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Union Wadding Artist Complex: Pawtucket, Rhode Island

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Union Wadding Artist Complex

Pawtucket, Rhode Island

Jennifer Turcotte

Roger Williams University

2011-2012

Jennifer Turcotte
Roger Williams University
Masters of Architecture
Graduate Thesis Design Project
2011-2012

Union Wadding Artist Complex

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Abstract

The decline of art education in our school systems is potentially robbing today's youth of the opportunity for creative expression. Without this outlet for personal expression, the student population stands to lose an educational experience that is no less important than academics, such as mathematics and science. The Union Wadding Artist Complex seeks to provide an environment for students in and around Pawtucket, Rhode Island to create and hone their artistic skills in a peer-driven and uninhibited setting. Art classrooms, designated for both two-dimensional and three-dimensional mediums, would foster a creative spirit that would only grow and prosper as the student population further developed their skills and techniques, while they worked collaboratively to generate pieces of art. Housing units of various sizes are also included in the program to augment the artist facilities.

Along with art classrooms, combining highly public services, such as shopping and dining amenities, with more artist-based spaces, such as studios and workshops, would bring together a wide demographic of individuals and unite the artist community

with the local, more general public. It is important to provide a space for students and artists to work together, while inviting the city's inhabitants and visitors to be part of the space, as well. It serves to benefit and promote the artist's (both student and adult) works and talents. The joining of the public, students and artists would occur most notably in a gallery that highlights the work being created on-site and inspire those that observe the displayed pieces. Public involvement and interaction with the artist community would further expand and promote the notion that art is an important part of development, regardless of age or artistic ability. Ultimately, the Union Wadding Artist Complex seeks to provide the opportunity for art-based educational programs and classes in order to generate a creative and vibrant communal spirit.

Volume 0 (Short Note)

As a student, I am constantly faced with the question of what I am majoring in. When responding to the question, “What are you getting your masters in?”, more often than not, the next comment to follow is, “Then you must be good at mathematics”. While I am not discrediting the importance of a core understanding of geometry and calculus in architectural training, the fact remains that the field of architecture is very much short changed.

Architecture is generally seen only as an education in the built world. By definition, architects are people that design buildings, ranging from the single family home to large, boundless skyscrapers. What seems to be lost in regards to the perception by the general public is that architecture is not about finding a balance between number crunching and devising a workable spatial layout, but is rather highly multi-faceted and influenced by many disciplines.

Not only is architecture connected to the field of mathematics, but art, psychology, philosophy and the humanities, as well. There is a psychology to properly designing structures infused with artistic and spiritual aspects. It is this intermixing of components that has resulted in architecture being a misunderstood profession. While the outside world sees vertical walls, glazed openings and angled roof lines, what is missed, but may be subconsciously felt, is the response to basic human necessity. It requires a general understanding of what the user will need and desire within a space and program,

even before pen is put to paper.

What cannot be seen by the general public are the more important and understated facets of design. Possessing the ability to establish and analyze the point of view of the inhabitant is vital in creating pleasant and livable spaces. The ability to see the design problem through the perspective of numerous sources simultaneously is deeply rooted in psychology and the understanding of the humanities. Such a concept again shies away from the notion that architecture is dominated by mathematical equations and calculations.

Clearly, a better understanding of the architectural profession on behalf of the general public needs to be improved. What is observed – the final design product – is undeniably taken for granted. Aside from the “stararchitects”, general architectural work is given barely a second thought by the public. What is appreciated boils down to purely aesthetic taste, rather than an understanding of the inner workings of the overall form. It is almost as if the architect has become this introverted character, an enigma, that outside of the design world is highly misunderstood.

Project Manifesto

The economic crisis being experienced worldwide has forced society to re-evaluate the way in which resources are handled, funds are spent, and generally the way in which we live our lives. Things, that were once indulged in and considered luxuries, are now cast aside more easily and considered superfluous and unnecessary. One such facet being easily pushed to the side of everyday life is involvement with the arts. As discussed in the Necessity of Art, art is “the business of a civilized society, and is one of the proofs that it is a society and is civilized”.¹ Art exemplifies the culture, tradition and personal expression of the time. As an artist myself, it is apparent that the market for interested buyers is much more difficult to come by in this uncertain economy. Artists all know the term, “starving artist”, far too well, and with the art market in the present condition, opportunities to explore and create may be sacrificed for more stable, traditional jobs.

Aside from the effects felt by the artistic community, numerous institutions are facing substantial budget cuts and are forced to re-evaluate their services and programs. These institutions, especially school systems, are forced to call into question which of their programs can stand to be downsized, or in some cases, completely eliminated. Whether one is to look at elementary schools or high schools, the first departments to be effected by such budget cuts, tends to be concerned with the arts. Legislation has sought to prevent the overall field of art from disappearing in schools, such as Percent for Art Legislation (1982), which requires the incorporation of art commissions and artistic practices in the curriculum, but nevertheless, it is evermore being pushed to the back burner of education.²

What seems to be ignored by such a decision is the importance of the arts within the overall framework of a child’s education. Mathematics exercises the ability to problem solve, English, the ability to properly utilize and manipulate language and Science, to understand the overall building blocks of the natural environment”.³ Art enables a child to “develop the imaginations of children” and access a deep-seated level of personal expression.⁴ What fails to be understood is that art is not a luxury, but exists as an innate part of all individuals.

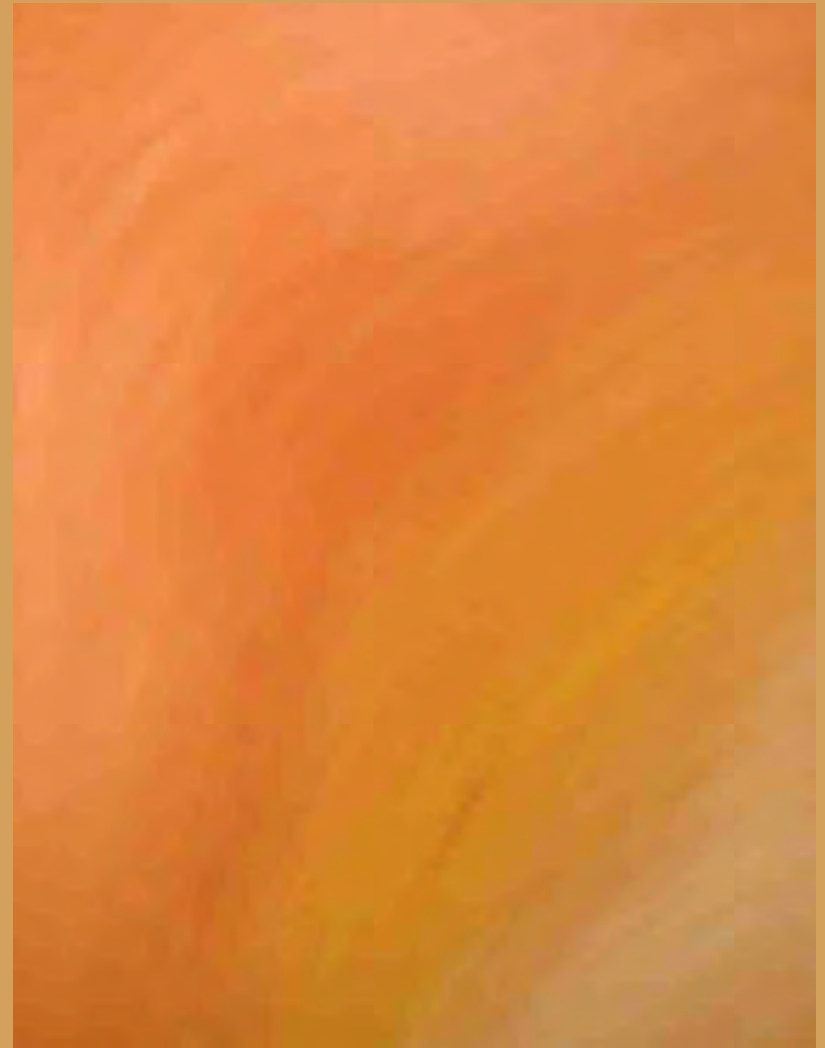
Within the entire human race there lies “a continual desire for expression” that is “part of the effort to achieve ourselves” and create a personal identity.⁵ This outlet is vital in personal development, especially for a child struggling with adolescence, as it “[forges] a link between curiosity and creativity”.⁶ While self-expression at any stage in life is necessary, preventing today’s youth from having this outlet on an everyday basis is detrimental and misguided.

In addition to the disappearance of art in our school systems, there also exists an untapped opportunity on the part of developers and architects: industrial buildings sites. While new sites of untouched earth are being excavated and ecological environments are being disrupted, these sites sit in limbo, falling into disrepair. In an age where sustainability is constantly at the forefront of design, it seems somewhat unbelievable that these sites would not be redeveloped and revitalized.

Besides exploring the benefits of art, understanding the components of architectural rehabilitation of former industrial sites will also be

analyzed. Using these large, shell buildings as skins for open exploration on the interior, as well as, revitalizing the deteriorating on-site landscape, the thesis will demonstrate the benefits of revitalizing previously developed sites. Whether through restoring a building to its original glory, putting to use sustainable practices or a combination of the two, the design will bring an abandoned industrial site back to its former glory, while at the same time, bringing it into the twenty-first century.

While these two areas of exploration may seem drastically different, in scope, I believe that the overall thesis project will bring together the variety of topics touched upon throughout an architectural education. Art, sustainability and passive design, appreciation for history and the psychology of human needs will all be touched upon and analyzed. The architect is ultimately responsible for bringing to fruition a clear design that cohesively takes into account program requirements, in conjunction with human needs and desires. It is also the architect's obligation to be accountable for their actions in regards to their impact on the environment, as well as, respond to current societal issues. The overall aim of the thesis is to explore the importance of art within the general framework of human existence, in addition to redeveloping and exploiting an untapped and valuable resource. Not only am I referring to art on an individual level, but in a community setting as well. By exercising the idea of the cooperative spirit and communal living in conjunction with art education, my project will demonstrate the importance of self-expression at various stages of development.



Radiance
Jennifer Turcotte
Acrylic

¹ Brock, a. Clutton, Percy Dearmer, A.S. Duncan-Jones, J. Middleton Murphy, A.W. Pollard, Malcolm Spencer. *Necessity of Art*. New York: Books for Libraries Press, 1924: 25

² Cohen, Michele. *Public Art for Public Schools*. New York: The Monacelli Press, 2009: 154

³ Addison, Nicholas, Lesley Burgess, John Steers and Jane Trowell. Understanding Art Education: Engaging Reflexively with Practice. New York: Routledge, 2010: 14

⁴ Addison: 18

⁶ Cohen: 228

com•mu•ni•ty

1 : a unified body of individuals : as

a : State, Commonwealth

b : the people with common interests living in a particular area; *broadly* : the area itself <the problems of a large community>

c : an interacting population of various kinds of individuals (as species) in a common location

d : a group of people with a common characteristic or interest living together within a larger society <a community of retired persons>

e : a group linked by a common policy

f : a body of persons or nations having a common history or common social, economic, and political interests <the international community>

g : a body of persons of common and especially professional interests scattered through a larger society <the academic community>

2 : society of large

3 a : joint ownership or participation <community of goods>

b : common character: likeness <community of interests>

c : social activity

d : a social state or conditions

* Webster's Dictionary

in•spi•ra•tion

- 1 a : a driving influence or action on a person believed to qualify him or her to receive and communicate sacred revelation

 b : the action or power of moving the intellect or emotions

 c : the act of influencing or suggesting opinions
- 2 : the act of drawing in; *specifically* : the drawing of air into the Lungs
- 3 a : the quality or state of being inspired

 b : something that is inspired <a scheme that was pure inspiration>
- 4 : an inspiring agent of influence

* Webster's Dictionary

“ I found I could say things with color and shapes that I
couldn't say any other way - things I had words for.”

- Georgia O'Keeffe

Project Statement

The overall themes of the thesis are the importance of involvements in the arts to create an overall sense of community, as well as redeveloping and exploiting an untapped and valuable resource in vacant industrial infrastructure. Beginning with creating an environment that will include an on-site artist haven, the work and creativity taking place on-site will extend outward to the overall city of Pawtucket. Uniting the surrounding educational institutions with the artist community would be one of the most direct ways of branching out into the city.

One aim of the thesis is to explore the importance of art in relation to the development of individuals of all ages. In doing so artist communities and the more general concept of communal living will be analyzed. The spirit of community undoubtedly fosters a greater understanding of self, but the power of community interaction and its effect on creativity need to be better understood. This spirit of fostering creativity will also be analyzed from a psychological standpoint in the form of the art's effect on adolescent development. Questions such as, how does the process of creating art change and shape the way that the community views its surroundings and how harboring this spirit will benefit the area in the future, will be answered.

While the arts is the driving force in developing and creating the artist community, a secondary theme will also influence the manner in which the existing building is manipulated. In addition to an art component, the benefits and issues associated with adaptive reuse and revitalization, more specifically, on a former industrial site, will be explored. In doing so, the potential for incorporating passive and sustainable design strategies will be weighed, while at the same time, reusing the existing resources of the building. Such a project

be strictly focused on the renovation of a historical building, but rather an exploration into how to introduce modern elements into a traditional landscape without compromising historical integrity.

Revitalizing the deteriorating industrial site, as well as the site's landscape, must remain historically sensitive and accurate and pay homage to the rich architectural quality of the 19th century mill building. Architectural additions or changes can act as an interesting juxtaposition between old and new, but the major consideration of working with an industrial building with a rich history in the community is to maintain its original integrity. With the twenty-first century focus on sustainability and passive design, developing ways to harmoniously unite sustainable building practices with 19th century traditional architecture will create the interesting condition, mentioned previously, merging old and new. Working in the spirit of sustainability, reusing existing building materials, when possible, will stay true to the aesthetic of the original building while at the same time remaining economically conscious. As mentioned, an on-site artistic community will be created and will extend out into the community. The overall campus on which the building resides must therefore appear intriguing and inviting to the surrounding residents. Rather than simply focusing on the building's exterior and interior organization, the site response to the design must be conducive for community art projects and art events.



The Enchanted Mill
Franz Marc
1913

Program Components

The adaptive re-use of an industrial site to create an artist community for all ages will consist of two programmatic elements: residential lofts and educational workspaces. On a more psychological level, the project will attempt to capture the historical spirit of the site. Highlighting different aspects within the overall framework of the structure will act as a method to teach and enlighten the user regarding the space. An understanding of times past will generate a greater appreciation of the current space. Incorporating energy efficient strategies and remaining conscious of material usage will bring together modern building practices with a historical structure.

Residential

The complex will have a residential component for artists to live and work. Such apartments have a direct dialogue with individual work spaces for the artists living in this community. Keeping such spaces for living and working centrally located, also keeps with the spirit of sustainability, encouraging inhabitants to remain within a relatively close-knit area. The residential component will offer housing for artist and accommodate a variety of demographics. To do so, the apartments will range in size and amenities, such as larger rooms and larger studio spaces. The purpose of having on-site housing will allow for artists to build a creative atmosphere.

LOBBY

The lobby would act as the primary, private entrance for the residents of the building. This lobby would not be accessible to those visiting the workshops, classrooms and gallery.

MAILROOM

STUDIO UNIT

ONE-BEDROOM UNIT

TWO-BEDROOM UNIT

WORKSHOPS

Each residential unit would have a workshop for the artist to privately work. This space would provide a private outlet, in conjunction with, the more public workshop spaces.



Educational

The promotion of art therapy and art education will provide the on-site artist the opportunity to reach out to the youth of the local community. While being given the opportunity to work and create on-site, workshops and public studio spaces will afford the artists the chance to share their artistic knowledge with the local youth of the area, more specifically, the youth population within major cities. Such an education can have numerous positive effects on a group of individuals faced with potentially harmful influences within the city.

SCULPTURE WORKSHOP

POTTERY WORKSHOP

WOOD SHOP

PAINTING WORKSHOP

PHOTOGRAPHY STUDIO/DARK ROOM

LECTURE ROOM



Historical

In keeping with the spirit of place, the building will provide opportunities for inhabitants to understand and learn about the building and site's industrial history. Keeping the original building relatively intact will allow the design to commemorate the history imbedded within the mill's walls. The importance of the Industrial Revolution in regards to American history is something children learn from a young age, but what school books and photos cannot teach is the spirit of the place. Staying true to aesthetics and maintaining the historical integrity of the building type is vital in preserving the memory of one of the United States most important eras.

ENTRY/LOBBY

The public lobby (accessible to the those visiting the workshops and gallery), will display the history of the place whether it be documents, photographs or literature about the Union Wadding Company.

GALLERY

The gallery would house a permanent exhibit of artifacts, literature, images or objects that tells the story of Pawtucket's rich and layered history. This gallery would be a tribute to the city of Pawtucket.



Sustainable

Bringing together modern sustainable practices with a traditional structure without changing the overall aesthetics of the industrial building, will cohesively tie modernity with historical precedent. Though historical integrity is of the utmost importance, integrating passive design strategies will address the site's responsibility toward nature. Some of these components can include energy conservation, consideration of materials, and on-site preservation of ecosystems.

VENTILATION

DAYLIGHTING

SOLAR ORIENTATION

MATERIALS



Services

GALLERY

The building's major gallery would be dedicated to displaying the works of the on-site artists and the students that visit the site. This space would show the quality of artwork being generated within the local community.

GALLERY LOBBY

CAFÉ

BOOKSTORE/MATERIALS SHOP

The potential for on-site self-sufficiency will need to be carried to its farthest potential with the basic amenities accessible to the user. In this regard, the artist will need to be able to acquire materials, as well as, the simple every day staples.

OPEN COURTYARD

PARKING

RETAIL

Numerous retail shops will draw a different group of individuals to the site, aside from artists, students and art enthusiasts. Shops catering to a new demographic would educate the general public as to the center's purpose and goals.

GYM

LOCKER ROOM

COMMUNITY ROOM

LOUNGE

Proposed Program *(TOTAL AREA: 59,6000 square feet)*

COMPONENTS	AREA (sq. ft.)	QTY.	RELATIONSHIP	LOCATION	REQUIREMENTS	DESCRIPTION
Residential						
Lobby	300	1	Semi-Public	Ground Level	Proximity to Street	Primary/private resident entry
Mailroom	200	1	Semi-Public	Ground Level	Proximity to Lobby	
Studio	500	12	Private	Upper Levels		
One-Bedroom	800	12	Private	Upper Levels		
Two-Bedroom	1200	12	Private	Upper Levels		
Studio/Workshops	400	36	Semi-Public	Second Level	Proximity to Residents	One workshop for each apartment
Education						
3D Classrooms						
Sculpture	500	1	Public	Second Level		
Pottery Wheel	500	1	Public	Second Level		
Wood Shop	500	1	Public	Second Level	Easy Ventilation	
2D Classrooms						
Paint	500	3	Public	Second Level		
Photography/Dark Room	300	1	Public	Second Level		
Silk Screening/Printmaking	300	1	Public	Second Level		
Lecture Space	1200	1	Public	Second Level	Hold 60-100 people	
Historical						
Entry/Lobby	500	1	Public	Ground Level	Proximity to Street	Display/Document history of place
Permanent Gallery	1200	1	Public	Ground Level	Proximity to Entry	Display historical memorabilia
Services						
Gallery	800	1	Public	Second Level	Moveable Partitions	For students/artists to display work
Lobby	300	1	Public	Ground Level	Proximity to Street	Public entry to classrooms/galleries
Cafe/Coffee Shop	800	1	Public	Ground Level	Proximity to Street	
Bookstore	1000	1	Public	Ground Level	Proximity to Street	Sell materials for students/residents
Retail	800	4	Public	Ground Level	Proximity to Street	Shops for residents/general public
Gym	1200	1	Public	Second Level	Proximity to Street	Open to residents/general public
Lockers	250	2	Public	Second Level		
Community Room	400	1	Semi-Public	Second Level	Proximity to Lobby	

Realized Program *(TOTAL AREA: 1,218,998 square feet)*

COMPONENTS	AREA (sq. ft.)	TOTAL AREA	QTY.	LOCATION
Residential				
Lobby	1382	1382	1	Ground Floor
Mailroom	436	436	1	Ground Floor
Studio	802	4010	5	3rd-6th Floors
One-Bedroom	1041 (4), 839 (5)	8359	9	2nd-6th Floors
Two-Bedroom	1247 (1), 1230 (3), 1112 (5), 1379 (5), 1548 (5), 1471 (2), 1422 (2)	30918	23	2nd-6th Floors
Studio/Workshops	567 (2), 498 (2), 480 (2), 451 (2), 460 (2), 400 (4), 600 (2), 355 (2), 291 (2), 367 (2), 340 (2), 276 (2), 309 (2)	11588	28	3rd & 4th Floors
Education		758	1	2nd Floor
3D Classrooms		1285	1	2nd Floor
Sculpture	758	1283	1	2nd Floor
Pottery Wheel	1285			
Wood Shop	1283	2873	3	2nd Floor
2D Classrooms		789	1	2nd Floor
Paint	957	1157	1	2nd Floor
Photography/Dark Room	789	1309	1	2nd Floor
Silk Screening/Printmaking	1157			
Lecture Space	1309	6581	1	Ground Floor
Historical		---	0	---
Entry/Lobby	6581			
Services		7293	3	1st-4th Floors
Gallery	2431 each floor	---	1	Ground Floor
Restaurant	12536	12536	1	1st & 2nd Floors
Retail	1168 each	----	0	---
Gym	8377	4672	4	Ground Floor
Lockers	241	8377	1	1st & 2nd Floors
Community Room	2096	482	2	Ground Floor
		2096	1	Ground Floor

The majority of the programmatic elements constitute the residential portion (shown in red). The remaining portions of the program will act as agents that will draw members from the surrounding community into the site.

The educational portion of the building (shown in green) will join the artist community and those outside. Both groups will be given the opportunity to work cumulatively to produce artwork to be enjoyed by the community.

The gallery spaces (shown in the grey service portion of the program) will link the educational components to the most public programmatic elements. In these areas, the community will be the most engaged.

When placed on the site the program easily fits on the allotted six acres of land. While each space is laid out in a single story configuration, in actuality, the residential portions will be organized vertically. Such an organization will free up even more space on the site to be left as open, landscaped space for the public to enjoy. By keeping the layout of the building more compact and vertical in organization, the remaining area can act as a public park space. In this area, art work by artists or students can be displayed. Such displays will help to generate a sense of community for those residing around the Goff Site.

Client & Users

The project will accommodate a variety of users, each will respond to a portion of the design concept. Developing a center for creativity would be developed in tandem with the goals of the Pawtucket Arts District. Numerous industrial sites and campuses have already been or are currently being renovated and rehabilitated to accommodate the local artist population. Working with the general goals and aspirations outlined by Pawtucket City Officials, with representatives such as, Herbert Weiss, the Union Wadding Artist Complex would be designed with the intent of reinforcing the intentions of Pawtucket's Arts Initiative.

The major components of the project can be broken into three primary groups: an artist community, a place for learning and a place for historic understanding. Each of these components result in a different type of user. With each component, a different set of desires and requirements exist that need to be individually addressed. The major user of the artist community will be the permanent residents on the site. These individuals

will both live and create on-site.

The major users of the learning component are a younger clientele than the residents. The goal behind the educational component is to bring together the local youth of Rhode Island with the local artist community. Classrooms and work spaces will allow visiting students to sculpt, paint, sketch and model. For this user easy access to classroom spaces will be of the utmost importance. Spaces for displaying student work will also act as a positive motivation and learning tool for the youth. The major goal of the project is to engage the youth of surrounding areas, specifically Pawtucket, Providence and inner city youth, and show them the positive aspects of art in the hopes that any negative path this population could choose would be avoided.

Those coming to the site to acquire a historical understanding of the site encompass the previous two users, but are also those interested in using the other facilities, whether that be the retail spaces, cafe or gallery. This user will come to respect and appreciate the importance of revitalizing these historical architectural pieces rather than building anew.



Narratives

*(Snapshots of various user
and inhabitant experiences)*

The User

Rather than entering into the main lobby space the on-site artist passes through the secondary entry into a smaller, more intimate lobby. The artist appreciates the juxtaposition of the traditional and contemporary architectural elements. The combination of old and new provides a unique perspective on residential living. Just a few stories below the artist's apartments lies the bank of studios. These spaces act as outlets for the artists residing in the building and create a sense of community in the space. This sounding board for self-expression brings a variety of artists together into one location, helping to expose an array of creative ideologies under one roof.

The Visitor

Upon approaching the site, the visitor first encounters the connection between traditional architecture and contemporary design. Rather than the traditional industrial mill that once was the site, instead it is infused with dynamic modern construction details and contemporary building materials. To offset the heavy masonry, the lightness of the glass components punctuate the facade. Maintaining the historic quality of the building, the lobby stays true to the aesthetics of the original building, while in the same vein, introducing modern construction. Images, art work and installations educate the visitor as to the site's original use, while in the same instance, display the caliber of creativity taking place within the community. Now passing further into the space the visitor can see into the various classrooms filled with students and artists working and creating within a common space. The spirit of the place is captured in this instance when one can see the powerful capability of art to bring a variety of people together with the hope of one common goal: free and candid self-expression.

The Seasons

The landscaping highlights each and every season in order to take full advantage of what the natural environment has to offer. Acting as an exterior room, reaching out from the main classrooms and studios, each season can be appreciated and studied for students and on-site artist inspiration. Foliage is constantly in bloom during the warmer seasons with pops of color in every direction. With the change of seasons, the foliage responds and adapts turning beautiful shades of red, orange and copper during the fall season. In winter, children can take advantage of the great expanse of lawn and make snow angels in the powder and throw the occasional snow ball.

Drawing visitors and residents from the street, the natural landscape that lies adjacent to the building serves as a public park space. Such a space will serve as an opportunity to give back to the local community. Open lawn enclosed by native and low-maintenance plantings and trees will serve as a subtle and permeable buffer from the noise of the street, making a space for children to play, artists to sketch, plein air workshops to take place and the display of sculptural installations. Such a space can work in tandem with the on-site gallery to highlight the work being created within the walls of this artist community.



Precedent Investigations

Mass MoCA (Museum of Contemporary Art)

Architect: Bruner/Cott

Location: North Adams, Massachusetts

Completed: 1999

Square Footage: 750,000
(125,000 renovated, 625,000 stablized)

The Massachusetts Museum of Contemporary Art (“MoCA”) of North Adams opened to the public in 1999. Encompassing 750,000 total square feet roughly, 125,000 visitors tour the museum each year to view the ever changing collection. With no permanent pieces, Mass MoCA is funded by renting out the galleries as commercial space.¹ As a contemporary museum, the space highlights visual arts, as well as, media pieces and the performing arts. An educational component, a collaboration effort between the Clark Art Institute and Williams College Museum of Art, is accessible to elementary aged children. The “Kidspace” gives children (roughly 5,000 per year) the opportunity to study and create art in a highly creative environment.² Unlike traditional galleries, the museum infuses



Perspective of the Museum of Contemporary Art



(Above) The entry sequence is understated as one passes by Natalie Jeremijenko's installation *Tree Logic* and the landscaped green into an enclosed courtyard space. The sequence allows the visitor to become surrounded by the historic brick architecture and separate themselves from the busy street that MassMoCA abuts.

(Right) Aerial view of the MassMoCA grounds: The parking lot lies directly next to the major roadway buffering the building and entry from noise. This separation of vehicular traffic allows for an easy segregation of cars and pedestrian. Visible with the change in roof materials, the majority of the museum (slate) is made up of the original mill building, while the contemporary portion (white in appearance) creates a strong juxtaposition between old and new.



High ceilings are beneficial for gallery spaces and displaying art



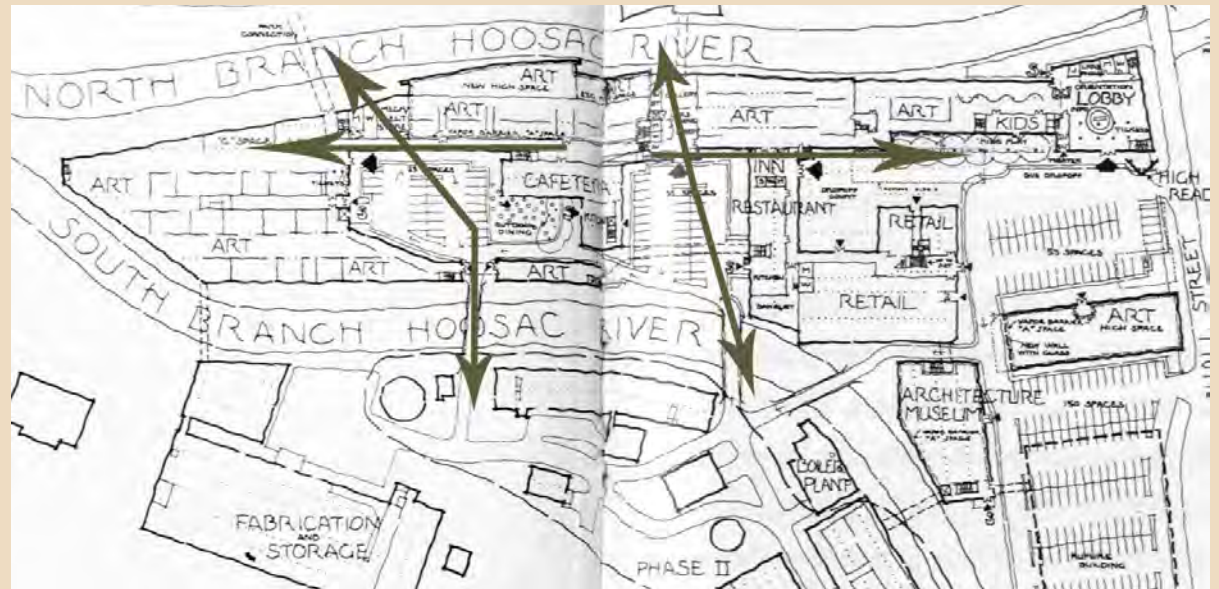
Integrating old and new creates interesting aesthetics



Natalie Jeremijenko's installation *Tree Logic*



Natalie Jeremijenko's installation *Tree Logic*



(Above) Connections extend through the building uniting the two major waterways that border the museum. These north-south spatial relationships connect the North Branch Hoosac River and the South Branch Hoosac River. A straight path from the eastern entry point directly connects the western contemporary portion of the museum.



Apartments at Boott Mills

Location: Lowell, Massachusetts

Project Type: Industrial Re-use & Restoration

The Apartments at Boott Mills in Lowell, Massachusetts stands as a representation of a seamless and subtle example of the rehabilitation of a historic building.

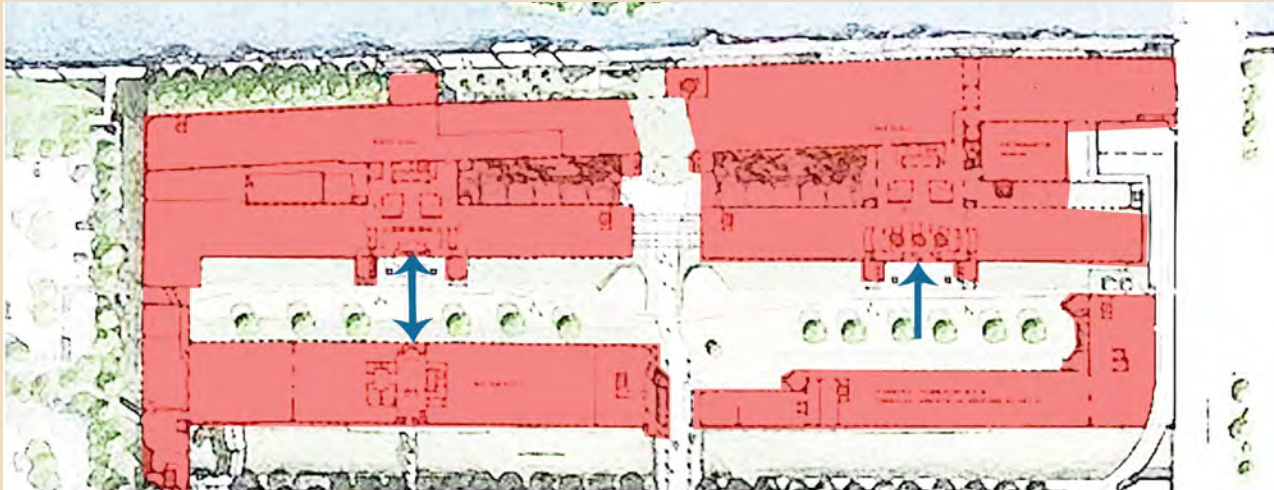
Sited within the Lowell National Historic Park, alongside the Merrimac River, the complex is composed of four major building units, and contains seven different apartment configurations, ranging from one to two bedrooms. The basic on-site amenities include a cafe, parking garage, central and pedestrian friendly courtyard, fitness center and access to the Riverwalk. In addition to the importance of being in close proximity to basic amenities, the Apartments at Boott Mills are situated close to the Transit Bus and MBTA Rail to aid in public transportation.⁴



Aerial of Boott Mills apartment complex



Site Plan



Entrances are located off of the courtyards rather than on the peripheral edges

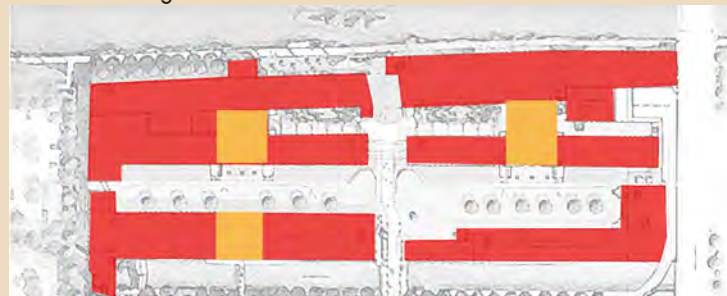
(Above) The overall form of the four buildings enable strong north-south and east-west paths to be created linking green spaces and the Riverwalk. This configuration also allows the site to be highly introverted and pedestrian-oriented.

(Top Right) The majority of the site is highly landscaped creating strong correlations to nature from within the building itself. In addition, the organic natural space is offset with clear and linear circulation paths.

(Bottom Right) Major circulation cores are located directly off the interior courtyard creating direct links between each building and the public space.

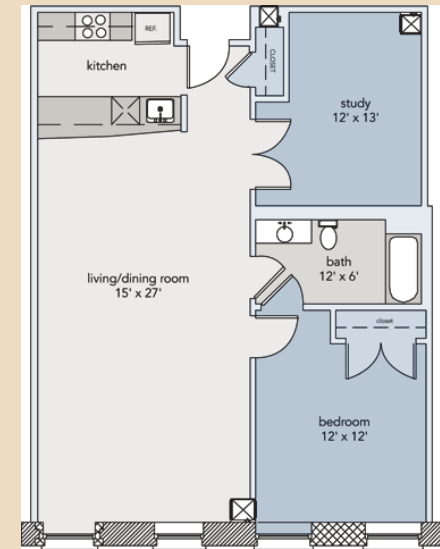
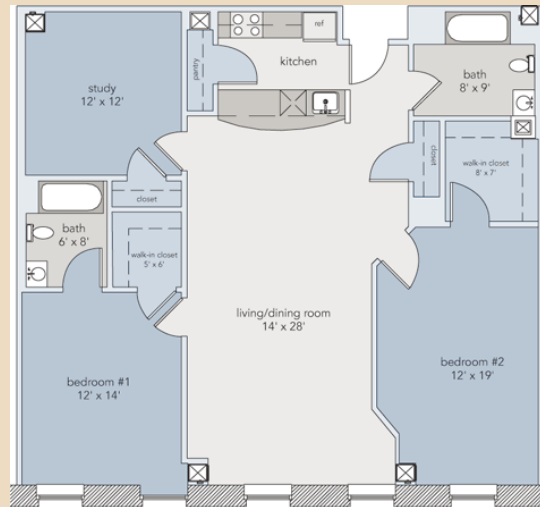
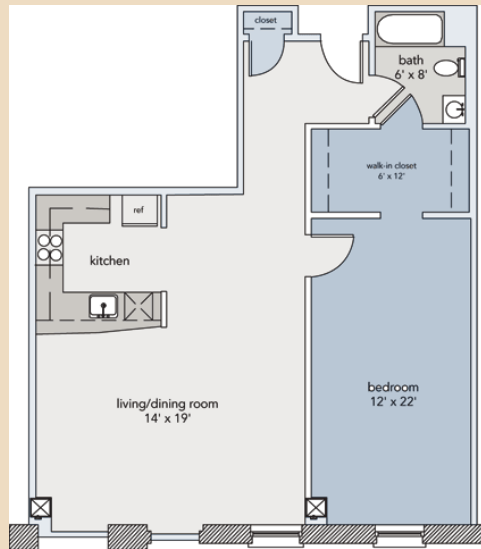


Circulation routes run through center of the complex as well as around the edges of the site

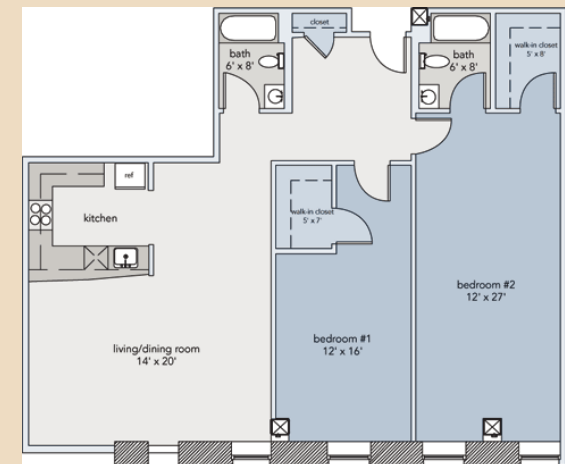
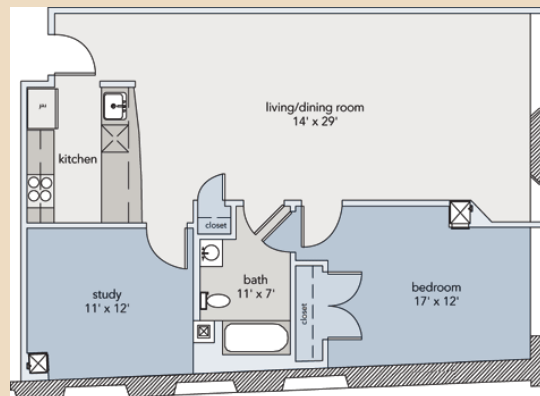
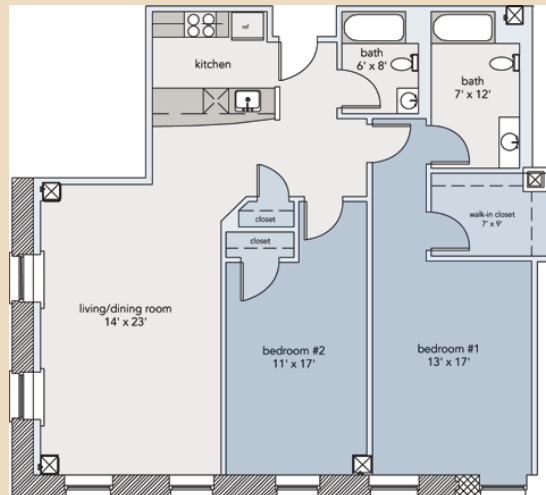


Vertical circulation cores correspond with the building's entry points

The majority of the site is kept pedestrian friendly. Vehicular traffic is restricted to the corner of the site that is bordered by two main roadways. In doing so, each circulation path is kept highly defined and clearly identifiable. This separation also allows the natural landscape to be developed and created into a park-like space. After passing into the central courtyard, the site is highly landscaped and buffered from the noise of the street. In addition, a clear path designates the entry point into the Riverwalk, creating a strong relationship to the adjacent waterway.



A variety of floor plans exist on-site ranging from 1-bedroom units, 2-bedroom units and units with a bedroom and flex room that can double as a second bedroom. Continuity of living space (kitchen, living room and dining room) keep the apartments feeling spacious and allow the maximum amount of natural light to filter into each room. The rather large depth of the apartment also helps complicate the issue of natural light and minimizing enclosure helps counteract this issue.





The building's exterior was relatively maintained with little intervention. The major changes to the building occur at the interior level.



10 Studios for Artists

Architect: GGMPU Architects

Location: Cordoba, Argentina

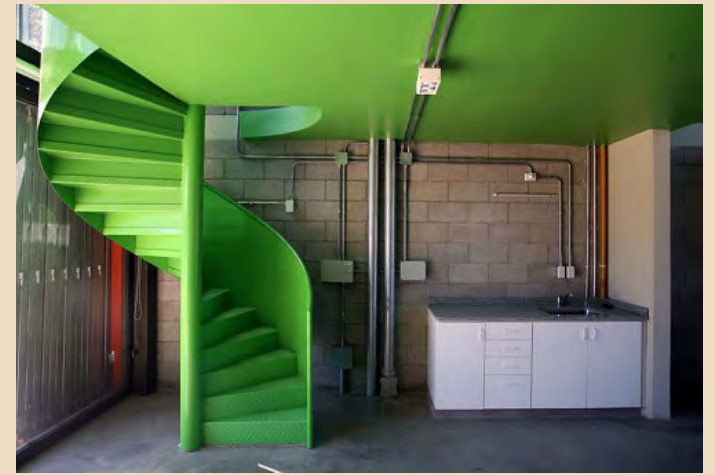
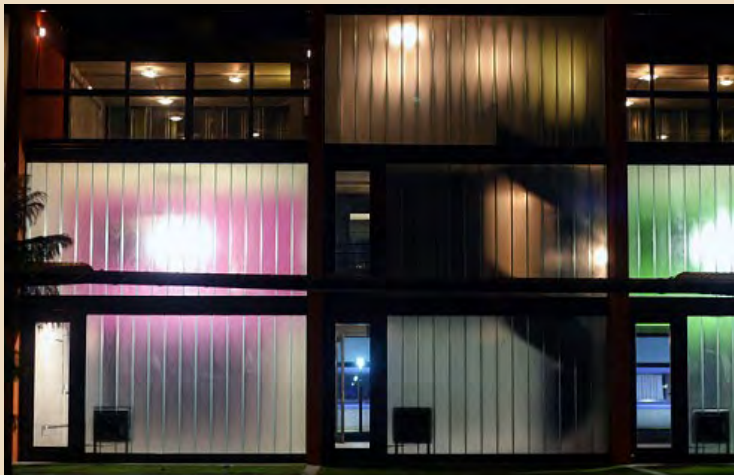
Completed: 2007

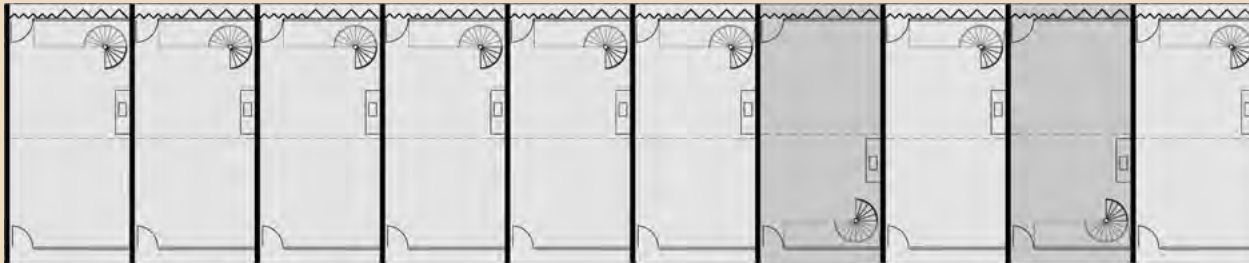
The small scale design project 10 Studios for Artists (Ateliers Ciudad de las Artes), located in Cordoba, Argentina, is associated with the Cordoba Province City of the Arts.⁵ Completed in 2007, these live/work units are lent to invited artists for a short period of time to create on the campus, as well as, interact with the students on-site. The ten studio spaces (eight for painters and two for sculptors) are two-story units composed of interlocking and double height spaces. To increase the sense of spaciousness in the studio, as well as, increase a sense of community, exterior sliding glass panels and “perforated-metal shutters” can be opened to bring the courtyard space into the ground floor.⁶ While the more public program is organized on the ground level, the second level and third level house the living spaces, as well as an exterior terrace.⁷



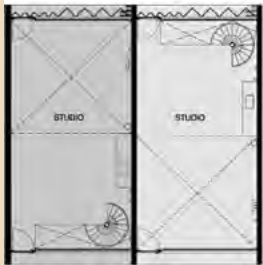
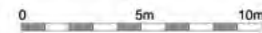


Site Plan

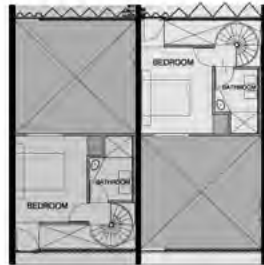




COMPLEX GROUND LEVEL PLAN



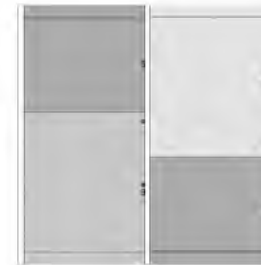
FIRST FLOOR PLAN



SECOND FLOOR PLAN



THIRD FLOOR PLAN



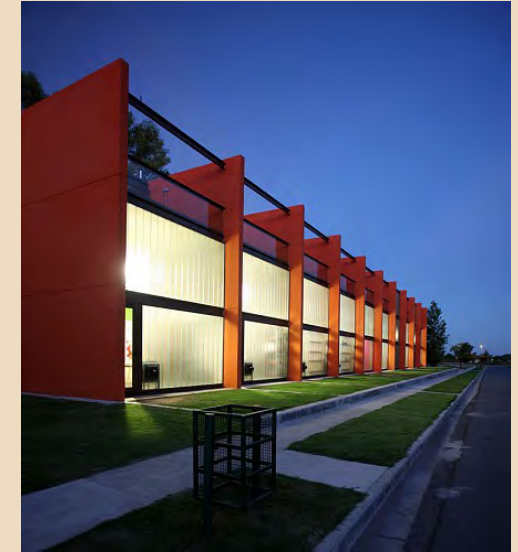
ROOF PLAN



1-1 SECTION - TYPOLOGY 2



2-2 SECTION - TYPOLOGY 1



Unlike the opposing facade, the facade that faces the street is more solid and closed off from interacting with the ground plane.

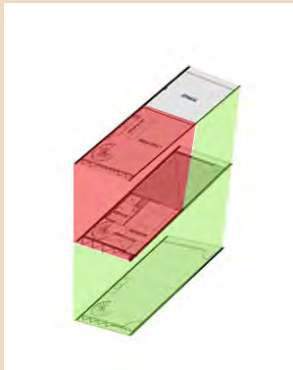
(Opposite, Top Right) Living spaces are organized on the upper two floors to allow for the maximum amount of public exposure to the artists' studio spaces.

(Opposite, Middle) Circulation corridor is organized to the periphery to allow for an open and spacious plan.

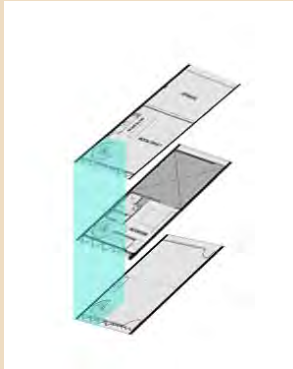
(Opposite, Bottom Right) To create a dialogue with the courtyard space, the ground level has open views to both the north and south of the site. Ascending to the upper floors, the views become more concentrated to allow for more privacy.



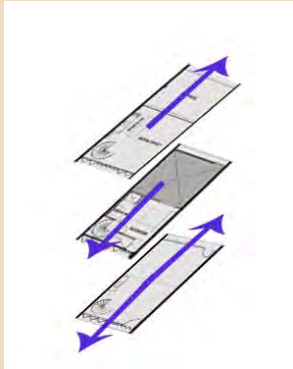
The building's facade is incredibly permeable and opens up to access and connect with the landscape.



Program Organization



Circulation



Views

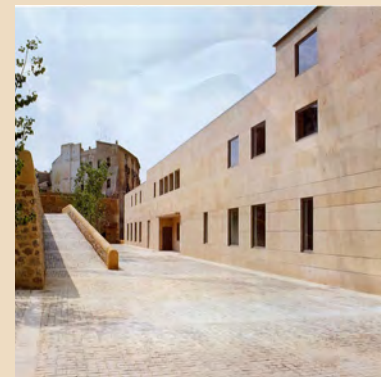
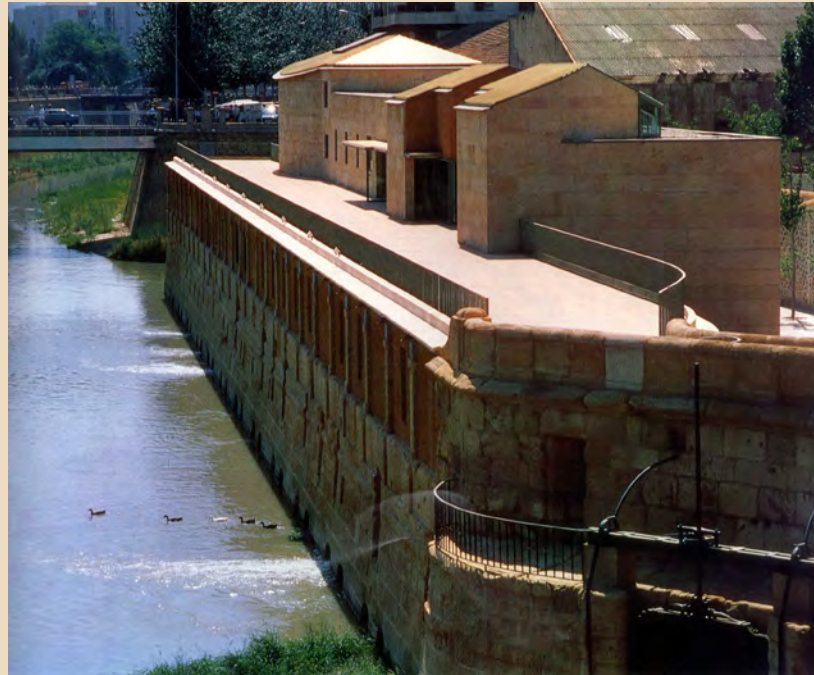
Hidraulico Museo Molinos Del Rio Segura

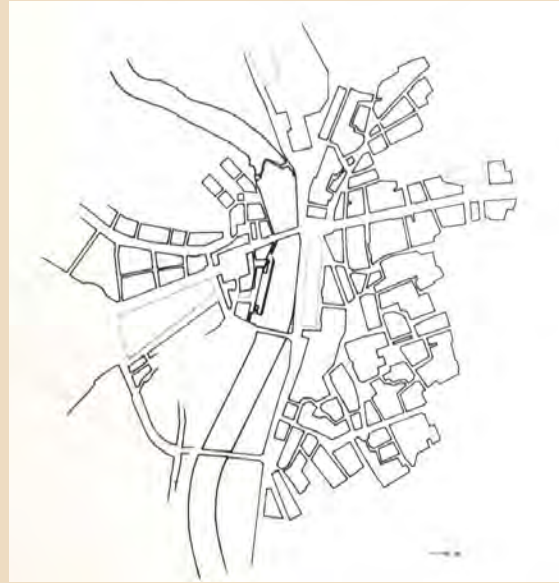
Architect: Juan Navarro Baldeweg

Location: Murcia, Spain

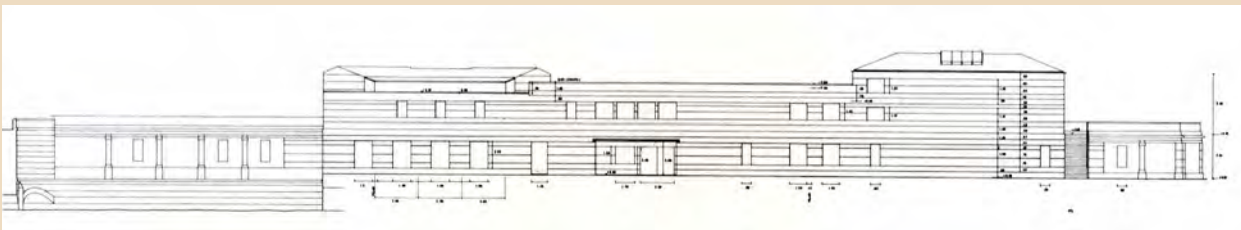
Completed: 1989

The Museo Hidraulico is a prime example of historic, classic architecture standing the test of time. Designed by Juan Navarro Baldeweg, the museum combines old world architecture with contemporary additions without losing its original integrity. Located in Murcia, Spain, which sits in the south-eastern portion of the country, the influence and importance of the surrounding water was highly important to the siting of the structure. The building originated as a flour mill and was constructed in 1718.⁸ Over the course of nearly thirty years, the building's users subdivided the building and added onto the mill to adapt to their specific needs. As a result the building reached its final design in 1741. Additional stories were added and numerous portions of the building branched off of what was originally the flour mill. These “spontaneous





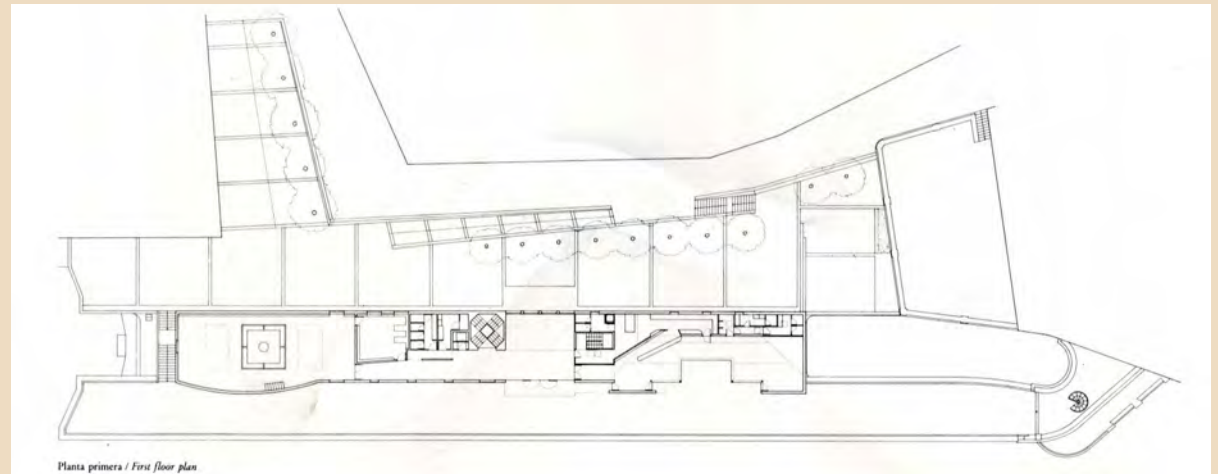
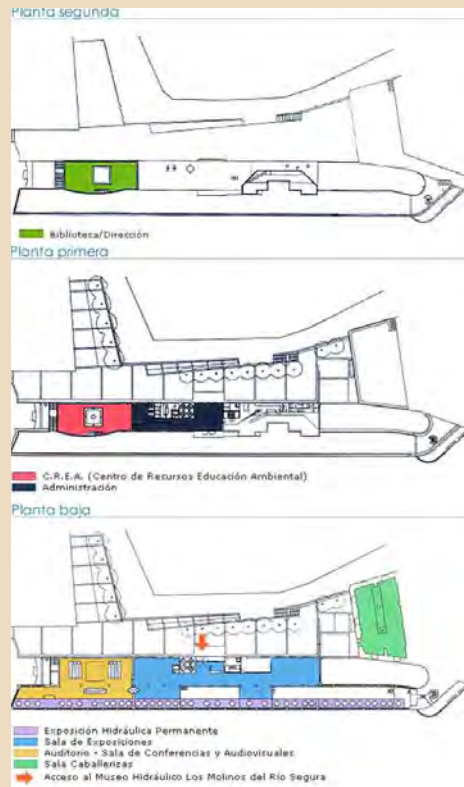
The lines of the building's elevations respond to the pre-existing retaining wall and historic mill. This is achieved by keeping with the original, traditional building's materials. Though the new construction has a very contemporary appearance the use of regional stone maintains the historical integrity of the original mill.



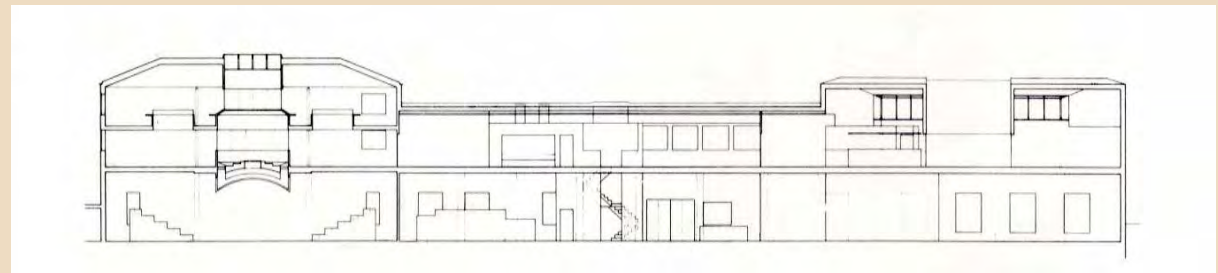
initiatives and vertical growth” truly disfigured the once uniform building and took away from its historical integrity. Rather than working with the strong geometric and cubic appearance, new angles and rooflines were introduced that did not respond to the original design intention.⁹

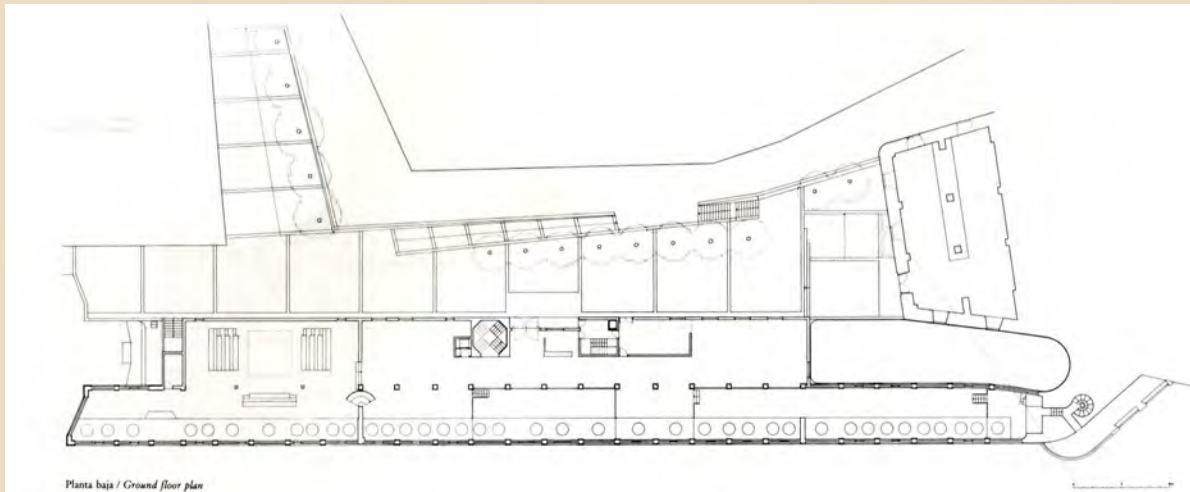
The rehabilitation of the building began in December of 1985 and was finally open to the public in 1989. The building now exists as a Cultural Center and Water Power Museum. A permanent exhibit at the museum, *Asi Funciona Un Molinos*, shows the technological evolution of the mill.¹⁰

The goal of the museum's design was to reconcile the aesthetic and fragmentation that had occurred with the numerous expansions. The design scheme was “based on the return to the more genuine antique aspects of the mills, ensuring the conservation of a monument”.¹¹ One such addition, the Sala Caballerizas or the mill's stables (1776) was revitalized and restored and is now a exhibition hall for artists in Murcia. In addition, a new portion of the building would be constructed that would incorporate the classic, vernacular aesthetic and materials of Murcia while employing certain contem-



Ground Floor Plan

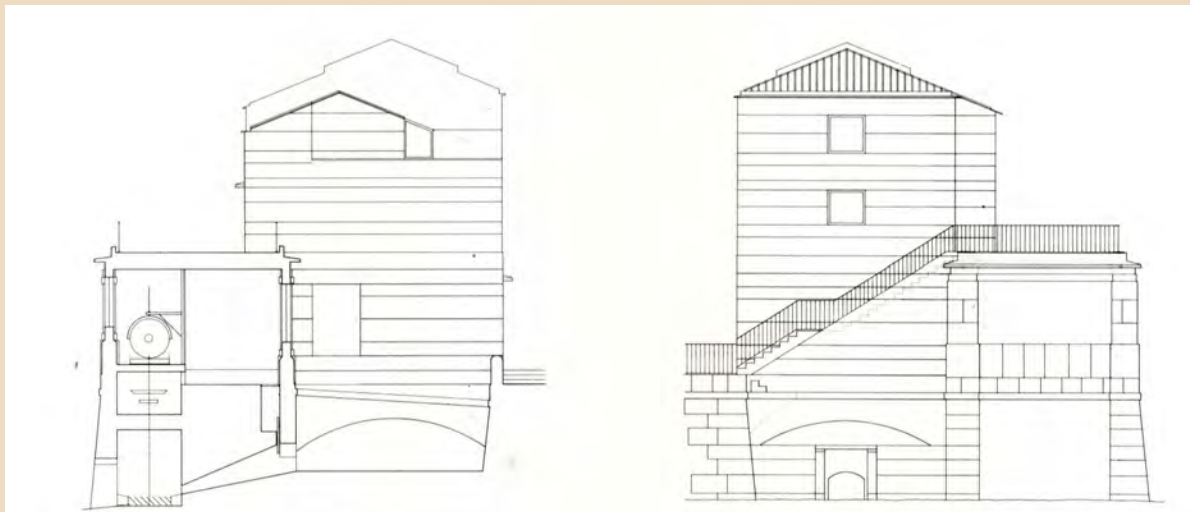




Planta baja / Ground floor plan

Basement Plan

The simplistic organization of the building's plan and relative open layout of the southern portion of the building, allows for the successful implementation of the rooftop apperatures to filter in light, rather than using large windows on the building's facade to illuminate the museum's interior.



porary aspects into the design as well. Materials, such as sandstone, remain true to the site in both the construction of the new building and the restoration of the old.¹² The design appealed to a specific language of horizontal fluidity and vertical circulation axes. Stressing the strict horizontality would make reference to the way the building first looked as a harmonic entity. Maintaining the modular sensation of the building by keeping with the large stone as the building unit and small windows, new methods for bringing light down into the building were explored. A skylight-patio draws the light into the various spaces (Public Hall, library, and reading rooms) rather than opening up the facade with more contemporary apperatures. The skylight also coincides with the interior vertical organization of program elements.¹³ While the original intent of the museum was to only exhibit the building and the local cultures, since 2008 contemporary artwork and contemporary cultural exhibits have also been displayed further uniting the old, historic architecture with the present art of the time.¹⁴

Cultuurpark Westergasfabriek

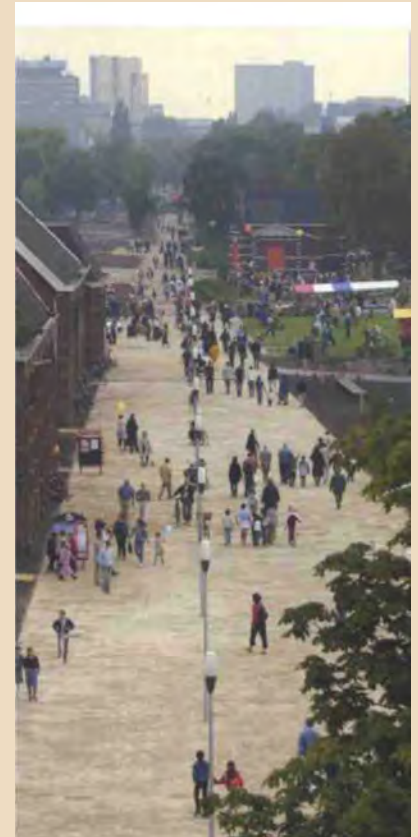
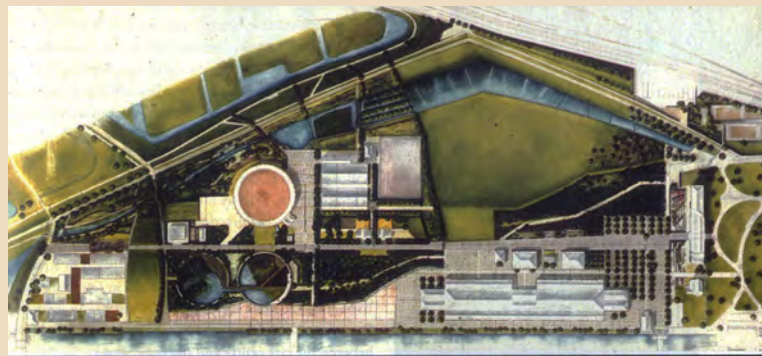
Architect: Gustafson Porter (Kathryn Gustafson)

Location: Amsterdam

Completed: Still in development

Westergasfabriek Park, located in Amsterdam, demonstrates the possibilities of combining urban elements with nature. The project's design intention was centered around rectifying the "ravages that nineteenth-century industrialism had inflicted" on the city. At the same time, new ways of incorporating nature with a communal sensibility into the vacant industrial site were explored. Rather than completely succumbing to the neighbor's desires to tear down the entire site, the designers, Kathryn Gustafson, wanted to demonstrate the possibilities of industrial revitalization.¹⁵

Located on a partially dismantled industrial site, the space is composed of the previously existing 12-acre Westerpark and the 34-acre vacant industrial site. While in a



(Above) The large central avenue creates a vertebrae linking each portion of the site to one another. This avenue also provides opportunities for informal entertainment opportunities, such as vendors.

(Left) The site design provides an equal balance between landscaped fields and restored, existing buildings and structures.

(Right) The area around the Westergasfabriek was highly lacking in park space, an issue that became the driving force behind the design. Using pastoral imagery helped restore the severely damaged site and completely transformed its appearance.

(Below) Providing departures from the city dynamic and developing natural havens allow outlets from the urban fabric. Introducing a variety of natural elements, such as water, and working with the existing topography, breaks up the site into smaller pockets and sections.



state of serious disrepair and possessing a large amount of contaminated soil, the community saw the site as a wonderful spot for outdoor space dedicated to cultural expression. A park, at this location would be the perfect solution to counteract the highly congested and dense area around the site. Seeing the possibilities for revitalization and restoration, in the 1980s, twenty-two of the buildings on site were given landmark status. They were seen as “examples of the era of fanciful industrial architecture” and these brick and stone structures were preserved.¹⁶ In 1997 project manager Evert Verhagan announced a design competition to develop the site into a center for culture and art. The design was to incorporate three major themes desired by the community: green park space, cultural points of interest and commercial opportunities.¹⁷ Demonstrating all points, Gustafson’s design is divided into three portions: central, eastern and western.

The eastern portion is the “historic and cultural city” which incorporated the Westerpark.¹⁸ This portion of the park is the most urban and acts as the entry point into the landscape. Described as the “Cultural Village”, this area houses the majority of the

the historical buildings and is used as exhibition halls, shops, studios and entertainment facilities.¹⁹ This commercial component, or the market square, was designed to feel like a “brick village street...[for] public interaction between the cultural facilities... and the activities in the park”.²⁰ The western portion is a complete departure from the highly formal, urban commercial “village”. The location of the Cite de Artistes (artist lofts and studios) is filled with wild and native vegetation and is more organically designed. The connecting element, Westergasfabriek Park, is intended for community space and a center for cultural expression.²¹ Stages of progression and creating movement were very important in the development of the plan. The desire was to establish movement from “experience that are intensely urban and programmed to those that are pastoral and quiet”.²²

In addition to the restoration of the historic buildings, other on-site structures were maintained and restored as well. The large gas holders, now empty, were also redeveloped to house different functions. One holder was filled with water and acts as a reflecting pool, another houses aquatic plants and the final holder was designed to



Every portion of the site was individually landscaped and designed. Creating outdoor “rooms” helped divide the large site into manageable and unique sections rather. In addition, each “room” lends itself to different activities and users.





formance space.²³

Though divided into sections, the overall layout is organized around a central axis, or promenade, which runs the entire length of the site from east to west. Four other supplementary paths run along this vertebrae as well. It is along this promenade that all the main spaces branch off. Along this vertebrae, variations in topography and elevations were exploited to create undulating mounds throughout the site providing different perspectives of the landscape and double as designated sitting and resting spots.²⁴

While the strongest circulation move is made moving from east to west, a juxtaposing series of paths break down the immense scale of the promenade. North-south routes bisect the site, creating a highly organized and gridded layout and helps establish nooks for different uses. This organization makes for a clear spatial understanding and creates defined zones.²⁵

- ¹ "MASS MoCA (Massachusetts Museum of Contemporary Art), North Adams MA" Bruner/Cott Architects and Planners, accessed April 18, 2011, brunercott.com/portfolio/cultural/cl_mass-moca#0
- ² "What we do and why we do it..." MASS MoCA, accessed April 18, 2011, www.massmoca.org/mission/php
- ³ "MASS MoCA (Massachusetts Museum of Contemporary Art), North Adams MA" Bruner/Cott Architects and Planners, accessed April 18, 2011, brunercott.com/portfolio/cultural/cl_mass-moca#0
- ⁴ "The Apartments at Boott Mills: Urban Living in a National Park" The Apartments at Boott Mills, accessed April 20, 2011, boottmills.com/main.htm
- ⁵ "Ateliers Ciudad de las Artes by Lucio Morini and GGMPU Architects" De Zeen Magazine, accessed April 20, 2011, dezeen.com/2010/01/14/ateliers-ciudad-de-las-artes-by-lucio-morini-and-ggmpu-architects
- ⁶ "Ateliers Ciudad de las Artes by Lucio Morini and GGMPU Architects" De Zeen Magazine, accessed April 20, 2011, dezeen.com/2010/01/14/ateliers-ciudad-de-las-artes-by-lucio-morini-and-ggmpu-architects
- ⁷ "10 Studios for Artists" Architecture News Plus, accessed April 20, 2011, architecturenewsplus.com/projects/340
- ⁸ "Molinos Del Rio Segura: Rehabilitacion para Centro Cultural y Museo Hidraulic," *El Croquis* N. 54 1984: 58-73: 58
- ⁹ "Molinos Del Rio Segura: Rehabilitacion para Centro Cultural y Museo Hidraulic." *El Croquis* N. 54 1984: 58-73: 59
- ¹⁰ "El Museo Hidraulic" Museo Hidraulico Molinos Del Rio Segura, accessed August 22, 2011, www.molinosdelrio.org/museo
- ¹¹ "El Museo Hidraulic" Museo Hidraulico Molinos Del Rio Segura, accessed August 22, 2011, www.molinosdelrio.org/museo
- ¹² "El Museo Hidraulic" Museo Hidraulico Molinos Del Rio Segura, accessed August 22, 2011, www.molinosdelrio.org/museo
- ¹³ "Molinos Del Rio Segura: Rehabilitacion para Centro Cultural y Museo Hidraulic." *El Croquis* N. 54 1984: 58-73: 60
- ¹⁴ "El Museo Hidraulic" Museo Hidraulico Molinos Del Rio Segura, accessed August 22, 2011, www.molinosdelrio.org/museo
- ¹⁵ Hinshaw, Mark. "Amsterdam opens a new culture park: Kathryn Gustafson Transforms a Dutch Brownfield into an Amazingly Complex Landscape." *Landscape Architecture* (November 2004): 60, 62-66, 68, 70-71: 60
- ¹⁶ Hinshaw: 60
- ¹⁷ Hinshaw: 62
- ¹⁸ Porter, Neil. "Westergasfabriek Park, Amsterdam, the Netherlands." *Landscape Design* (February 2002): 24-25: 24
- ¹⁹ Hinshaw: 66
- ²⁰ Porter: 25
- ²¹ Porter: 24
- ²² Hinshaw: 70
- ²³ Porter: 25
- ²⁴ Hinshaw: 68
- ²⁵ Porter: 24



History of the Place

Important Dates in Pawtucket's History

- 1636 The land that would become Pawtucket, Rhode Island is purchased by Roger Williams from the Narraganset Indians
- 1644 English Parliament grants a charter establishing Rhode Island Colony
- 1671 A forge is established by Joseph Jenks Jr. becoming the first permanent settlement of the area (will become Pawtucket Village)
- 1714 A series of dams and trenches are constructed on the Blackstone River in order to provide waterpower for the growing industries in the area
- 1772-76 Pawtucket Village industries produce cannons, muskets, ramrods and bayonets for the Revolutionary War
- 1790 Samuel Slater begins spinning cotton yarn, using techniques brought from Europe, making it a factory-based industrial area; Seventy-five families live on the land that will become Pawtucket, Rhode Island
- 1793 Slater Mill is opened
- 1815 The War of 1812 ends, bringing industrial competition from England
- 1822 *Population 2,200*
- 1829 A major economic crash causes the collapse of many industrial businesses, especially cotton
- 1830 *Population 3,300*
- 1840 Pawtucket experiences minor economic stimulation with the construction of the Providence Worcester Railroad, which was then connected to the Boston Railroad
- 1850 Industry expands from the Blackstone River waterfront to the Church Hill area
- 1855 Pawtucket's first public high school is constructed
- 1862 Pawtucket, Massachusetts is ceded to Rhode Island
- 1865 Industry expands from the Church Hill area to west of Dexter Street; Pawtucket's Congregational Church is constructed on Walcott Street
- 1870 A commercial district begins to be developed on Main Street, Mill Street and Pleasant Street; A fire department and police department is established
- 1874 The eastern portion of North Providence becomes part of Pawtucket; Pawtucket incorporates as a town, with present day boundaries
- 1875 Large population of Irish and English immigrants settle in Pawtucket becoming the largest group of immigrants in the city
- 1877 The Main Street Bridge is constructed uniting the eastern and western portions of the city
- 1880 The city's downtown expands, making the area more of a shopping hub
- 1880 *Population 19,030*
- 1885 Pawtucket becomes incorporated as a city; Large population of Italian immigrants settle in Pawtucket, becoming the largest group of immigrants in the city

- 1890 *Population 64,248*
- 1894 Land is purchased for the first major public park which would later become Slater Park; Construction of the Pawtucket Armory begins
- 1895 Large population of Russian, Polish and Portuguese immigrants settle in Pawtucket, becoming the largest group of immigrants in the city
- 1903 Slater Park, Pawtucket's first major public park, is completed
- 1905 Large population of Armenian and Syrian immigrants settle in Pawtucket, becoming the largest group of immigrants in the city
- 1910 Large population of Greek and Austrian immigrants settle in Pawtucket, becoming the largest group of immigrants in the city
- 1920 Large population of French Canadian immigrants settle in Pawtucket, becoming the largest group of immigrants in the city
- 1924 Slater Mill is purchased for preservation as a historic landmark
- 1930-39 Textile industry declines in the Blackstone River Valley
- 1950 *Population 81,436*
- 1958-63 I-95 is built through Pawtucket providing major highway access
- 1961 First master plan for the city is adopted
- 1965 Slater Urban Renewal Project is initiated
- 1970 *Population 76,984*
- 1975 Slater Urban Renewal Project is completed and closed out
- 1980 *Population 71,204*
- 1990 *Population 72,644*
- 1998 Pawtucket establishes an Arts and Entertainment District (sales tax exemption for artwork and sales within the district)
- 2000 *Population 72,958 (becoming the fourth highest population in Rhode Island's cities and towns)*

**Dates and facts were obtained from City of Pawtucket: Comprehensive Plan 2003 and Rhode Island Historical Preservation Commission. Pawtucket, Rhode Island: Statewide Historical Preservation Report P-PA-1 Rhode Island: October 1978*

Pawtucket, Rhode Island

The city of Pawtucket, Rhode Island is characterized by a rich and diverse history dating back years before the English settlers set roots in the area. Most notably Pawtucket is known for its significant involvement in the Industrial Revolution.

Located in the Blackstone River Valley, Pawtucket is sited in east-central Rhode Island and measures 8.94 square miles. The city falls in a “section of a broad coastal plain varied by two low hills and occasional steep bluffs”.¹ Originally, the Blackstone River Valley was primarily occupied by the Wampanoag Tribe who lived in seasonal villages and migrated in response to hunting, fishing and agricultural cycles. Pawtucket’s current Main Street actually follows the path of the old Pawtucket Trail initially used by the Native Americans. In the early seventeenth century, a plague wiped out most of the Wampanoag, leaving the area open for the Narragansett tribe to filter from the south, expand and settle. In 1636, this land, which would come to be named Pawtucket, was purchased by Roger Williams from the Narragansett.²

The establishment of the city of Pawtucket, as it is known today, was initially due to the area’s proximity to the Blackstone River. Though located near other water masses, the Blackstone River is the city’s major water body. Running north to south, the river acted as the earliest means of transportation to the area, dating back before Pawtucket’s settlement. Up until 1671 Pawtucket was mostly home to farmers, primarily from the Daggett, Esten, Bucklin or Smith families, but when Joseph Jenks bought

60 acres of land, the city’s involvement in the Industrial Revolution began. Though forced to rebuild after the destruction of King Phillip’s War, Jenks established an industrial settlement and saw mill that proved the powerful benefits of water power.³ Jenks was the first individual to harness the river’s water-power and paved the way for others to use the river’s abilities to their advantage. The water acted, in the seventeenth and eighteenth-centuries, as both a vehicle for power, as well as ,“a link in the major overland route between Providence and Boston”.⁴

The history of Pawtucket is deeply rooted in the time of the Industrial Revolution. It was during this time that those on the land established themselves as major players in the textile industry. This period of growth, which began in the late 1780s, lasted for over one hundred years during which time close to a dozen major textile companies established themselves.⁵ These companies, like the Dexter Yarn Company or the Lebanon Mill Company, provided goods like yarn, cotton, silk, lace, cardboard and paper products.⁶

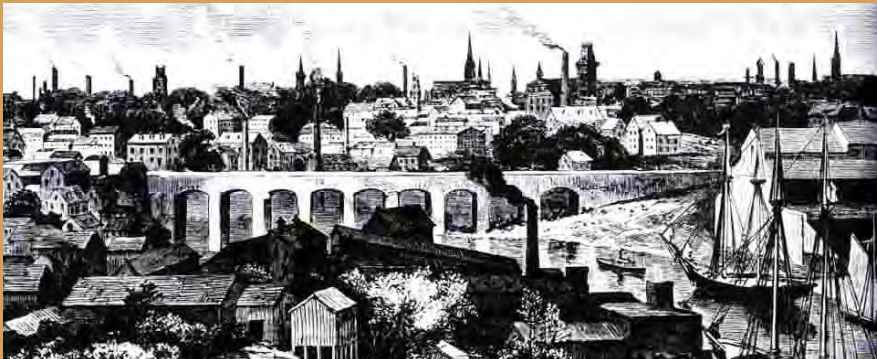
Pawtucket owes its development as an industrial powerhouse to Samuel Slater with his “intimate knowledge of the English factory system”, as well as, the Wilkinson family, who were the area’s first producers and manufacturers of cold-cut mills. This family also established a rolling and slitting mill in Pawtucket.⁷ In the case of Samuel Slater, with the help of local mechanics, cotton yarn began to be spun using techniques brought from Europe, making it a factory-based industry. This production later led to the development of bleachery and dye-works



Dunnell Manufacturing Company's Works, Pawtucket, print (1815)



Bird's eye view of Pawtucket, Rhode Island (1877)



View of Pawtucket from below Division Street Bridge, engraving (1881)



Old Slater Mill, engraving (1793)



Union Wadding Company Fire, photograph (1869)

industries in Pawtucket. In the year 1793, Samuel Slater founded America's cotton industry in the city's downtown sparking the Industrial Revolution in the United States.⁸

Ship building, undoubtedly due to the city's access to the open ocean, also became a huge industry in and around the Pawtucket area. Later when the United States was at war with England and certain amenities became scarce, flour mills began to flourish as a competitor in the local industry, as well as, cotton wadding, leather goods, yarn and textiles. Though the War of 1812, lasting until 1815, prevented industrial competition between England and the United States; with the close of the war, this competition emerged again. In addition, a terrible economic crash in 1829 caused the collapse of many New England industrial businesses, especially cotton. The city did experience minor economic stimulation in 1865 with the construction of the Providence & Worcester Railroad, which was then connected to the Boston Railroad, but still industry continued to decline. In the 1850s, new industry developed and moved away from the congested waterfront. On the water, small industries and mills took over the coast and larger factories began to be developed to the north and west.

Aided by the construction of the railroad, which bypassed the downtown, coal-fire steam became the leading power source. This area, known then as the Church Hill area (present day Goff Avenue area), originally housed three factories, including the Pawtucket Stead Wadding Mill which "turned cotton mill waste into batting and wadding used to fill quilts and pad furniture". The building later came to be known as the Union



Pawtucket City Hall



Pawtucket Armory



Slater Mill Museum and the Old Slater Mill



Division Street Bridge



View of Pawtucket's Downtown area

Wadding Company (the site of the proposed thesis design). In the 1860s, this area quickly grew into the industrial area of Pawtucket, with the establishment of a nut and bolt manufacturer, wood-turning shop, file mill and thread mill.⁹ By 1865, industry outgrew the Church Hill area and expanded west to Dexter Street.

With the growth of industry, the need for factory workers quickly increased and as a result, a city full of diverse cultures began to grow and flourish. During the time of the Industrial Revolution, groups such as French Canadian, Greeks, Italians, Portuguese and Poles all settled into Pawtucket in order to practice their trades.¹⁰ Statistics have shown that the population of Pawtucket was almost completely employed by the manufacturing companies.¹¹

During this time of expansion, Pawtucket still failed to call itself its own private city. Originally it was part of Massachusetts, but in the year 1862, Pawtucket was transferred to Rhode Island in exchange for Fall River. Not until 1874 was Pawtucket incorporated as a town when it annexed part of North Providence. In 1885, Pawtucket officially became a city when it received its first charter.¹²

With the second World War came economic recovery in Pawtucket, but not without changes and shifting trends. By 1939 "cotton had been displaced as the city's primary industry... [with]...fabricated metals and machinery industries". This trend continued well into the 1950s with "63 percent of the work force being employed by manufacturers". In the same vein,



McCoy Stadium, stadium of the Pawtucket Red Sox



View of the Blackstone River



Pawtucket Public Library

the number of manufacturing employees grew, while those employed by the textile industries declined from 62% (1936) to 32% (1967).¹³ As the city grew and established its roots, the river negatively divided the area into eastern and western portions.

Even though it caused economic and political tensions, the Blackstone's water power "was the primary reason for Pawtucket's early development" during the Industrial Revolution.¹⁴ This tension in the present day was rectified with the introduction of a railway line and the interstate highways. Both made the eastern and western portions of the city "integral parts of the heavily developed 'North-east Corridor'". More specifically, during the 1960s, Pawtucket was connected to I-95 and more minor roadways (U.S. 1, R.I. 15 and R.I. 114); all radiated from the downtown area and extended outward to the surrounding cities and towns.¹⁵

Pawtucket of Today

While 17th century Pawtucket could be categorized as an iron-work village, the numerous industrial changes that occurred in the years following drastically changed the character of the city. By the 19th and 20th centuries Pawtucket had outgrown its village charm and became a full blown manufacturing city. Statistics show that in the 1970s, sixty percent of Pawtucket's workforce was employed by the local industries.¹⁶

The Pawtucket of the twenty-first century owes everything it is

today to the textile industry that brought the small town to the forefront of the Industrial age. Its population has grown to 72,958 with over 30,000 housing units making up the residential areas, 300 industries and 1,000 commercial and service establishments.¹⁷

In residential and historic areas, there have been great efforts to rehabilitate and renovate historical buildings, demolish those beyond repair and use vacant lots to create parks and green spaces. In addition, there has been a push to improve the educational programs, expand employment opportunities by stabilizing existing commercial industry and creating new industries. To jumpstart these commercial sectors, rehabilitation and location incentive loans have become available..

Though the area thrived with its numerous factories and mills, in recent years, this commercial base has relocated leaving these large structures vacant and in many cases abandoned. In its heyday, Pawtucket had close to 200 operating manufacturing companies in its mills. In 1998 Pawtucket's City officials approached the General Assembly and lobbied for the creation of a 307 acre district devoted to the arts. The district would take over 23 mills, eleven commercial and vacant buildings and would be spread out over sixty streets.¹⁸

This district in the downtown was put into effect under the supervision of the Mayor, James E. Doyle and the Department of Planning and Redevelopment.¹⁹ To date, the Arts District has obtained 12 commercial buildings to be used toward the initiatives of the art plan and three live-work projects (230 units)

have been designed drawing 400 new people to the downtown area. The overall arts plan aims to fill more than 1 million square feet with “arts live-work lofts, studios, performance spaces and small businesses”.²⁰

Surrounding towns and cities, in addition to Pawtucket, are seeking ways to increase a community for the arts. Providence, for example, established the initiative *Creative Providence*. This cultural plan brings together the community, educational institutions, as well as, the local government (more specifically, the Department of Art, Culture & Tourism) to foster a strong artistic environment.²¹ Two major goals of *Creative Providence* guide the overall plan:

1. “Building community and foster neighborhood vitality through increased access and diversified cultural participation.
2. Educate and inspire the next generation of creative thinkers.”²²

Such goals are reminiscent of the same goals desired with the Pawtucket Arts District. Sharing mutual sentiments with other surrounding communities in regards to encouraging and supporting the arts makes the footing on which the District is being developed even stronger.

Prior to the establishment of the Arts District in Pawtucket, an annual Arts Festival was devised in June in 1999 to celebrate the Visual and Performing arts in the city. In addition, interactive workshops, musical theater and dance performances were

also incorporated into the festival. To give back to the community, this festival has left its mark by donating four permanent sculptures to the City.

Originally, the festival had a budget of \$20,000 but due to its growing success in the community, this amount has grown to over \$96,000. Such a drastic increase shows Pawtucket’s interest and appreciation for the arts and has created a platform for future development in the area of the arts.²³

Demographics

The city of Pawtucket has a population of 72,958 (circa 2000) with 47.4% being men and 52.6% being women. With a relatively youthful population (median age is 35), Pawtucket possesses a wide ranging demographic with a fast growing Hispanic population. The median income of the city is roughly \$31,000 annually with over 75% of its residents never achieving a college education. More specifically 5.5% of residents have graduate/professional degrees, 8.8% have bachelorette degrees and 14% have a college education (in comparison to 31% of Rhode Island overall). A significant 30% of residents never achieved higher than a high school degree and stunningly, 13% of Pawtucket’s population has received less than a 9th grade education.²⁴

Educational status in Pawtucket has declined in recent years, therefore consideration for ways to incorporate art into the

neighboring schools has been proposed to help counteract this decreasing interest in pursuing higher levels of education. The Arts District sees this union as highly necessary “with an unemployment rate of 6.3%, the arts could provide a range of employment opportunities, if school-to-career issues were included in the comprehensive arts plan”.²⁵ Encouraging artists to move to Pawtucket would be a major benefit to the local economy, as well as, to the local school system. The “U.S. census identifies artists and workers in the creative industries as among the fastest growing occupational groups in the latter half of the 20th century”.²⁶ Pawtucket serves as a great alternative for artists who wish to live in a city atmosphere, but cannot afford the high prices and high rental rates of, say, Providence and Boston.²⁷

- ¹ Rhode Island Historical Preservation Commission, *Pawtucket, Rhode Island: Statewide Historical Preservation Report P-PA-1* Rhode Island: October 1978: 3
- ² Rhode Island Historical Preservation Commission: 4
- ³ Rhode Island Historical Preservation Commission: 5
- ⁴ Rhode Island Historical Preservation Commission: 6
- ⁵ Boucher, Susan Marie. *The History of Pawtucket: 1635-1976*. Connecticut Printers, 1976: 57
- ⁶ Slater Trust Company. *Pawtucket: Past and Present*. Boston: Walton Advertising and Printing Company, 1917: 19-26
- ⁷ Rhode Island Historical Preservation Commission: 8
- ⁸ Weiss, Herb. "City of Rome Presentation". Economic & Cultural Affairs Office. 27-29 October 2009: 1
- ⁹ Rhode Island Historical Preservation Commission: 15
- ¹⁰ The Pawtucket-Blackstone Valley Chamber of Commerce. *Pawtucket-Blackstone Valley, Rhode Island*. Windsor Publications, Inc. 1974: 8
- ¹¹ Boucher: 64
- ¹² The Pawtucket-Blackstone Valley Chamber of Commerce: 24
- ¹³ Rhode Island Historical Preservation Commission: 34
- ¹⁴ Rhode Island Historical Preservation Commission: 3
- ¹⁵ Rhode Island Historical Preservation Commission: 3
- ¹⁶ Rhode Island Historical Preservation Commission: 3
- ¹⁷ Weiss, Herbert. *Arts Vision Plan*. www.pawtucketri.com/arts/plan
- ¹⁸ Weiss, Herbert. *Arts Vision Plan*. www.pawtucketri.com/arts/plan
- ¹⁹ Galligan, Ann M. *Arts and Cultural Roadmap for Pawtucket*. A Report to the Mayor and the Department of Planning and Redevelopment for the Future Growth of Arts and Culture in the City of Pawtucket, Rhode Island. Northeastern University: Cultural & Arts Policy Research Institute, 2005: 3
- ²⁰ Weiss: 6
- ²¹ "Creative Providence: A Cultural Plan for the Creative Sector," David N. Cicilline, Mayor, accessed August 29, 2011. <http://cityof.providenceri.com/efile/47>: 7
- ²² "Creative Providence: A Cultural Plan for the Creative Sector": 15
- ²³ "Pawtucket Arts Festival History: The Pawtucket Arts Festival: Twelve Years of Quality Programming," The Pawtucket Arts Festival, accessed August 29, 2011. <http://www.pawtucketartsfestival.org/about/history>
- ²⁴ Galligan: 40
- ²⁵ Galligan: 41
- ²⁶ Galligan: 8
- ²⁷ Galligan: 14

Pawtucket's Arts Initiative

Encouraging the Arts

The economic crises and budgetary cuts being experienced nationwide resulting in reduced class funding by the downsizing of academic curriculums. In many cases, these cuts are initially directed at cutting back the funding for arts classes, whether it be visual arts, music or theater. Regardless of what medium being considered, these cuts to the educational offerings is doing an enormous disservice to the youth of this country. The arts are viewed as secondary to the “primary” academic courses: math, english, science and history.

The first issue at hand is correcting the concept that the arts fall second to the academics. All classes should hold the same weight and need to be treated as such. The arts open up the opportunity where “people can explore new identities and possibilities for themselves and their communities, moving beyond perceptions of limited boundaries and circumstances”.¹ During adolescent development is when this type of exploration is most vital. In the year 2009, only one half of the elementary schools in the United States had a full-time art teacher on staff and with the current economic status of the country, this trend threatens to only get worse.² To counteract the decrease in art courses in school systems, community art programs are gaining a greater importance within neighborhoods in creating a sense of community.

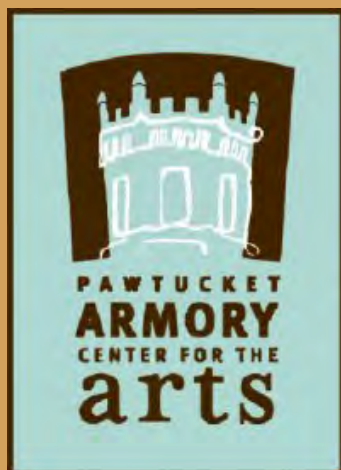
Pawtucket approached the need for urban revitalization by using the local artistic community as a catalyst to bettering the

city's future. This approach has been used nationwide, such as in SoHo, New York, but Pawtucket's method for implementation is drastically different and more long-term in scope. Typical artist revitalization projects use the artists as short term solutions to draw residents and tourists to an area. The intent is to eventually replace the artists with more traditional residents. Pawtucket, in contrast, sees artists as “long-term investments”.

“Instead of using artists as instrumental agents for urban renewal, (often dubbed “the SoHo Effect” based on the experience of artists in lower Manhattan who renovated this blighted neighborhood only to be forced out when real estate and other costs becomes prohibitive), the City is seeking to develop a long-term, sustainable relationship with artists and the arts.”³

Rather than acting as subordinates to the city officials, these individuals are viewed as “desirable partners in the City's long-term economic recovery” and permanent fixtures in the community. Treating these artists as business professionals, “Pawtucket has made efforts to include artists in the planning process and is actively looking for ways to involve them.”⁴

Pawtucket views its artists as a wide-ranging and multi-faceted group of individuals. This group includes “professionals working in the for-profit and not-for-profit worlds...professionals and emerging artists”. Though the group of artists being considered is highly diverse, the desires are relatively consistent (such as high ceilings and elevators), affordable housing is the most prevalent concern. Affordable housing “is a crucial element in allowing your artists the chance to develop their work so that they can have a real “shot” at achieving success”.



The second most prevalent concern voiced by artists is widespread visibility and easy public access in order to successfully sell their work.⁵ To promote the audiences of the Pawtucket artists, those involved with the Arts and Cultural District saw the importance of uniting the surrounding educational institutions, ranging from the elementary to collegiate levels, with the artistic community. By uniting students, educators and artists, an environment can be created that can use the “arts to develop those skills that will help [students to] compete in a knowledge-based economy. While not only increasing artists exposure in the community, the benefits of the arts on students is highly beneficial in regards to development and psychological growth.

Not only does the arts act as a creative outlet, but “arts education is linked with higher grades and higher attendance rates”. Studies have even shown that “young people enrolled in sports/academic/ community service, and arts programming do better in school and in their personal lives than young people from similar socio-economic backgrounds”.⁶

Numerous art institutions have already been established in conjunction with the renovation of mills for working and living space, such as the Fall Arts Festival and the Armory, which has become the first art high school in the area. Revitalizing the downtown of Pawtucket cannot be solved simply by developing art live/work spaces. The Arts District also calls for “places to shop, eat and purchase goods and supplies”, in addition to residences. (In conjunction with the development of these various institutions, the development plan suggests designing an “appropriate, well-designed, pedestrian-friendly uses” with links to Pawtucket’s waterfront is also called for.⁷)

¹Krensky, Beth and Seana Lowe Steffen, Engaging Classrooms and Communities Through Art: A Guide to Designing and Implementing Community-Based Art Education. Altamira Press, Lanham, 2005: 5

² Krensky: 6

³ Galligan, Ann M. *Arts and Cultural Roadmap for Pawtucket*. A Report to the Major and the Department of Planning and Redevelopment for the Future Growth of Arts and Culture in the City of Pawtucket, Rhode Island. Northeastern University: Cultural & Arts Policy Research Institute, 2005: 6

⁴ Galligan: 18

⁵ Galligan: 27

⁶ Galligan: 31

⁷ Galligan: 25



Location & Specifications



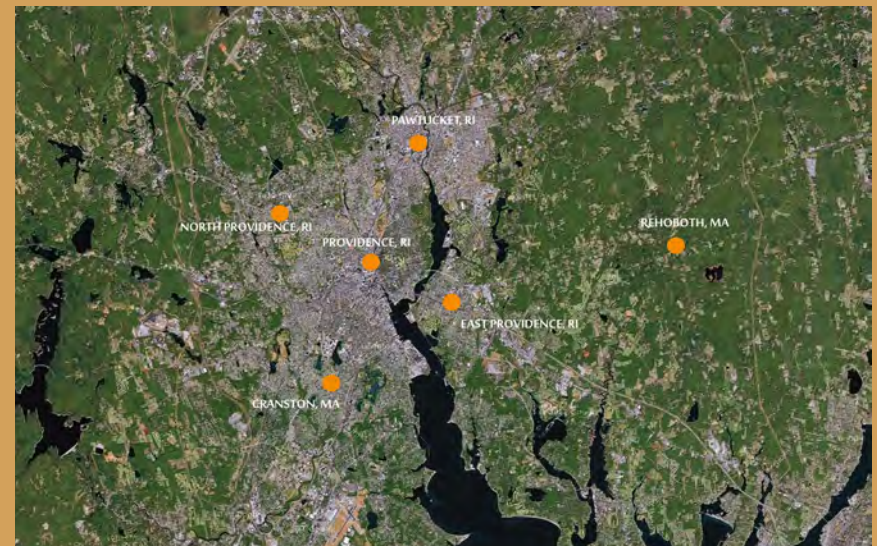
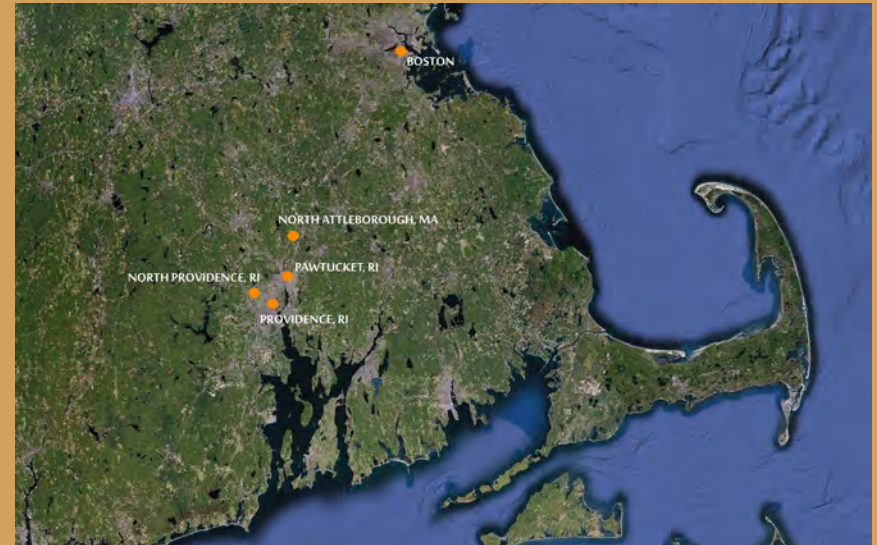
Land Use Goals

1. Protect existing residential neighborhoods from undue encroachment of conflicting non-residential uses.
2. Protect existing neighborhoods from increasing housing densities that lead to overcrowding, shortage of available off-street parking and traffic congestion.
3. Protect viable vacant industrial sites from industrial uses. Where industrial lands are no longer viable, consider rezoning to more appropriate uses.
4. Encourage infill development on vacant parcels that reflects the built character of the neighborhood.
5. Control strip commercial development by promoting neighborhood and regional shopping districts.
6. Revitalize downtown with a variety of mixed uses including live-work space, offices, studios, galleries, restaurants and theaters.
7. Protect existing publicly owned open space and recreational areas.
8. Promote and encourage appropriate development along Pawtucket's riverfront including well-designed commercial uses, the reuse of existing, vacant industrial buildings, the creation of public gathering places, and the provision for river access.

The City of Pawtucket

The city of Pawtucket, Rhode Island is located in the northern portion of the state and sits directly adjacent to the state of Massachusetts. Bordering the city is Lincoln, Rhode Island and Attleboro, Massachusetts to the north, North Seekonk and Rehoboth, Massachusetts to the east, Providence to the south and North Providence to the west. Pawtucket's close proximity to Providence (6.0 miles, 12 minutes by car) allows the city to benefit from the large city amenities while keeping some distance to maintain its own charm as an up and coming place of interest in Rhode Island. Sitting directly adjacent to Massachusetts and having immediate access to I-95, which connects to I-90, creates a direct linkage between Pawtucket and Boston, Massachusetts (46.9 miles, 54 minutes by car).¹

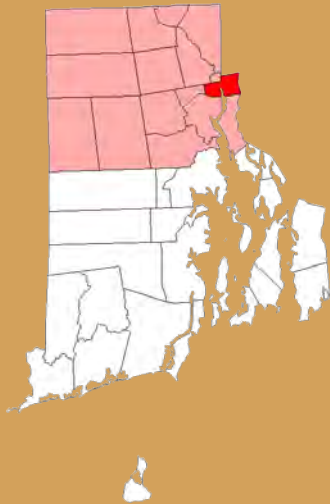
Pawtucket is divided in half by the Blackstone River, which flows south to Providence, travels down past Newport and later empties into the Atlantic Ocean. This river initially acted as the natural barrier between Providence (which became North Providence in 1765) and Rehoboth, Massachusetts (which became Seekonk, MA in 1812 and then Pawtucket, MA in 1828). In 1862 Pawtucket, Massachusetts was ceded to Rhode Island and the eastern portion of North Providence became part of Pawtucket. It was at this time, in 1875, that the two portions were joined to create Pawtucket, Rhode Island. It was this river that first encouraged industry to settle in the area and harness the water's power.² The Goff Avenue site (site of thesis design) is located in the western portion of the city to the left of this river, approximately one half mile from the water's edge.





When industry outgrew the area along the river, large mills and factories moved west of the river where open masses of land allowed for the construction of more expansive industrial buildings.

To the east of the river are both Interstate 95 and Route 114. I-95 bridges the river just south of the Goff site (one half mile south) and then continues north paralleling the river. This major highway directly connects Pawtucket and North Attleboro to the north, and Providence to the south. While I-95 borders the city and remains closer to the periphery of the city's boundaries, Route 114 cuts directly through the western portion of the city from north and south. This smaller scale roadway connects Pawtucket to Woonsocket, Rhode Island and Central Massachusetts to the north and to the south directly links to the coastal and beach communities of Rhode island such as Bristol, Portsmouth and Newport. Both roadways traverse the Blackstone River uniting the west and east of Pawtucket. In tandem, two major bridges tie together each portion. The Division Street Bridge, constructed in 1876, is located directly south of I-95 which connects more residential areas of the city to one another. This also provides access to the Joseph Jenks High School and the McCoy Stadium. The Exchange Street Bridge is more northerly and is located in the city's downtown area. This bridge, constructed in 1872, is directly adjacent to the Pawtucket's City Hall and not only links the downtown to the William E. Tolman High School, the Armory (Pawtucket's High School for the Arts) and the Sandra Gamm Theater, but also connects to I-95.³



"Pawtucket's geographic area is 8.94 square miles of which 0.1 square miles is water. Pawtucket, with a population of 72,958 in 2000, has a population density of approximately 8,160 persons per square mile, making it one of the most densely populated municipalities in the state."

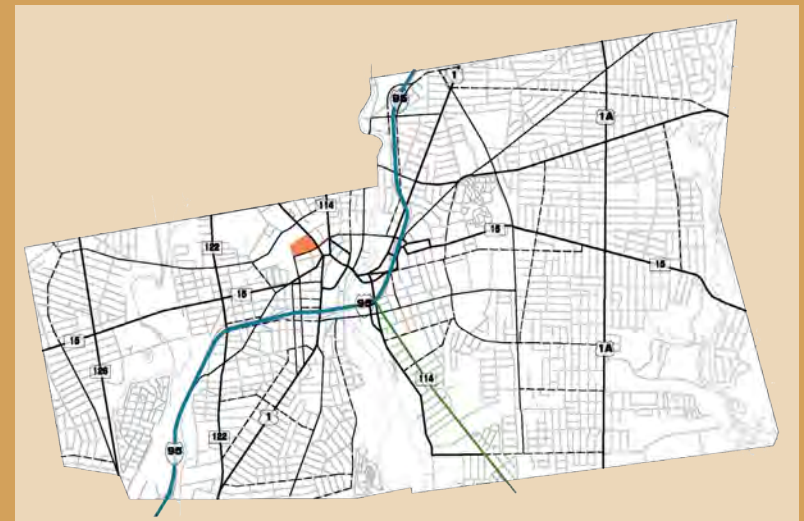
- City of Pawtucket,
Comprehensive Plan pp. 18

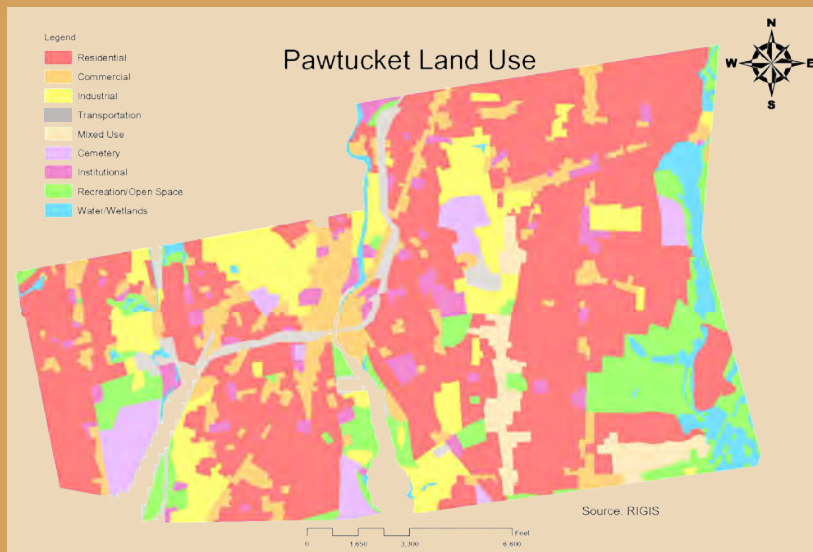


* image taken from flickr.com

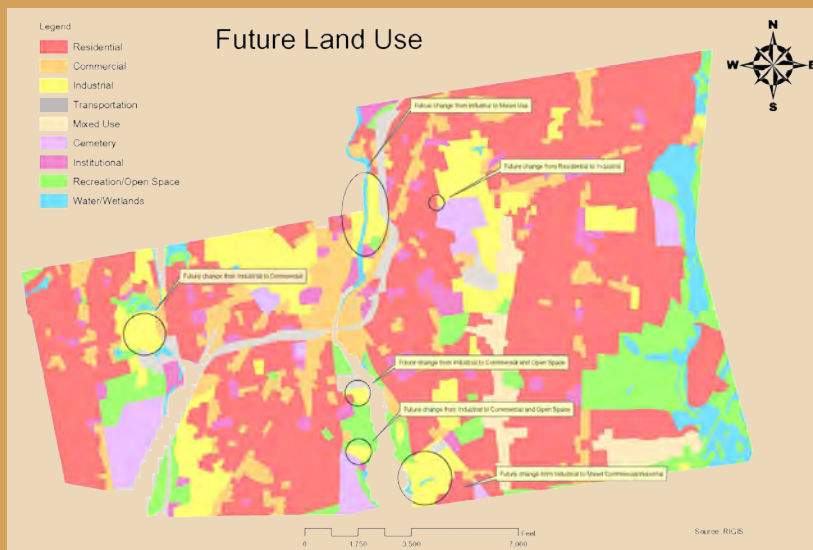


Blackstone River bisects the city, City of Pawtucket, Comprehensive Plan pp. 111





"The City of Pawtucket is a mature, intensively developed, urban community. Most development occurring in the future will be in-fill development and redevelopment of existing structure." - City of Pawtucket, Comprehensive Plan pp. 36

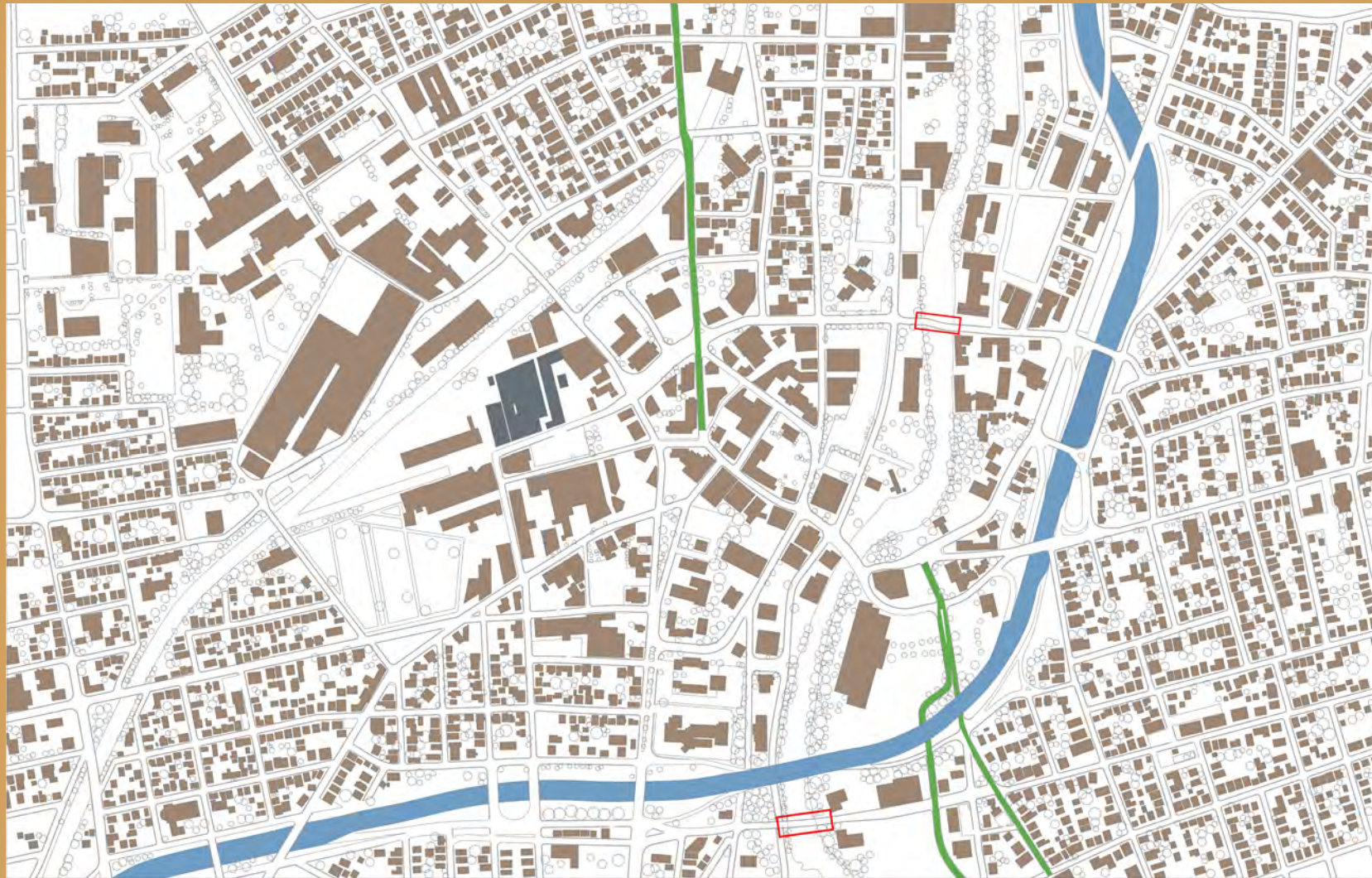


Based on 2002 figures, Pawtucket can be broken down into seven areas of usage⁴:

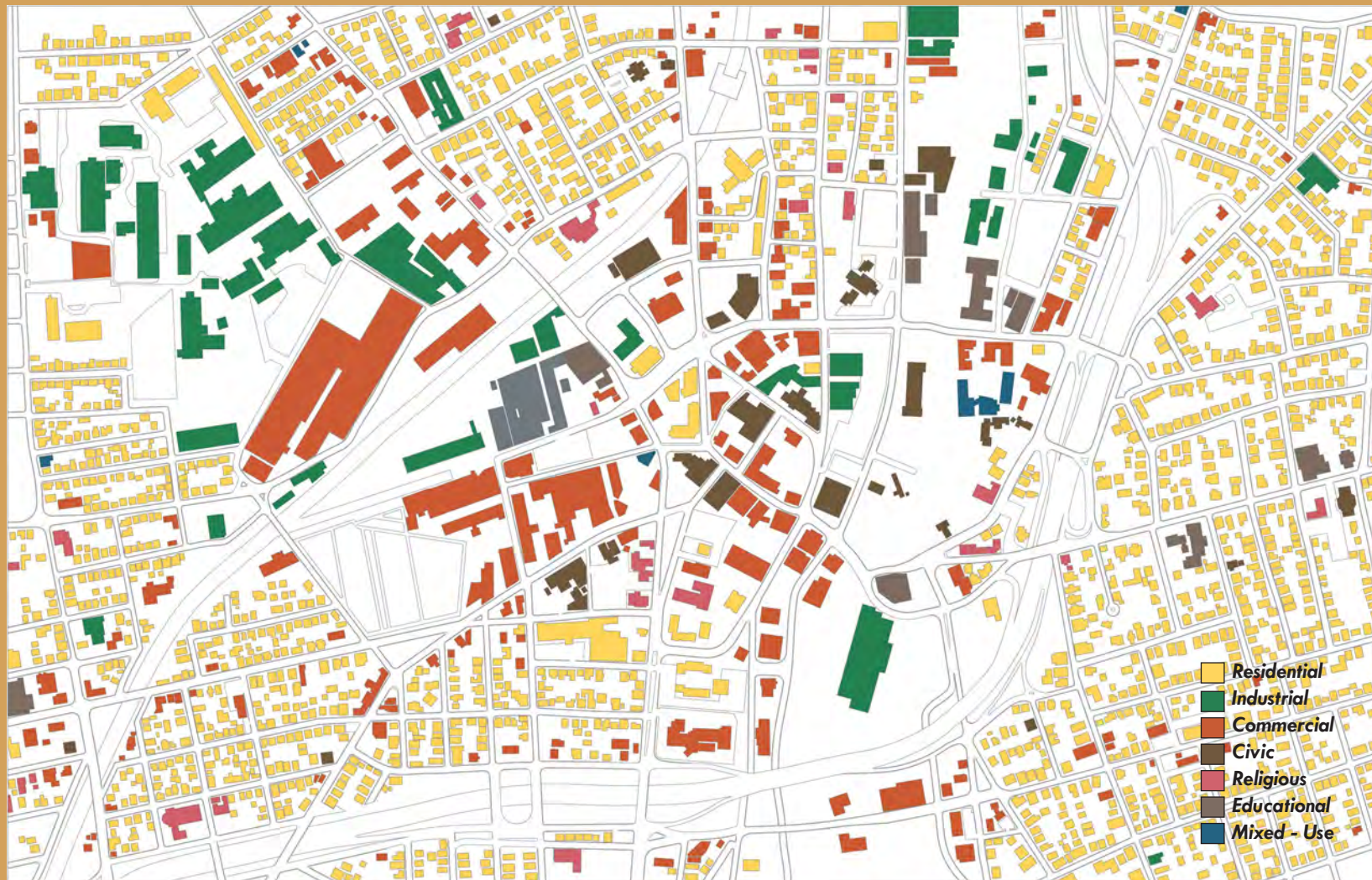
Residential	36%
Commercial Land	8%
Industrial Land	6.5%
Public/Semi-Public	19%
Railroad/Utility	2%
Street/Waterbodies	20%
Vacant Land	8%

Though these numbers have slightly changed due to efforts to modify and reuse existing structures, the majority of Pawtucket's land is still residential. These areas remain outside the periphery of the Blackstone River's water's edge. Public and semi-public structures are the next major use of land, followed by commercial (8%) and industrial land (6.5%). These two figures are most subject to change with the city's goals to promote commercial developments in the city and find new uses for the industrial structures.

While currently, buildings seem to fit into one of these categories, plans for the revitalization of available industrial buildings are introducing the mixed-use typology to the area. Small pockets of mixed use structures can be found only toward the south-eastern corner of Pawtucket, but the mixed use typology should begin to be intermixed in the downtown area.



The major highway (indicated in blue), I - 95, which connects to I - 90, passes to the south and east of the Goff Street site. In addition, Route 114 (indicated in green) is accessed to the east of the site. Each roadway directly connects the city to the surrounding town and metropolitan areas. Pawtucket is split in two by the Blackstone River and is joined by two bridges, both of which are circled in red. The Exchange Street Bridge and the Division Street Bridge joined the city in the northern and southern regions.



Pawtucket's building diversity extends from residential, civic, industrial, commercial and religious. The majority of diversity of uses is concentrated to the downtown area, beginning at the water's edge and extending out to the west in the industrial sector. Residential buildings are segregated from other forms of infrastructure and kept to the edges of the city. The separation of uses adds to the highly vehicular nature of the city.

Notes

¹ Distances and information determined through Google maps

² Rhode Island Historical Preservation Commission. *Pawtucket, Rhode Island: Statewide Historical Preservation Report P-PA-1* Rhode Island: October 1978: 4

³ Distances and information determined through Google maps

⁴ Pawtucket City Council. *City of Pawtucket Comprehensive Plan*. Rhode Island, 2003: 21

Housing Goals

1. Provide Pawtucket residents, from all socio-economic groups, with safe, decent and affordable housing.
2. Ensure that a consistent portion of the City's rental housing stock remains affordable and is in compliance with the provisions of the State of Rhode Island Low and Moderate Income Housing Act.
3. Ensure that residential growth does not adversely affect environmental, recreational and cultural resources.
4. Promote the expansions of owner occupancy in all neighborhoods.
5. Encourage the rehabilitation of underutilized commercial and industrial structures to residential units, as appropriate.
6. Protect the City's residential neighborhoods by preventing encroachment from other non-residential land uses.
7. Discourage increased density in established residential neighborhoods throughout the City.
8. Encourage the development of mixed income housing throughout the City.
9. Promote and enforce the federal Fair Housing Law throughout the City.

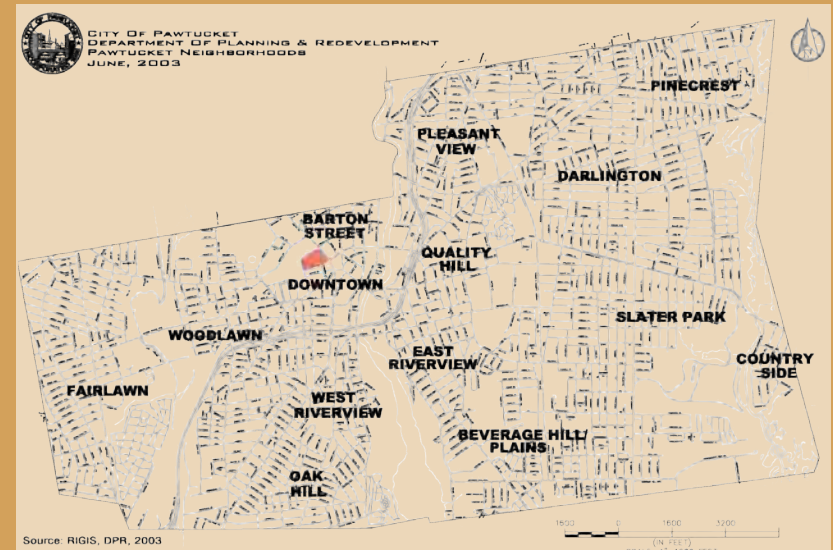
Neighborhoods

There are fourteen major neighborhoods that make up Pawtucket, Rhode Island.

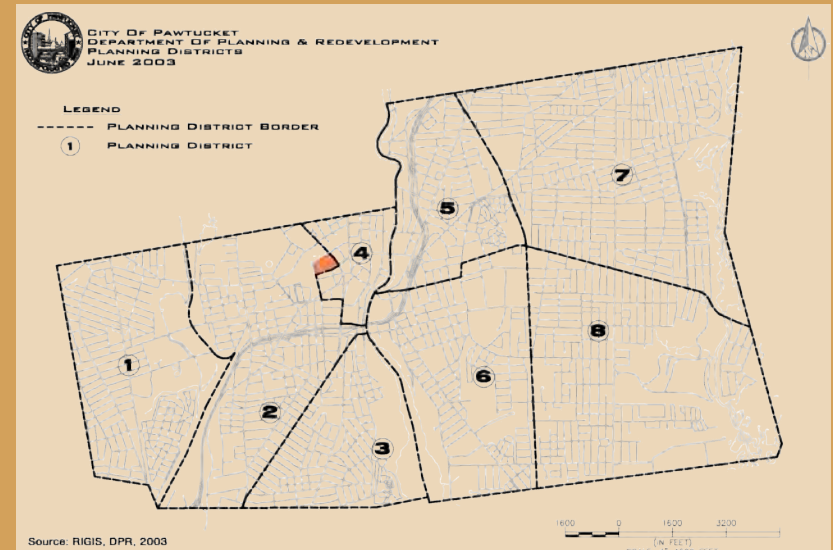
The Goff site is located in the Woodlawn portion (District 2) of Pawtucket. While not directly in the downtown neighborhood, due to its proximity to the river and its adjacent location to the original settlement of Pawtucket, this neighborhood has strong ties to the Industrial Revolution of the 18th and 19th centuries. As listed in the 2003 City of Pawtucket Comprehensive Plan issues such as conservation and green passage are proposed.

In an effort to maximize opportunities for the creation of open space and recreational spaces, individual goals have been set for each neighborhood. In addition, all districts are given a set of overall goals for which all should strive to achieve:

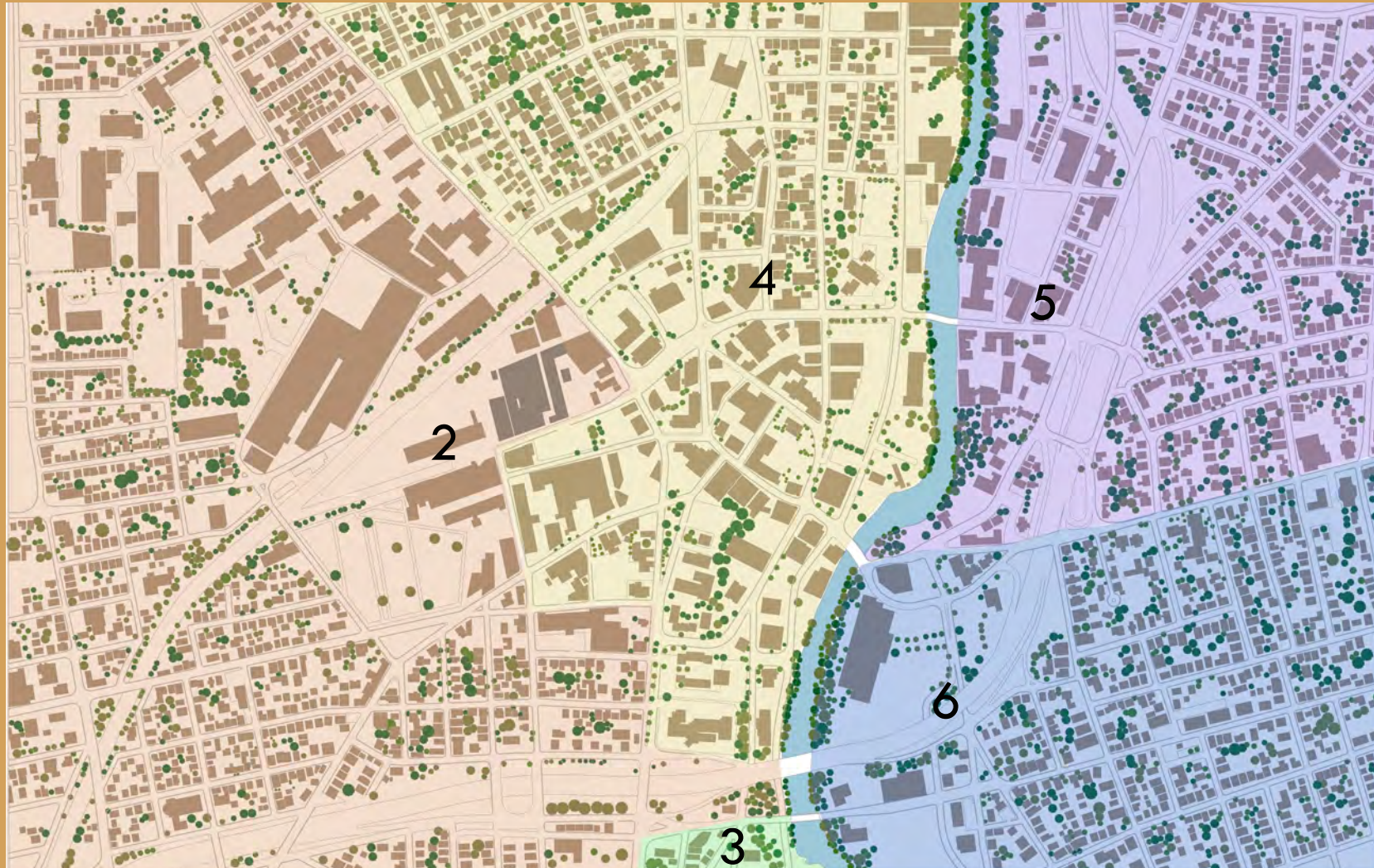
- Review all land parcels on the City's river and all streets' rights-of-way for public water access and recreational potential, including view sites, walking, biking, fishing, and boat launching
- Evaluate sites for acquisition and development for additional athletic facilities throughout the City
- Improve landscaping and plantings in neighborhood parks
- Explore opportunities for additional passive parks in all neighborhoods¹



Neighborhoods, City of Pawtucket, Comprehensive Plan pp. 117



Districts, City of Pawtucket, Comprehensive Plan pp. 55



"Housing in this district is dominated by multi-family structures. District 2 has the second largest supply of housing units in the City"

- City of Pawtucket, Comprehensive Plan pp. 52

Architectural Typologies

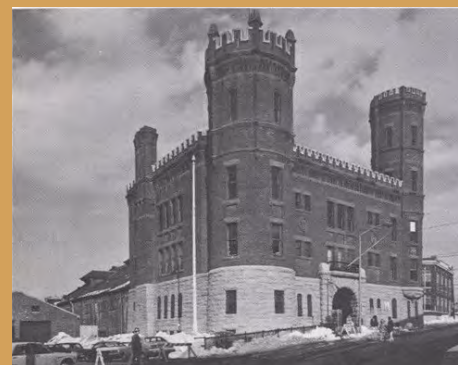
Dominant Architectural Styles

The architecture of Pawtucket is highly diverse in both its residential construction and its public buildings. Through the years various typologies have been constructed such as Victorian Gothic, Queen Anne, Shingle Style and Colonial Revival.² In the case of public buildings, the Art Deco style is the most prevalent, as seen in Pawtucket's City Hall. Simple, precise detailing with bold monolithic qualities allows the building to present a bold, civic quality. In addition, Neoclassical examples can also be found as well in many of Pawtucket's civic buildings. In contrast to the simple, strong lines of the Art Deco styling, buildings' such as the Armory and the Post Office are highly ornamental and complex. In the same vein as the City Hall, the attention to detail and classic appearance makes these Neoclassical civic buildings exude their own level of community importance.

The three most popular of the residential styles are Greek Revival, Italianate, and Picturesque. Greek Revival, most common in structures built between 1830 and 1850, is characterized by "wide paneled pilasters and full entablatures" such as seen in the Lorenzo Crandall House (1848) on High Street. The Italianate, which developed after the Greek Revival, was more cubic in its massing and traditionally had wide eaves. Such a style can be seen in Pawtucket's Children's Museum (originally Pitcher-Goff House, 1881) on Walcott Street, as well as the John F. Adams House (1867) on Allen Street. Following both Greek Revival and Italianate came the development of the Picturesque, where both previous styles are harmoniously



Pawtucket City Hall (1935)



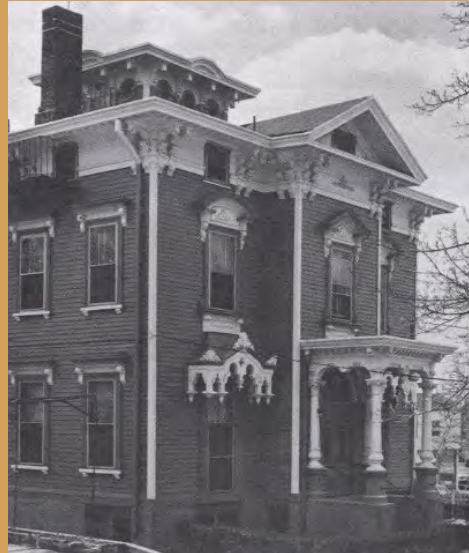
Pawtucket Armory (1894-95)



Old United States Post Office (1896-97)



Carlos Rogers House (1872-73)



John F. Adams House (1867)



Christopher Donnelly House (1868)

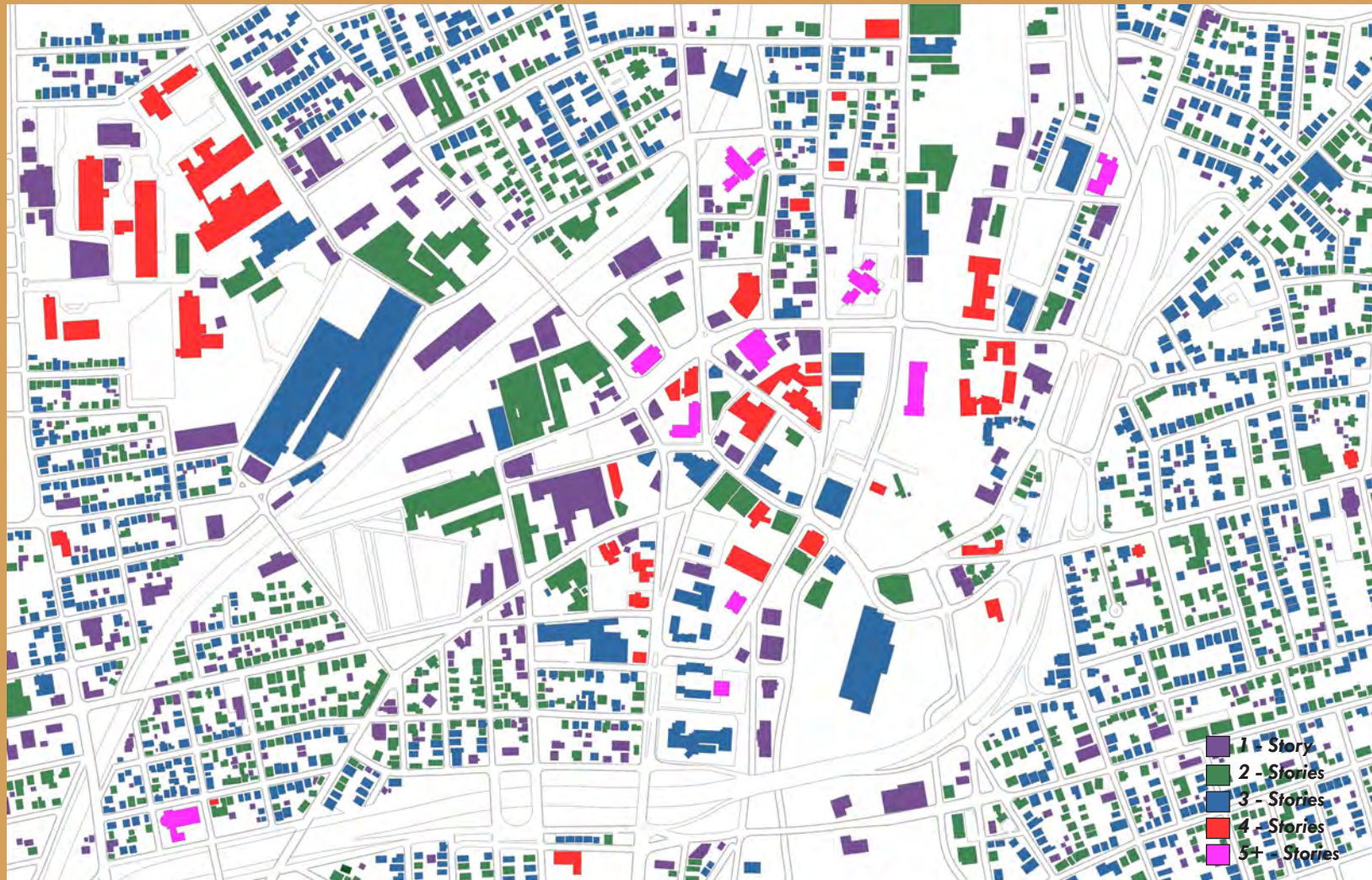


Nehemiah Bucklin House (1760)

combined together.³ The Picturesque, later in the 1880s, developed into the Queen Anne Style.⁴

Residential architecture is equally as diverse as the architectural typologies overall in Pawtucket. The wealthy families primarily occupied the mansions and single family homes. Such dwellings were either of the “three bay, end gable form” as seen in the Carlos Roger House (1872-1873) on Clyde Street or “five-bay, flank-gable type” such as the Christopher Donnelly House (1868) on Pine Street or Nehemiah Bucklin House (1760). Both typologies “utilized traditional schemes for plan and elevation, but overlaid them with a veneer of up-to-date details”.

While the wealthy lived in single family dwellings, the majority of Pawtucket residents lived in two- or more-family homes, otherwise referred to as tenements, especially during the late nineteenth and early twentieth centuries. Some of these multi-family tenements were owned by the local industries, but in most cases, these structures were privately owned and were divided both horizontally by floors or vertically creating a duplex condition.⁵



Similar to the the configuration of building uses, the arrangement of building heights is the most diverse in the downtown and industrial areas of the city. As one extends out from the water's edge, the building heights become more uniform and minimal. In the case of the residential border, the homes are primarily two and three stories with single-story, detached garages and storage structures adjacent to the residences. Very few high rise structures are found in the city. The few instances of such buildings represent singular instances of residential apartment blocks being introduced in the downtown areas.



Pitcher-Goff House (1840)



Lorenzo Crandall House (1848)



Three Decker Typology



H. B. Dexter Two-Family House (1890)

Heights

The buildings in and around the downtown of Pawtucket range from a single story (shown in purple) to over five stories (shown in pink). The greatest variety in different heights is found in the downtown area with one-story structures abutting four (shown in red), five and even nine story structures. Moving farther away from I-95 the heights of buildings are primarily two stories (shown in green) to three stories (shown in blue). This is due to the fact that this section of the city is primarily dedicated to residential buildings. The most variety is found in the civic or educational buildings. In contrast to the smaller residential buildings, residential complexes or high rises closer to the downtown tend to be the tallest buildings overall, reaching heights closer to nine stories.

Notes

¹ Pawtucket City Council. *City of Pawtucket Comprehensive Plan*. Rhode Island, 2003: 155

² Rhode Island Historical Preservation Commission, *Pawtucket, Rhode Island: Statewide Historical Preservation Report P-PA-1* Rhode Island: October 1978: 30

³ Rhode Island Historical Preservation Commission: 22

⁴ Rhode Island Historical Preservation Commission: 31

⁵ Rhode Island Historical Preservation Commission: 32



Environmental Conditions

Temperature Analysis

Pawtucket, Rhode Island experiences a typical New England climate, with warm Summers, cold Winters and mild Springs and Falls. In regards to temperature during each season, the climate drastically varies between both months and seasons overall.

As indicated through Autodesk Ecotect Analysis the average temperatures per month are as follows:

MONTH	CELSIUS	FAHRENHEIT
January	-3.5 C	25.7 F
February	0.1 C	32.2 F
March	0.5 C	32.9 F
April	7.6 C	45.7 F
May	13.1 C	55.6 F
June	19.5 C	67.1 F
July	19.4 C	66.9 F
August	21.5 C	70.7 F
September	17.7 C	63.9 F
October	9.6 C	49.3 F
November	3.2 C	37.8 F
December	1.6 C	34.9 F

Most notable the most extreme temperatures are felt in January (-3.5 C, 25.7 F) and August (21.5 C, 70.7 F) with the former being the most intense cold values and the latter the most severe warm values. Temperatures in between these months gradually increase and decrease, to correspond with the

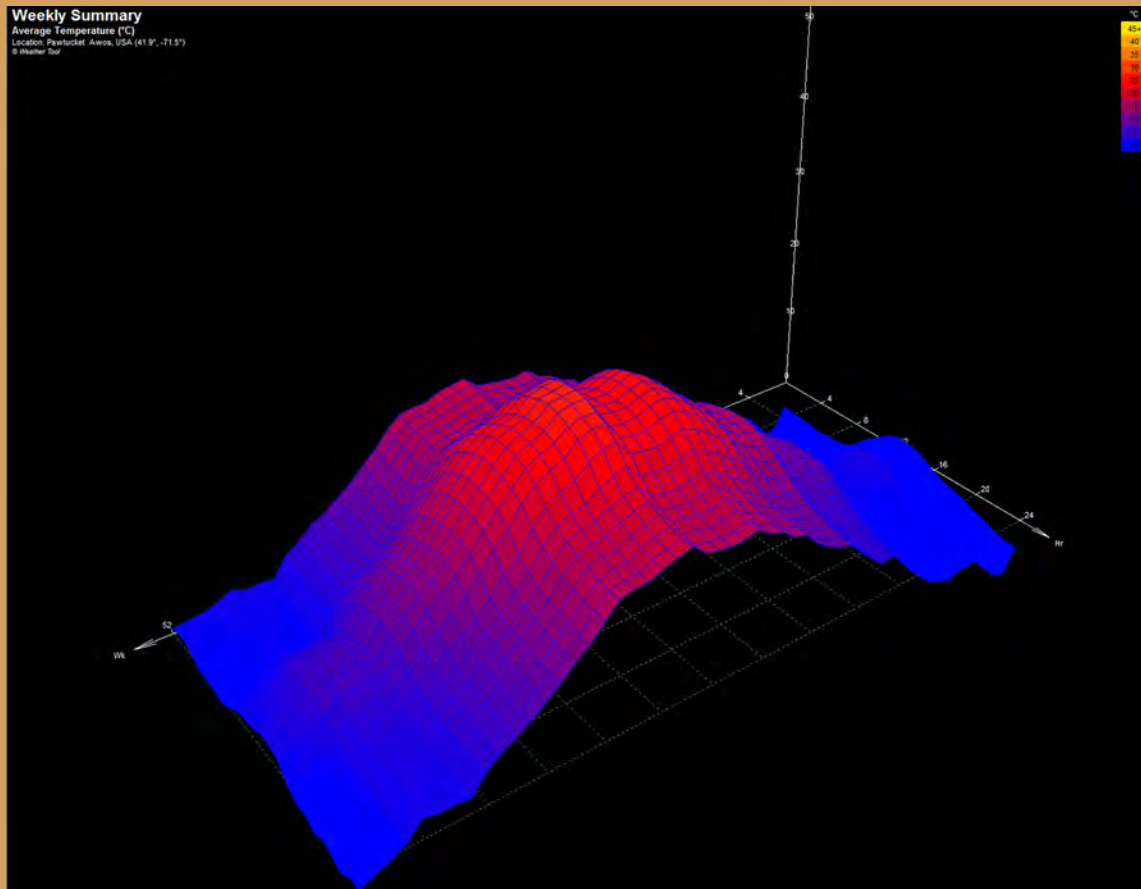
change of seasons, at a relatively even rate.

Though the numerical difference between coldest temperature value and warmest is close to 50 degrees Fahrenheit (25 C, 45 F), these values are typical of the region and are not so extreme that they cannot be simply managed with typical design strategies and techniques. There is no need, architecturally, to overcompensate for a climate that does not display staggering temperatures during its most extreme seasons.

Design Considerations

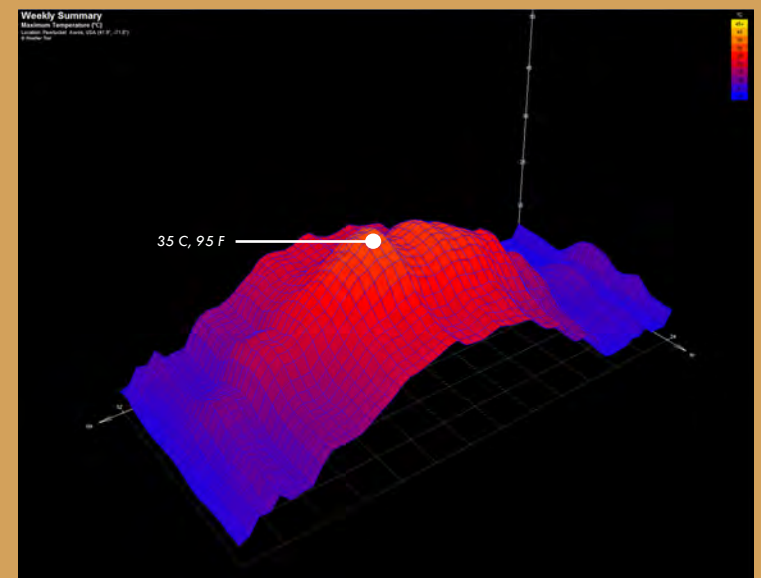
The building's facade and material selection should be chosen to accommodate a wide range of temperatures. Materials and the treatment of the facade should allow for the infiltration of daylight into the building, to warm the space during the cooler months, but also be conscious of the level of sunlight that is allowed in. While daylight will naturally and passively heat the space, there also has to be a level of control to prevent against over heating, which in the summer months will be the most extreme and apparent.

The treatment of the facade should also be able to accommodate the opening of wall apperatures to passively ventilate the space during the warm months, but in the same vein utilize materials that absorb heat during fall and winter months to passively keep the space at a more consistent temperature during the evening. Allowing for materials to work towards passively regulating the temperature within the building will cut down on the need for extreme level of HVAC and mechanical intervention.

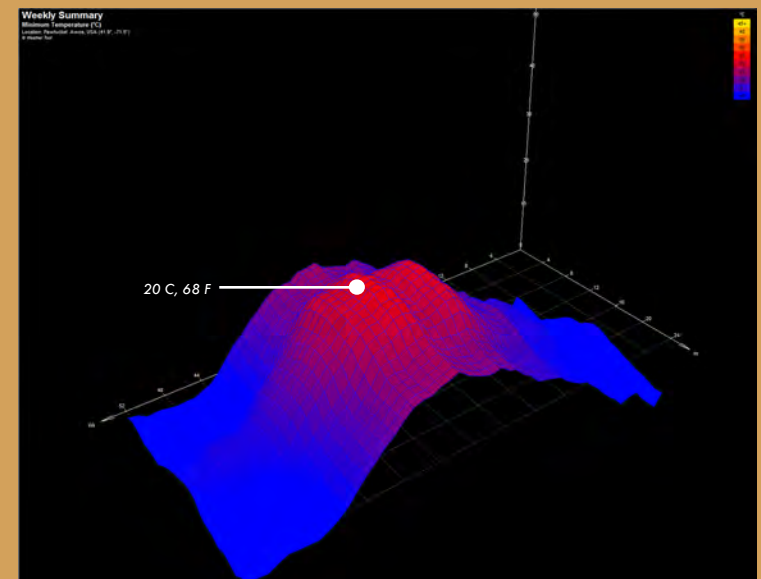


Average Weekly Temperature

The average weekly temperature is calculated to range between 25 C to 0 C (77 F to 32 F). Demonstrating typical New England weather, this average encompasses all months suggesting that the change in temperature during the winter months falls at, slight below or slightly above 0 C (32 F) and the summer months at, below or above 25 C (77 F). These figures express the average, and do not take into consideration humidity level, which can drastically affect the perception of temperature. Maximum and minimum temperatures more accurately reflect the extreme temperatures during the winter and summer indicating values such as 35 C (95 F) and 20 C (68 F).



Maximum Temperature



Minimum Temperature

Wind Analysis

Traditional New England weather, in which case Pawtucket is no exception, experiences regular levels of wind during all seasons. The constant presence of the free-flowing movement of air can affect the way in which temperature is perceived. Wind can decrease the effects of harsh summer heat, but can also give the sense of more extreme winter temperatures. In the same instance, the wind's temperature can also contribute to an increased perception of heat. Pawtucket's wind is a constant factor in regards to weather and climate. All seasons and months experience various wind speeds and the direction at which the wind is moving is also constantly changing.

According to the wind analysis information obtained through Autodesk Ecotect Analysis the average monthly wind statistics are as follows:

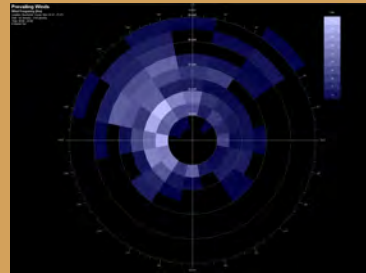
MONTH	SPEED	DIRECTION	TEMPERATURE	HUMIDITY LEVEL
January	20 km/h	North-West	15 C / 59 F	95% at 45 km/h
February	25 km/h	North	15 C / 59 F	85% at 30 km/h
March	20 km/h	South-South-East	10 C / 50 F	95% at 30 km/h
April	20 km/h	South-South-West	15 C / 59 F	95% at 35 km/h
May	15 km/h	South-West	25 C / 77 F	95% at 25 km/h
June	20 km/h	South-South-West	30 C / 86 F	75% at 30 km/h
July	15 km/h	South-West	25 C / 77 F	95% at 30 km/h
August	15 km/h	South-West	35 C / 95 F	95% at 30 km/h
September	15 km/h	South	25 C / 77 F	95% at 40 km/h
October	20 km/h	West	20 C / 68 F	95% at 30 km/h
November	20 km/h	West	20 C / 68 F	95% at 20 km/h
December	15 km/h	West	10 C / 50 F	95% at 30 km/h

Wind directionality, as well as wind temperature and wind humidity (to be discussed later), all vary from season to season and shows little consistency in transitioning from month to month. The only noticeable consistent pattern exists in the fact that the wind's direction is more northerly in the colder months and southerly in the warmer months. Aside from this, the direction of wind pinwheels with each change of month. Without a predominant direction wind, its management needs to be considered in regards to all facades. Seeing as wind speeds never become alarmingly strong, exploiting its presence to passively cool the building in the summer and maintain the movement of air in spring and fall will improve indoor air quality. Quality air conditions within buildings have been proven to promote and increase productivity and attentiveness.

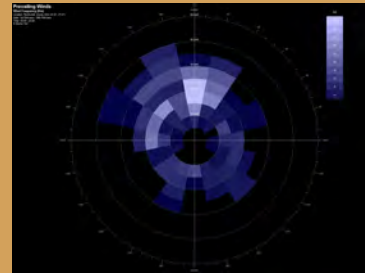
Wind temperatures demonstrate a more consistent response to months. Winter months display colder wind temperatures and summer months display warmer wind temperatures. November through April have the coldest wind temperatures with May showing a transition to warmer temperatures while May shows a transition to warmer temperature levels. In contrast, in the month of October, the dominance of warm air begins to transition to cooler air. As a result of wind directionality, the stronger wind forces in the winter months and lesser forces in the summer this contributes to the sensation of temperature comfort. As discussed earlier, the directionality of these winds vary from month to month. Regardless of the season the wind is always a factor. Using the wind's movement to improve indoor air quality is still a viable solution. The summer months, with their warm wind temperature, can still help regulate the air quality as the

Prevailing Winds (Monthly)

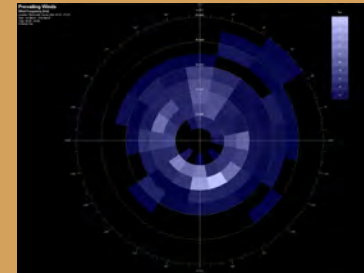
The direction of wind varies with each month with no specific direction dominating. The majority of strong winds occur in the colder months rather than during the warm summer months.



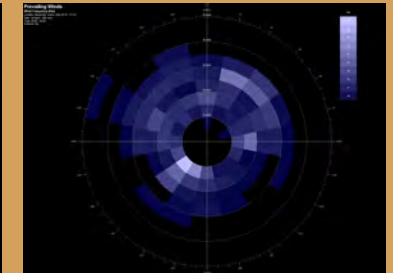
January



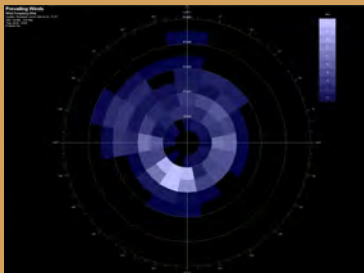
February



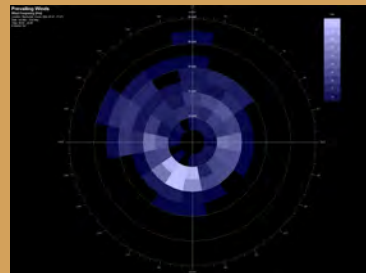
March



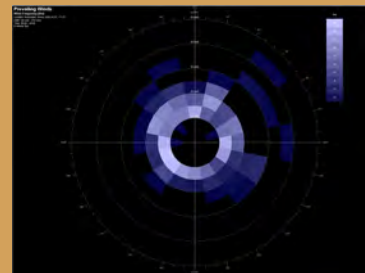
April



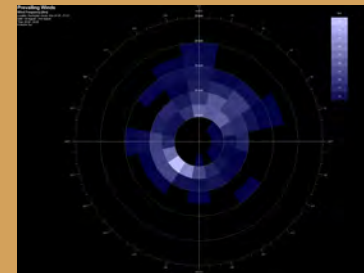
May



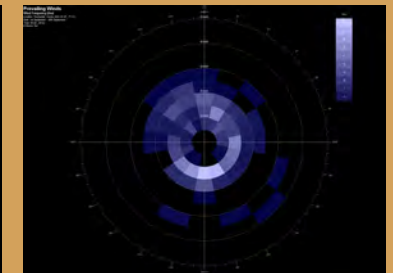
June



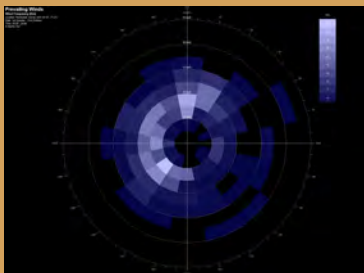
July



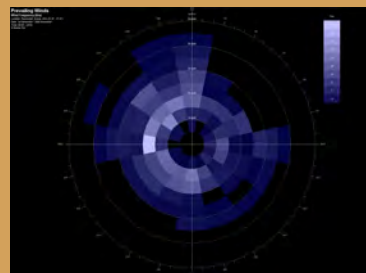
August



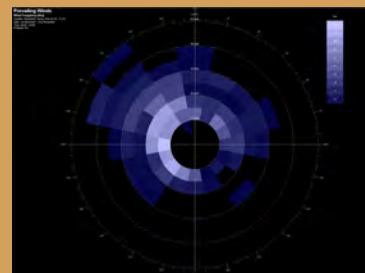
September



October



November



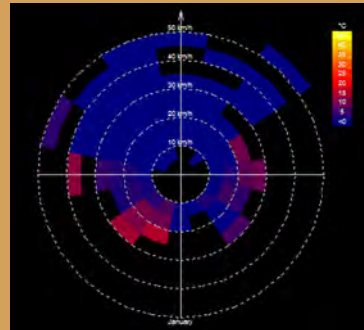
December

movement of air, warm or cool, still provides the sensation of cooler air temperatures.

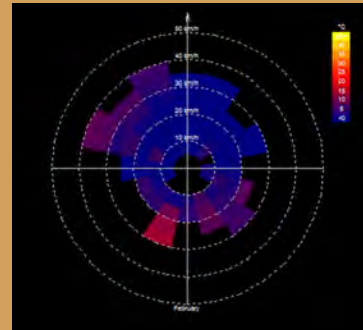
The wind's humidity levels are similar to wind directionality, in that they do not follow any obvious pattern and vary from month to month. The month with the highest humidity levels are January (95% at 45 km/h), April (95% at 35 km/h), July 95% at 35 km/h), September (95% at 40 km/h), and December (95% at 30 km/h). January and

Wind Temperatures (Monthly)

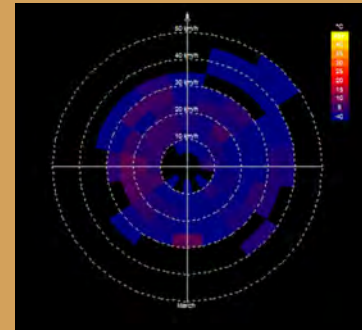
Corresponding with their respective months, the wind temperatures increase during the summer months and decrease in the winter months. Temperatures range from 0 C (32 F) to 35 C (95 F).



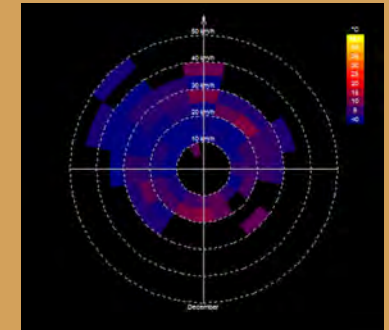
January



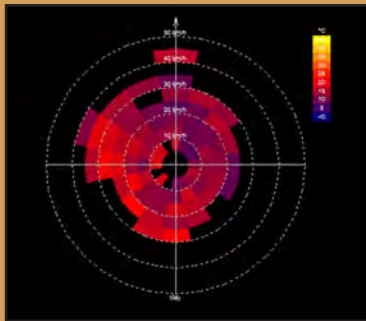
February



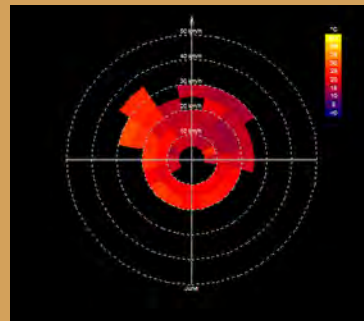
March



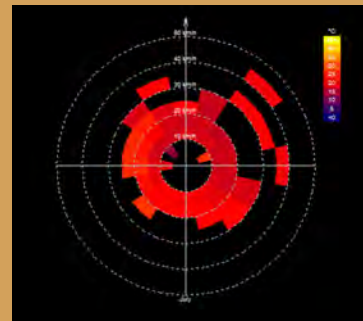
April



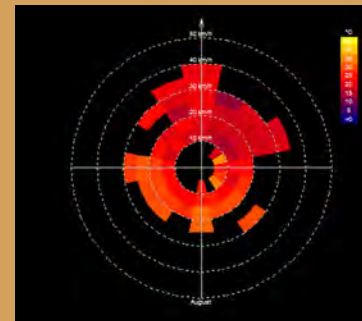
May



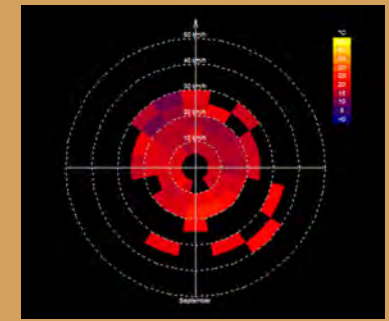
June



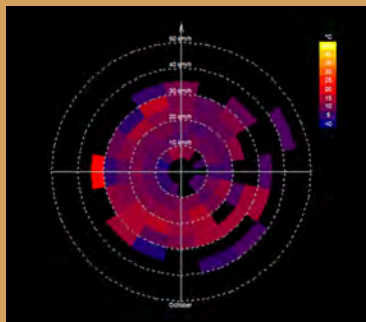
July



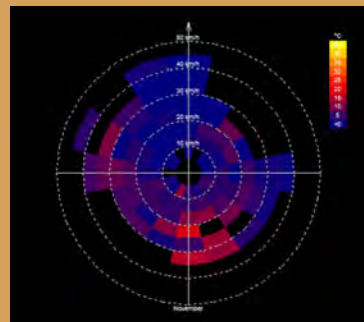
August



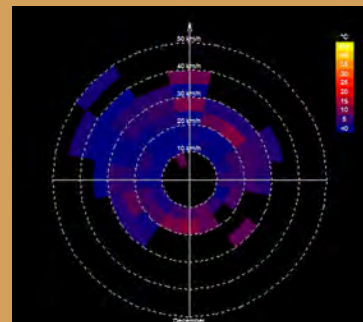
September



October



November

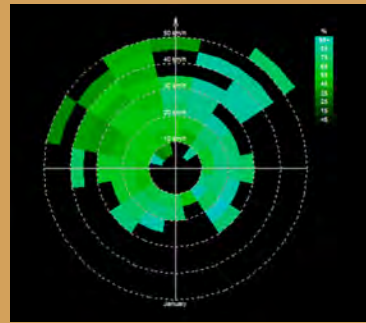


December

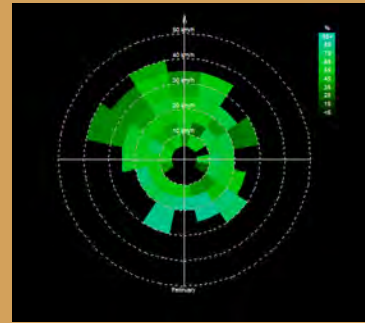
April's humidity, as a result of the wind's direction, primarily moves in from the north east. July's humidity moves in from a more eastern direction and in September and December, a more south eastern direction. In the case of humidity, unlike temperature and direction, a specific direction (eastern) demonstrates the strongest movement of wind's humidity.

Wind Humidity (Monthly)

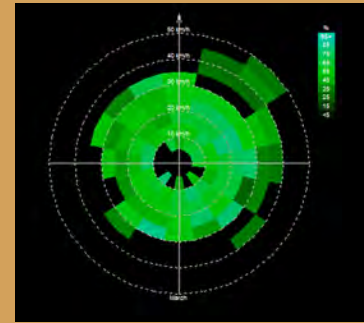
Unlike the temperature of the wind that increases along with the temperature, the humidity level is more sporadic and inconsistent. Each month displays a very different condition from the one prior to it and the one following.



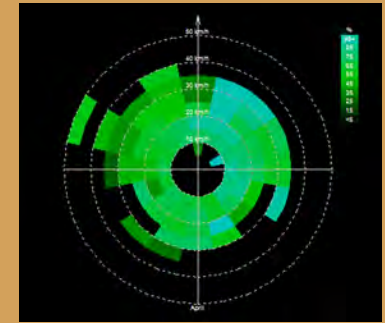
January



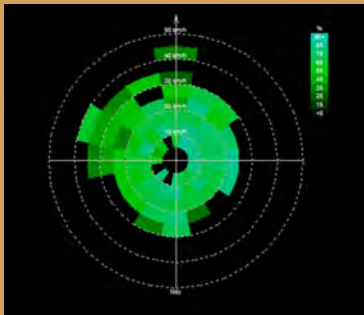
February



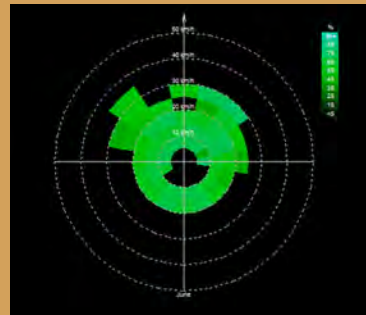
March



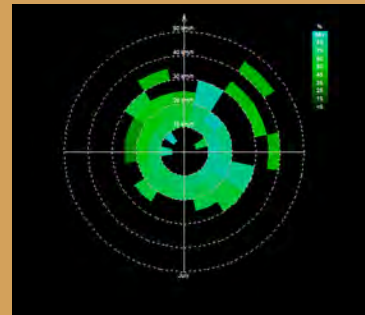
April



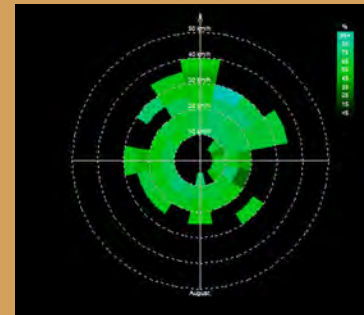
May



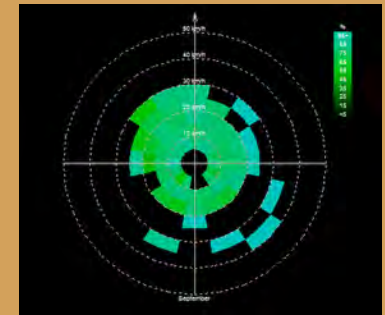
June



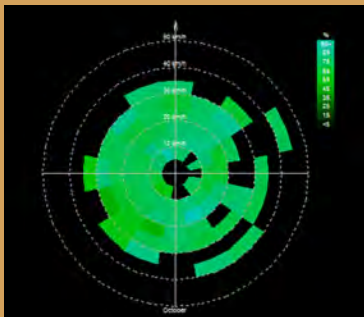
July



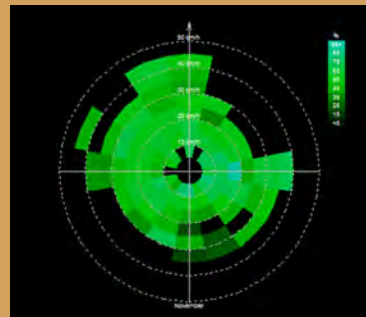
August



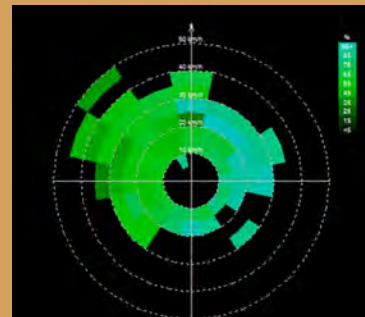
September



October



November



December

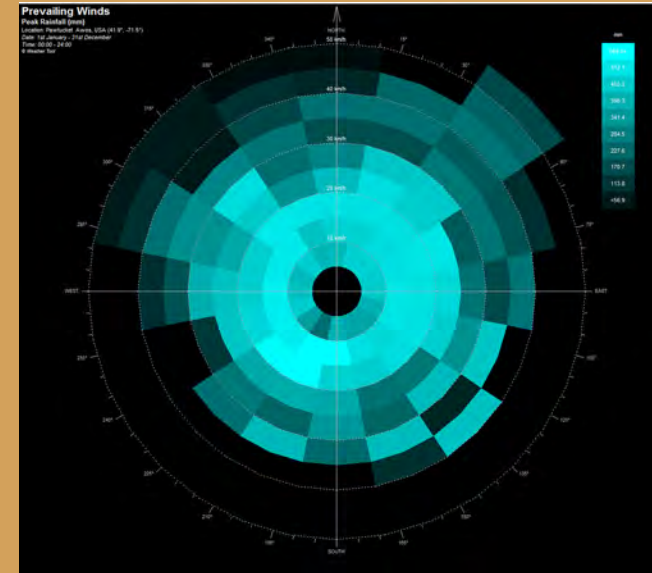
Rainfall Analysis

Rainfall in Pawtucket is highest between May and September. June, specifically, has the highest level of precipitation, with 22 inches. The winter, in contrast, has the lowest level of precipitation. Such statistics reflect that Pawtucket's major issue regarding water management centers around rainfall. Snowfall, and its minimal level, is not a major environmental obstacle.

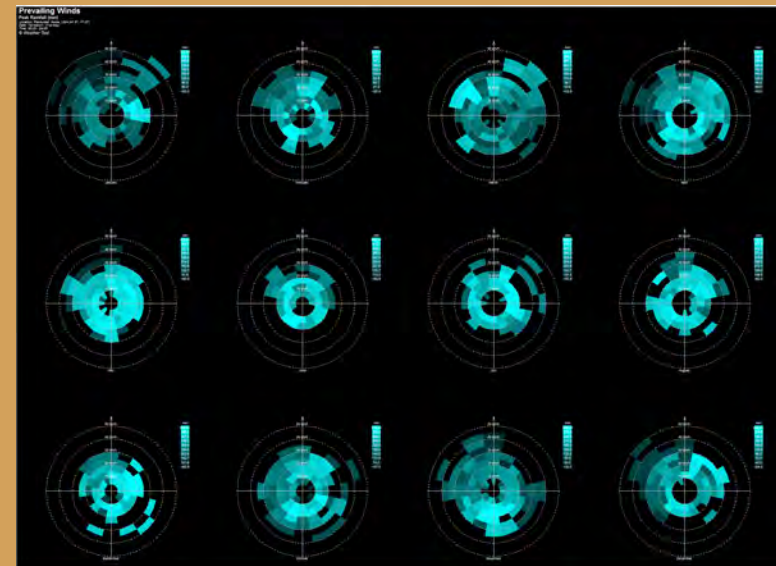
Stormwater management is a consideration on site, yet due to the flat nature of the site, the risk of soil erosion and the collection of water at the lowest elevation is not a major concern. Minimizing the level of impermeable surfaces will help regulate the movement of water on-site. Using permeable site materials and pavers will allow the water and rainfall to move in a less obstructed way across the site and can be absorbed easily into the ground plane.

According to the rainfall information obtained through Autodesk Ecotect Analysis the average monthly precipitation levels are as follows:

MONTH	MILIMETERS	INCHES
January	300	11.8
February	209	8.2
March	329	12.9
April	320	12.6
May	409	16.1
June	559	22
July	509	20
August	530	20.8
September	509	20
October	370	14.6
November	300	11.8
December	240	9.4



Average Yearly Rainfall - 569 mm/ 22 inches



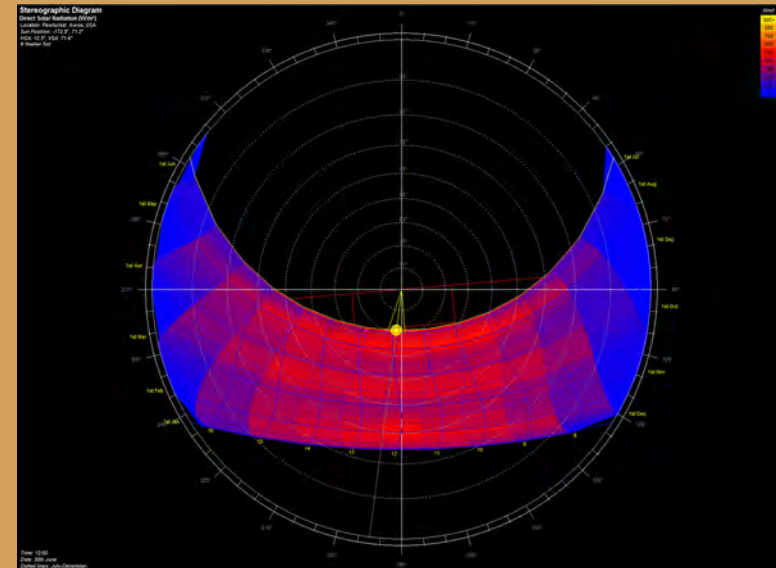
Monthly Rainfall

Solar Radiation

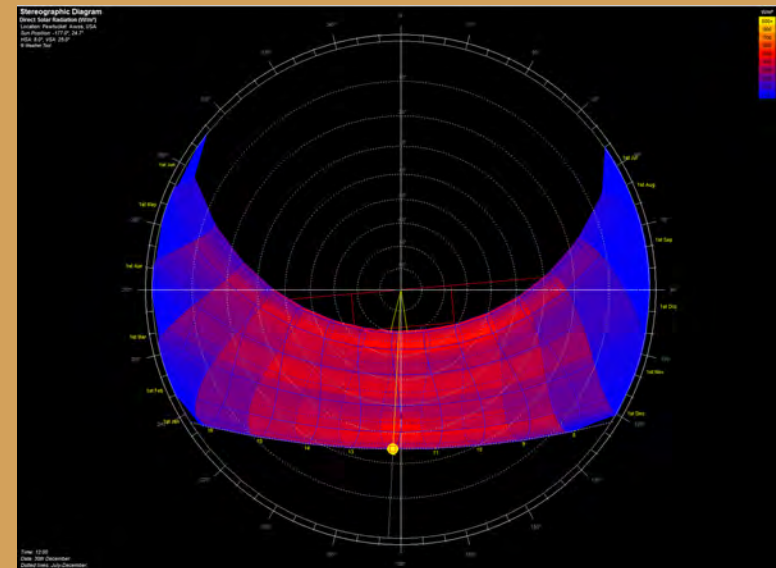
Reflecting the change in the sun's positions throughout the year, the level of solar radiation varies. During the summer months (when the sun is at the highest angle), the solar radiation is greatest (June has the highest level of solar radiation) and the daylight is present for a longer span of time. In contrast, the sun's winter conditions reflect the complete opposite of it's summer conditions, with the lowest angle and a shorter duration of daylight (December demonstrates the lowest radiation of all). Regardless of which season or month is being considered, the highest level of solar radiation and the highest sun angle occurs at noon with subsequent times before and after being less extreme. In June, the level of solar radiation is roughly 600 Watts per square meter (at a 70 degree angle) at noontime. December's noon condition (at a 30 degree angle) is less severe with 400 Watts per square meter emitted.

In addition to the June's 600 W/m² being the strongest level of radiation throughout the year, the duration of major sun exposure is also the longest, extending from 6:00 a.m. to 6:00 p.m. Decembers prime sun exposure is significantly shorter, extending from 8:00 a.m. to 4:00 p.m.

Managing sun infiltration (between 0 and 70 degrees) must be brought into consideration to prevent against overheating within the space, without diminishing adequate natural lighting. Finding a suitable balance between shading and allowing natural light into the space will aid in balancing passive lighting and heating techniques with mechanical intervention.



Direct Solar Radiation - June

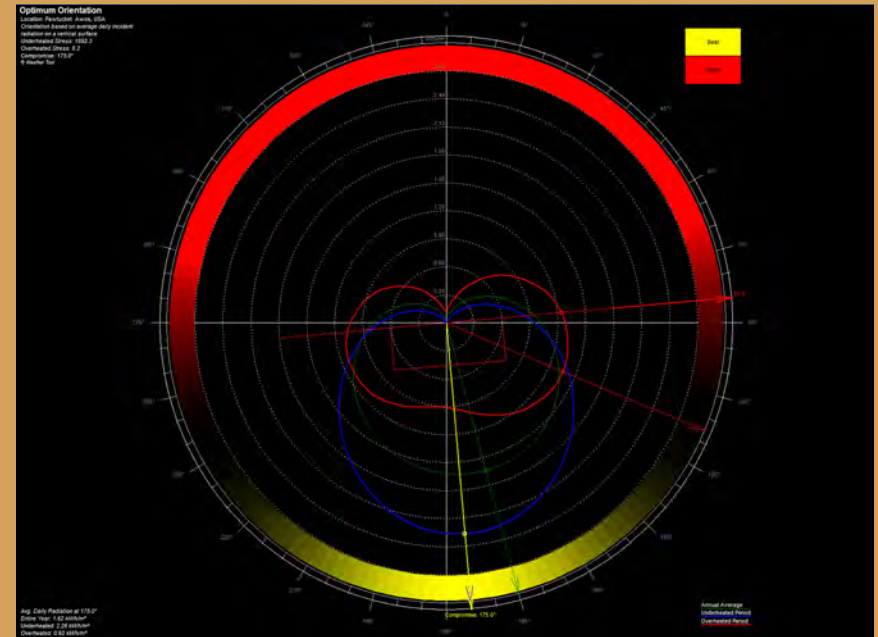


Direct Solar Radiation - December

Comparison & Solutions

Each season poses its own individual set of problems and obstacles to overcome. Handling precipitation, sun infiltration, heating and cooling and wind are all issues that must be dealt with during at least one season. Keeping with the typical New England climate and seasonal conditions, fall and spring are the most comfortable and mild, while summer and winter pose the greatest problems. Summer and winter months, which present the harshest climates, are associated with the most problematic concerns, especially in regards to the management of temperature. Climate control and the maintenance of a consistent, comfortable temperature at the building's interior is the greatest concern during both of these seasons. In the summer, temperatures reach an average of 70 degrees Fahrenheit and is further complicated by extreme levels of humidity, in some cases, at a level of 85%-95%, which only increase the sensation of temperature. It is during the summer months, more specifically, June through September, that Pawtucket experiences the most rainfall, roughly an average of 20 inches each month. To combat each of these issues, rainfall, solar radiation management and temperature/humidity control, the building's envelope must directly respond and be sensitive to these issues.

The winter months, in contrast, experience the least amount of precipitation, at roughly 9.5 inches each month, as well as, low levels of humidity (45%-50%). The greatest issue during the winter season is the insulation of the building from harsh and frigid temperatures. While the temperature must be monitored and interior temperatures kept at a constant level, solar radia-



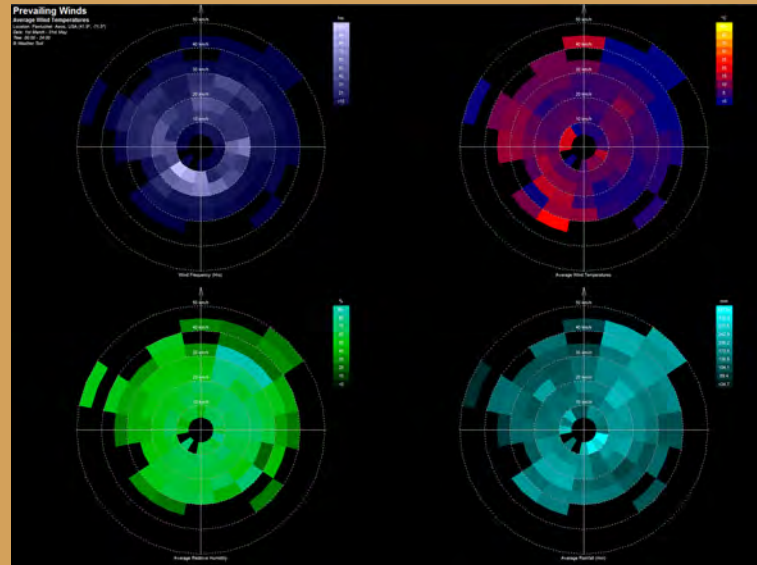
Optimal Orientation

Northern exposure yields the worst situation of a structure. Orientation due south, or slightly off axis, is the best solution.

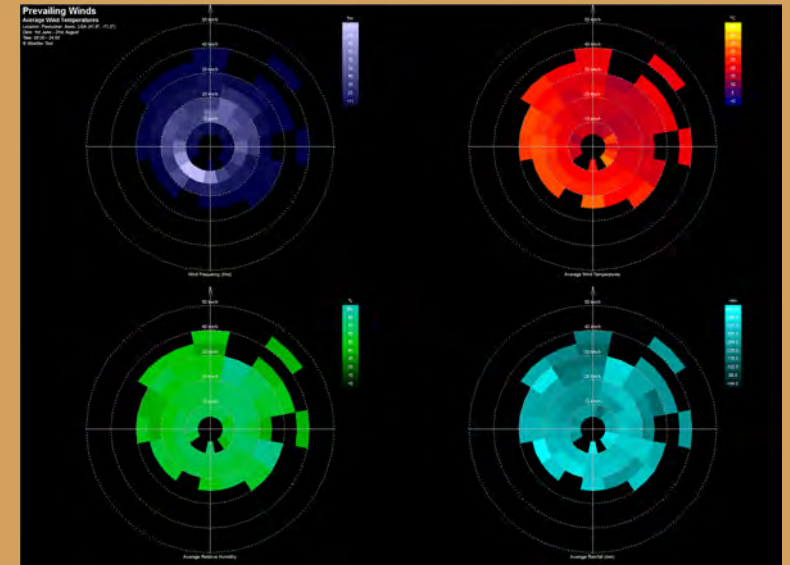
tion should be handled in the opposite fashion from the summer months. The infiltration of sunlight during the winter would passively heat the space and counteract the cold.

Pooling the conditions of all twelve months and taking into consideration all climatic factors and statistics, optimal orientation of the building is slightly angled with the greatest level of glazing facing south, more specifically angled slightly south-east. Northern exposure to the elements should be minimized, while southern exposure has the ability to be substantial.

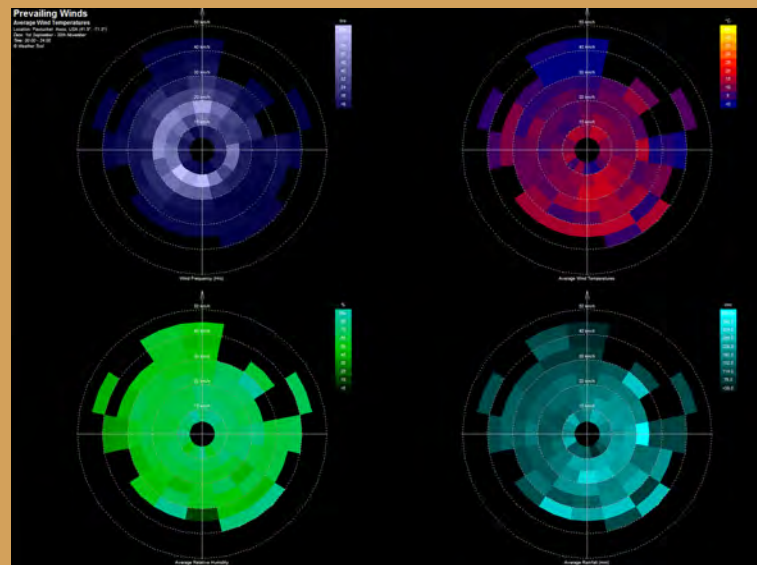
Weather Comparison: Seasonal
 (Wind frequency, Average Wind
 Temperature, Average Relative Hu-
 midity, Average Rainfall);



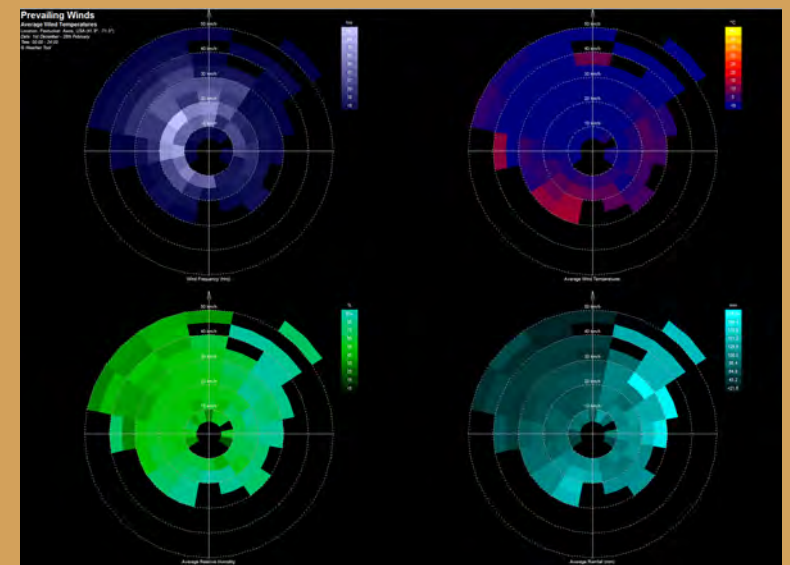
Spring



Summer



Autumn



Winter



Zoning

ARTICLE IIIA - Planned Land Development [Added 6-23-1999 by Ch. No. 2531]

410-15.1

G. Development and landscaping design standards.

(1) Purpose and objectives. The purpose of this section is to promote and protect public health, safety, general welfare and amenity. Effective site planning, development design, and landscaping can accomplish the following objectives:

- (a) Promote the most desirable use of land and arrangement of development in the City and thus conserve the value of land and buildings, and thereby protect the City's tax revenues;
- (b) Improve the physical environment through the provision of amenities such as open space, street trees, sidewalks, and live vegetation;
- (c) Preserve the character and scale of existing developments and control new development in conformity of the existing character of the area;
- (d) Provide a transition between and a reduction in the environmental, aesthetic and other impacts of one type of land use upon another;
- (e) Provide safe and efficient pedestrian and traffic circulation patterns;
- (f) Lessen the transmission of noise, dust, pollution, light and glare from one lot to another;
- (g) Improve air quality through the production of oxygen and reduction of dangerous carbon monoxide;
- (h) Through shading, provide cooling of air and land to offset radiational heating;
- (i) Minimize the negative impacts of stormwater runoff to enhance and protect surface and groundwater quality, and promote effective floor management;
- (j) Control damaging impacts of sheet runoff and resultant surface water contamination;
- (k) Stabilize groundwater tables through vegetative root systems, which play an important and effective part in soil conservation, erosion control, floor control, and absorption of pollutants

(2) Development Standards

(a) Compatibility. Applicants shall be required to plan developments, the design of which (including proposed style and materials, the relationship between any proposed buildings and the site, and the overall physical appearance), will be consistent with the goals of the City Comprehensive Plan as listed below to the extent possible:

- [1] Protect existing neighborhoods from increasing housing densities that lead to overcrowding, shortage of available off-street parking and traffic congestion.

- [2] Encourage infill development on vacant parcels that reflect the built character of the neighborhood.
- [3] Control strip commercial development by promoting neighborhood and regional shopping districts.
- [4] Revitalize downtown with a variety of mixed uses including live-work space, offices, studios, galleries, restaurants and theaters.
- [5] Promote and encourage appropriate development along Pawtucket's riverfront including well-designed commercial uses, the reuse of existing, vacant industrial buildings, the creation of public gathering places, and the provision of river access.
- [6] Ensure that residential growth does not adversely affect environmental recreational and cultural resources.
- [7] Encourage the rehabilitation of underutilized commercial and industrial structures to residential units as appropriate.
- [8] Protect the City's residential neighborhoods by preventing encroachment from other nonresidential land uses.
- [9] Continue efforts to attract new, compatible economic development that is sensitive to Pawtucket's historic, cultural and environmental resources
- [10] Provide the adequate infrastructure including utilities, roadways, and parking facilities, at appropriate locations for economic development activities.
- [11] Continue to promote Pawtucket as an artist-friendly community and as a tourist destination.
- [12] Protect and improve ground and surface water quality by alleviating and where possible eliminating point and non point sources of water pollution.
- [13] Preserve biological diversity through the protection and management of state and federally listed rare species habitat areas and ecologically significant natural communities.
- [14] Preserve and use, or adaptively reuse structures or sites in the National Register of Historic Places, in the Local Historic District, or other structures and sites of historic significance to the City.
- [15] Preserve the integrity of historic neighborhoods where most of the residential structures are more that 70 years old.
- [16] Manage stormwater runoff to prevent flooding, loss of life, and property damage, to protect ground and surface water quality and to preserve the integrity of natural watercourses and wetlands.
- [17] Provide safe pedestrian and bicycle access along the City's streets and at intersections, recognizing the inherent value of these forms of movement to the preservation of neighborhoods.
- [18] Maintain and improve the image of the City of Pawtucket by enhancing the visual character of the City's streets, road and highways through carefully designed landscaping and street tree planting.
- [19] Promote and encourage appropriate commercial development, re-use of vacant industrial buildings, the creation of public gathering places, and the provision of access to Pawtucket's riverfront.

- [20] Provide linkages and means of access to existing and developing trails and walkways, either in conjunction with or separate from bikeways in Pawtucket, the Blackstone Valley and elsewhere in Rhode Island.
- [21] Recognize pedestrian movement as a necessary and viable means of movement and provide residents with safe, secure, and pleasant pedestrian access to neighborhood activities, such as schools, parks, playgrounds, libraries, commercial activities, employment and places of worship

ARTICLE VA - Mill Building Reuse District [Added 8-21-2008 by Ch. No. 2896]

410-43.1. Purpose and objectives

- A. The purpose of a MBRD is to allow the redevelopment of industrial sites for mixed use development through careful site planning.
- B. This article is intended to accomplish the following objectives:
- (1) Promote the appropriate reuse of the mill structures in the City built before 1950;
 - (2) Provide for expanded economic redevelopment of the mill structure in the City; and
 - (3) Promote mixed use of the mill complexes remaining in the City to ensure their viability.
- C. Any MBRD District may contain one or more manufacturing and/or commercial structures, accessory buildings, common areas, open space and roadways.

410-43.2. Establishment of district; permitted uses; additional criteria; review of projects.

- A. Establishment. A reuse development may be established upon approval by the Planning Commission pursuant to R.I.G.L. 45-24-47 for any mill listed in the Pawtucket Mill Building Survey dated 1995 and on file in the Department of Planning and Redevelopment, in any MB or MO Zone in which the proposed use of each building is permitted in accordance with Table of Use Regulations of this chapter and Article VA.
- B. Permitted uses. Uses permitted by right in the MB and MO Zone and the following uses, listed by Table of Use Regulations category, are permitted in a Mill Building Reuse District: [Amended 8-20-2009 by Ch. No. 2928]

C. Additional criteria for approval. To approve a reuse development, the Planning Commission shall find that:

- (1) The plans for the reuse development are consistent with the Comprehensive Plan.
- (2) That the reuse development is not displacing an active manufacturing and or industrial use and that there is no reasonable expectation that manufacturing will continue at the site.
- (3) The reuse development will not create a serious conflict with adjacent manufacturing and or industrial businesses in the MO and MB Zones.
- (4) The developer as a plan to notify all tenants and owners of the buildings and units in the reuse development that they are in a MO or MB Zone and that allowed industrial zone uses that may be perceived as a nuisance or otherwise obnoxious shall give them no cause for action against such industrial and or manufacturing activity.
- (5) The plans for the reuse do not include the demolition of more than 25% of the existing structures.

D. Review by the Pawtucket Historic District Commission.

- (1) Proposed mill building reuse projects which are not participating in the federal or the Rhode Island Historic Tax Credit Program shall be reviewed by the Pawtucket Historic District Commission prior to Planning Commission review.
- (2) Scope of review. The review by the Historic District Commission shall be advisory only to the permitting authority, which is the City Planning Commission. Such advisory opinions shall be in writing and shall comply with all requirements of the regulations, including those for filing of records and decisions. The City Planning Commission, as the permitting authority, may reject the advisory opinion of the Historic District Commission when considering the application before it or may incorporate the Historic District Commission's recommendations as conditions of the establishment of the Mill Building District.

ARTICLE IX - Parking and Loading

410-73. Intent [Amended 8-20-2009 by Ch. No. 2928]

No land shall be used and no structure shall be erected or used unless off-street parking spaces as required in this chapter are provided with either accessory use or principal use parking facilities, as applicable. Any structure or use existing prior to the effective date of this chapter, or any amendment thereto, with parking space that does not meet the requirements of this Article shall be subject to the requirements of Article VIII, Nonconformance. While it is the intent of this section to require minimum off-street parking facilities, excessive paving of land that provides significantly more than the minimum number of spaces is discouraged. No land shall be used for temporary storage, except as provided below. The intent of this section is to allow for necessary temporary storage.

410-74. Accessory parking.

Accessory parking required by this chapter shall be located on the same or contiguous lot as the principal structure or use the parking is intended to serve, unless the Board shall allow off-site parking as a special use permit under Article XIII.

410-76. Parking space requirements. [Amended 8-25-3004 by Ch. No. 2739]

The following sections specify the minimum number of off-street parking spaces required for each use code as designated in Article II, Use Regulations:

A. Parking the Commercial Downtown District. With the exception of places of worship, in the Downtown District, the requirements set forth below shall be reduced by 50% for structures of uses in a CD District, and parking may be located at a distance of not more than 400 feet from the structure or uses that are intended to serve. Parking requirements for eating and drinking establishments in the Commercial Downtown District shall be zero.

B. Parking in the Mill Building Reuse District (MBRD). With the exception of places of worship, the requirements set forth below shall be reduced by 50% for structures or uses in the MBR District, and parking may be located at a distance of not more than 400 feet from structures or uses that the parking is intended to serve. [Added 8-20-2009 by Ch. No. 2739]

C. Parking requirements for all other zones. The following table specifies the minimum number of off-street parking spaces required for each use. All parking facilities shall conform with the Rhode Island State Building Code with respect to number of spaces designated for handicapped persons. In determining parking requirements, all calculations shall be rounded up to the next whole number.

Use	Parking Spaces Required
	Residential
One- and two-family dwelling units	2 per dwelling unit
Multifamily dwellings with 3 or more dwelling units	2 per dwelling unit
Community residence	1 per staff employee
Nursing or convalescent home, orphanage	1 per 4 beds
Convent or rectory	1 per 4 beds

Family day-care home	1 per dwelling unit
Manufactured home park	1 per manufactured home
Boardinghouse	1 per rooming unit
Rooming House	
Up to 6 rooming units	1 per rooming unit
Over 6 rooming units	1 per dwelling units and 1 per rooming unit
Bed-and-breakfast, motor inn and hotel	1 per guest room

Commercial

Offices	1 per 300 square feet of leasable floor space
Personal business services, office and repair and commercial uses	1 per 300 square feet of leasable floor space
Restaurants	1 per 4 seats
Amusements and recreation	1 per 5 seats in assembly rooms or 200 square feet of gross floor area, whichever is greater
Wholesale commercial	1 per 2,000 square feet of floor area
Storage	1 per 10,000 square feet of covered floor area
Industrial	1 per 1,000 square feet of floor area or 2 employees on the maximum working shift, whichever is greater

410-78. Parking standards for more than four vehicles.

Every parcel of land which, after the effective date of this chapter or any amendment thereto, is developed as an accessory of principal use parking facility for more than four vehicles, including automobile or trailer sales area, automotive service station or garage, shall be developed as provided herein.

A. Minimum size if parking spaces.

(1) Parking areas for more than four cars shall have the follow minimum dimensional requirements affecting the width and length of individual parking stalls and the width of aisles exclusive of necessary drives and other accessways: [Amended 9-21-2006 by Ch. No. 2825]

(a) Minimum width: nine feet

(b) Minimum length: 18 feet

(c) Minimum aisle width:

[1] Ninety-degree angle: 24 feet

[2] Sixty-degree angle: 16 feet

[3] Forty-five degree angle: 12 feet

[4] Thirty-degree angle: 11 feet

[5] Zero-degree angle (parallel parking): 12 feet

(2) All parking facilities shall conform with the Rhode Island State Building Code with respect to the size of spaces for handicapped persons.

Use for Structures in MO and MB Zones

Based on the Zoning, 410 Attachment I, City of Pawtucket, TABLE OF USE REGULATIONS

[Amended 9-26-1996 by Ch. No. 2425; 10-23-199 by Ch. No. 2470; 6-23-1999 by Ch. No. 2531; 8-20-2009 by Ch. No. 2928; 2-25-2010 by Ch. No. 2825]

MO Zone

State-licensed community residence

Family day-care home, up to 8 children

Artist Studio, display and sales

Storage shed over 150 square feet in area

Fence

Sale of handicraft or homecraft products incidental to their manufacture on the premises, provided that the display of such merchandise shall not be visible from the street

Gardening/farming, not to include the raising of animals

Greenhouse/nursery not used for a private gainful business

Commercial greenhouse or nursery

Keeping of animals as household pets

MB Zone

Artist Studio, display and sales

Storage shed over 150 square feet in area

Fence

Sale of handicraft or homecraft products incidental to their manufacture on the premises, provided that the display of such merchandise shall not be visible from the street

Gardening/farming, not to include the raising of animals

Keeping of animals as household pets

Place of worship

Municipal fire station

Municipal structure or use not otherwise specified herein

MO Zone

Place of worship
Municipal fire station
Municipal refuse transfer station
Municipal structure or use not otherwise specified herein
Individual instruction as defined by 410-46C
Day-care center
Trade or vocational school
Schools not otherwise defined
Municipal Park
Nonprofit recreational facility
Municipal police station/substation
Eating places of less than 2,500 square feet of gross floor area; no dancing or live entertainment
Auction house
Coin-operated dry cleaner and laundering
Dry-cleaning plant, except rug
Carpet and upholstery cleaning
Funeral services
Beauty salon, barbershop
Travel Agency
Physical fitness facility
Photographic studio
Cobbler
Tailoring/dressmaking
Pet care services
Pet overnight boarding
Community food services
Services to dwellings and buildings

MB Zone

Individual instruction as defined by 410-46C
Day-care center
Trade or vocational school
Schools not otherwise defined
Historical museum or art gallery, including incidental retail sales
Municipal Park
Municipal police station/substation
Dry-cleaning plant, except rug
Carpet and upholstery cleaning
Physical fitness facility
Photographic studio
Cobbler
Tailoring/dressmaking
Community food services
Services to dwellings and buildings
Equipment rental and leasing and automotive rental and leasing
Industrial equipment and leasing
Business support services
Pest control
Security systems services and locksmiths
Other office use
General automotive repair shops
Other automotive repair shops
Automobile, truck and motorcycle sales, rental and service
Motor vehicle towing
Miscellaneous repair services
Commercial and industrial machinery repair services

MO Zone

Equipment rental and leasing and automotive rental and leasing
Industrial equipment rental and leasing
Business support services
Pest control
Security systems services and locksmiths
Other office use
General automotive repair shops
Other automotive repair shops
Automotive services, except repair
Automobile, truck and motorcycle sales, rental and service
Boat Dealer
Motor vehicle towing
Miscellaneous repair services
Commercial and industrial machinery repair services
Performing arts venues and related businesses
Bowling alley billiards and pool
Non-gambling coin-operated amusement devices
Parking garage or parking area
Parking garage or parking area for noncommercial vehicles
Parking garage or parking area within 100 feet or any commercial, riverfront, or industrial zone
Storage of 1 truck of not more than 3/4-ton capacity, owned and operated by a person residing on the premises, specifically excluding vehicles used for the transportation of liquids, gases, rubbish, trash, garbage or other noxious matter
Parking of commercial vehicles over 3/4-ton capacity
Wholesale commercial use, including the sale and storage of goods, supplies, or equipment

MB Zone

Performing arts venues and related businesses
Bowling alley billiards and pool
Parking garage or parking area
Parking garage or parking area for noncommercial vehicles
Parking garage or parking area within 100 feet or any commercial, riverfront, or industrial zone
Storage of 1 truck of not more than 3/4-ton capacity, owned and operated by a person residing on the premises, specifically excluding vehicles used for the transportation of liquids, gases, rubbish, trash, garbage or other noxious matter
Parking of commercial vehicles over 3/4-ton capacity
Wholesale commercial use, including the sale and storage of goods, supplies, or equipment
Communications office, excluding antennas
Public utility pole
Radio or television transmission tower
Water tower
Helipad
Railroad
Coal, lumber or wood yard heating oil storage or distribution
Rental storage space
Manufacture, processing or treatment of products, provided that they are principally sold at retail on the premises, and provided that not more than 5 persons are engaged therein
Processing of food and kindred products
Textile mill products
Apparel and other textile products
Lumber and wood products
Furniture and fixtures

MO Zone

Communications office, excluding antennas
Public utility pole
Radio or television transmission tower
Water tower
Helipad
Railroad
Coal, lumber or wood yard heating oil storage or distribution
Rental storage space
Manufacture, processing or treatment of products, provided
that they are principally sold at retail on the premises, and
provided that not more than 5 persons are engaged therein
Processing of food and kindred products
Textile mill products
Apparel and other textile products
Lumber and wood products
Furniture and fixtures
Paper and allied products
Printing and publishing and sign manufacturing
Plastic materials and synthetics
Soaps, cleaners
Rubber and miscellaneous plastic products
Leather and leather products
Stone, clay and glass products,
Primary metal industries
Fabricated metal products
Jewelry, silverware and plated ware
Boat and ship building
Medical equipment, medical supplies and office supplies
manufacturing

MB Zone

Rubber and miscellaneous plastic products
Leather and leather products
Stone, clay and glass products,
Primary metal industries
Fabricated metal products
Jewelry, silverware and plated ware
Boat and ship building
Medical equipment, medical supplies and office supplies
manufacturing
Miscellaneous manufacturing
Artist studios display and sales
Signs

Special Permit:

Elementary or secondary school
Restaurant exceeding 2,500 square feet of gross floor
area or providing dancing and entertainment
Nightclub
Pet care services
Pet overnight boarding
Autobody repair shops
Other amusement and recreation
Electric, gas, water and irrigation stations
Any other structure which is part of a public utility sys
tem, other than a fright or trucking terminal
Personal communications system antenna
Wireless communications antenna
Passenger transportation terminal
Freight or trucking terminal

MO Zone

Miscellaneous manufacturing
Artist studio, display and sales
Signs

Special Permit:

Multifamily (5 dwelling units and over)
Municipal incinerator
Elementary or secondary school
Restaurant exceeding 2,500 square feet of gross floor area or providing dancing and entertainment
Any commercial use with a drive-in window
Nightclub
Autobody repair shops
Other amusement and recreation
Electric, gas, water and irrigation stations
Any other structure which is part of a public utility system, other than a freight or trucking terminal
Personal communications system antenna
Wireless communications antenna
Passenger transportation terminal
Freight or trucking terminal
Storage of equipment, products, supplies or material
Storage of junk, automotive junk, junkyard, commercial junkyard
Machinery manufacturing
Storage of flammable or volatile materials
Drugs, pharmaceutical
Miscellaneous chemical products

MB Zone

Storage of equipment, products, supplies or material
Storage of junk, automotive junk, junkyard, commercial junkyard
Storage of flammable or volatile materials
Drugs, pharmaceutical
Miscellaneous chemical products
Machinery manufacturing
Petroleum products
Billboard, bulletin type
Billboard, thirty-sheet poster type
Billboard, eighth-sheet poster type

MO Zone

Petroleum products

Billboard, bulletin type

Billboard, thirty-sheet poster type

Billboard, eighth-sheet poster type

MB Zone



Site : 125 Goff Avenue

125 Goff Avenue

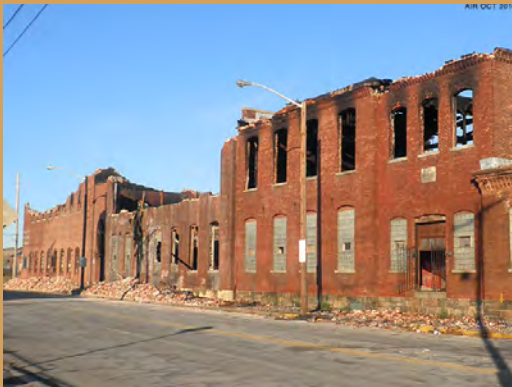
The Union Wadding Company originally set up its roots in 1808 in Rehoboth, Massachusetts under the name the Union Cotton Manufacturing Company. While in Rehoboth, the company “pioneered the manufacture of cotton batting, a non-woven fabric used for stuffing and lining”. In 1842, after close to three decades at this location, the company relocated to the Pawtucket location under the guise of Darius Goff and George Lawton’s new partnership and was renamed the Pawtucket Steam Wadding Mill. The building, throughout the years, has experienced numerous hardships and setbacks including a fire in 1851 which forced Goff and Lawton to completely rebuild, this time on a much larger scale. This rebuild established the company’s place in the community as a contending industrial power in the Pawtucket area. After the partnership between Goff and Lawton dissolved in 1870, the company was given its final name, the Union Wadding Company and once again “suffered one of the more destructive fires ever seen in Pawtucket”. The company, only two decades after a complete rebuild, needed to be rebuilt once again in 1872.

Though fire seemed to plague the building in the late 19th century the company “was the largest operation of its kind, [paper stock and cotton waste], in the world”. After the reconstruction, numerous changes on-site began to take place, including the addition of new buildings, demonstrating the company’s resilience and strength in the community. Between the years of 1890 and 1895, a cleaning house was added, in 1901 a Classical Revival office building was constructed, and between 1923 and 1939 a bleachery was also added. In addition to new construction, the Union Wadding Company opened its doors to smaller businesses to work out of certain portions of the campus. For example, the New England Machine and Electric Company was housed in one of the eastern buildings 1925-1990).

The mid-twentieth century, beginning in the 1940s, marked a decline in the textile market and, as a result, the business started to suffer. In 1940, the property was subdivided with the eastern parcel on Dexter Street sold to the United Public Markets. To counteract the decline in the need for textiles, The Union Wadding Company branched out from its traditional products and expanded its goods to include “holiday ornamentations and industrial fans and blowers”. Unfortunately in the 1960s, the company had to close its doors due to the substantial decline in business.

In recent years renewed interest has been shown in rehabilitating Pawtucket’s industrial buildings, including the Union Wadding Company building. While plans for future renovations, as well as, small strides to renovate portions of the building are underway, the building once again suffered a terrific blow on October 13, 2010 with a fire that destroyed a large portion of the building. Assumed to be a case of arson, ten buildings in the western portion of the site were completely destroyed leaving only the eastern buildings standing.

What remains of the building after the 2010 fire has been added to the National Register of Historic Places by Rhode Island’s Historical Preservation and Heritage Commission for its “historical and architectural significance”. This location will join five other industrial campuses in the Church Hill Industrial Historic District. By joining the National Register, the building is given “special considerations during the planning of Federal or federally assisted projects” as well as, makes the site “eligible for Federal and Rhode Island tax benefits for historic rehabilitation”.¹ While the building is given new Federal and State privileges, the owners(s) of the property are “free to maintain, manage, or dispose of their property” in any manner they please leaving, the possibility of a complete renovation.²

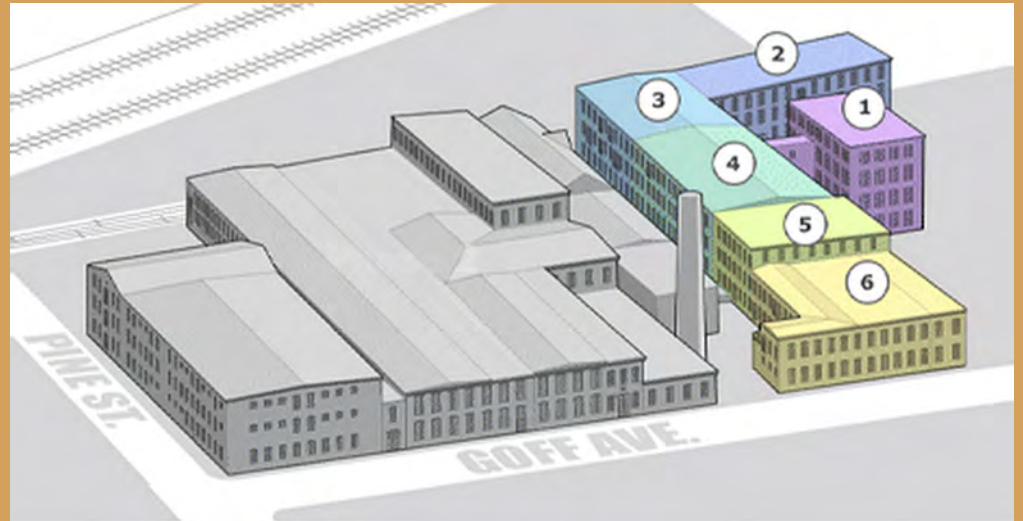


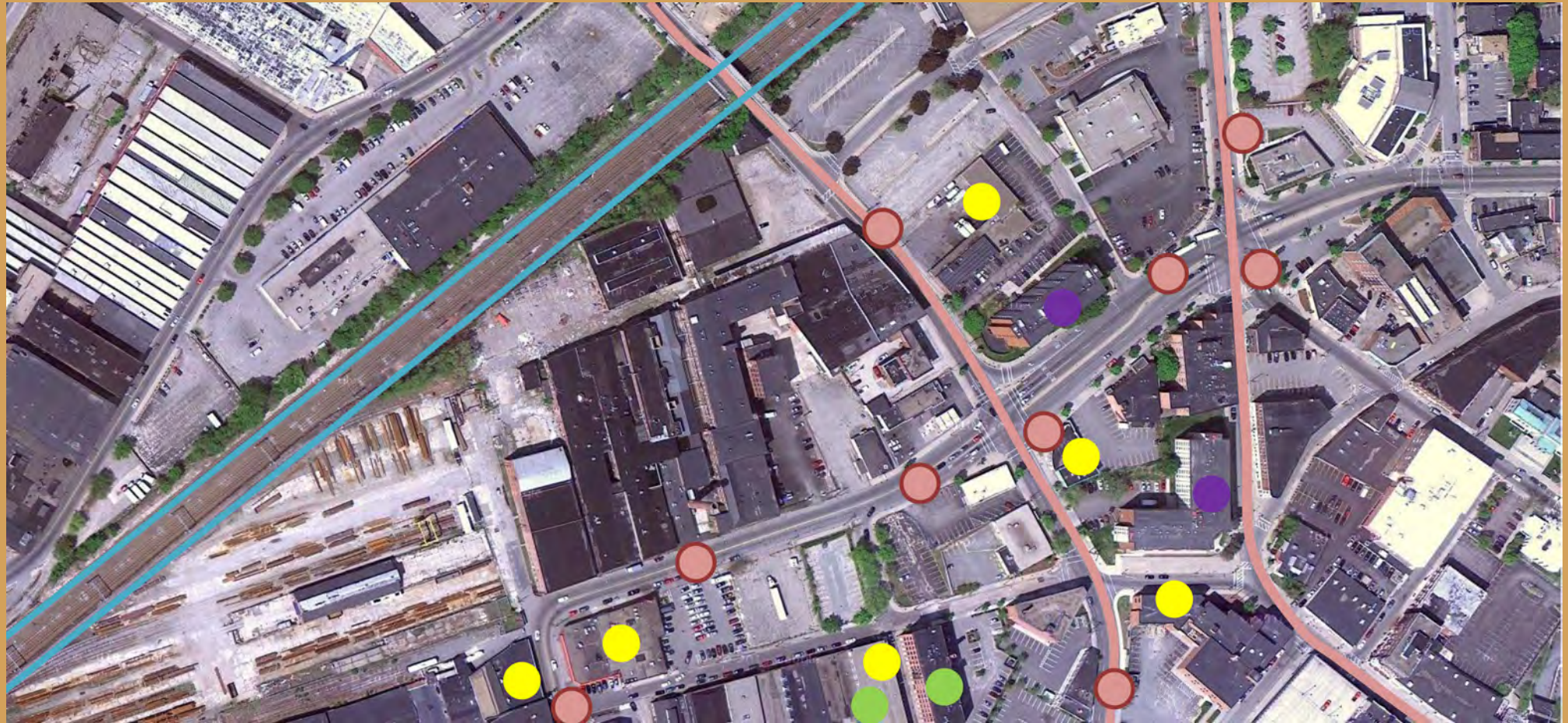
Surrounding Architecture

The Goff Avenue site is conveniently located near numerous RIPTA stops and two RIPTA lines making the site highly accommodating to those without personal transportation. There are eight stops close to the site with three actually located directly in front of the building on Goff Avenue.

Due to the fact that the area surrounding Goff Avenue was originally a haven for industrial development, the immediate architectural typologies are not highly diverse. The commercial buildings are less accommodating to pedestrians, but are more suitable for other commercial businesses. There are highly lacking in retail opportunities.

Residential buildings (shown in purple) are also limited in the area and are confined to two high-rise structures. Indicated in green, there have been efforts to revitalize this area as two other industrial buildings adjacent to the Goff site have already undergone a restoration and redevelopment. Developed to suit purposes not including residences, the efforts have brought in smaller businesses to the neighborhood.





- | | | | |
|--|--|---|--|
|  RIPTA Stop |  Robert Chemicals |  Dry Cleaners |  Industrial Building Retrofit |
|  RIPTA Line |  Meat Market |  Insurance Company |  Residential |
|  Railway tracks |  Fruit Distribution |  Food Stamps | |

Notes

¹ Thomas J. Morgan. "Pawtucket's Union Wadding added to US historic register" *The Providence Journal*, March 08, 2011, accessed August 1, 2011, newsblog.projo.com/2011/03/paw-tuckets-union-wadding-added.html

² Union Wadding and N.E. Machine Make National Historic Register," last modified April 1, 2011, www.patuckettimes.com/content/union-wadding-and-ne-machine-make-national-historic-register

Original Building

The original Union Wadding Mill building was two and three stories tall in addition to having a basement. Though the building appears as one cohesive structure, the mill actually is compiled of six separate sections. Each section represent different additions that were added as the company expanded. The central, and original portions, labeled “3” and “4” (diagram on page 140) were the original portions, while sections “2”, “5” and “6” and finally “1” were constructed later on. Section 1 is the tallest section of the building, rising four stories and section 6 is the shortest section, rising only 2 stories.

The basement runs the entire length of section 1, 3 and 4 and is the only portion of the basement with a legitimate floor to ceiling height. Section 2 is built on grade and therefore there is no basement in this portion of the mill. This same condition exists under section 5. In the case of the two storied, section 6, the majority of the basement consists of crawl spaces ranging in heights from 5'-0" to 7'-2". There is a small portion of legitimate basement space in this portion of the building.

The total areas of the main building are as follows:

First Floor: 32,156 square feet
Second Floor: 32,156 square feet
Third Floor: 23,600 square feet

Over all, the total square footage of the original building is 87,912 square feet.



Western Corner of Lot now burnt



Western Corner of Lot now burnt



Condition between burnt building and Section 6



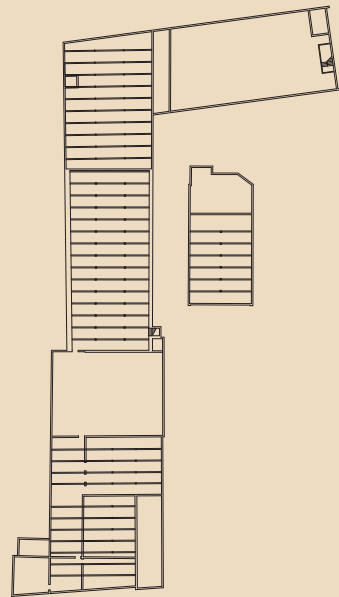
Building's condition after 2010 fire



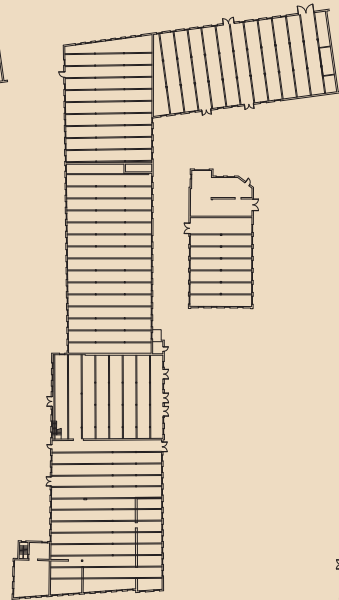
Building's condition after 2010 fire



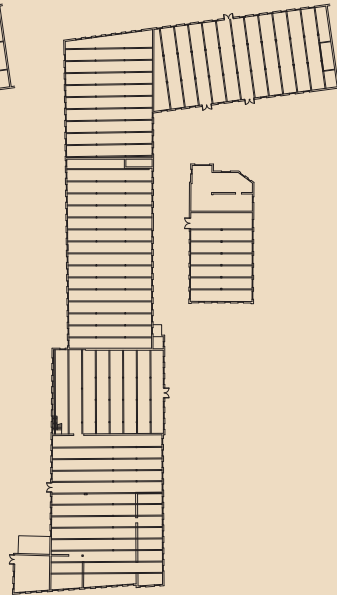
Building's condition after 2010 fire



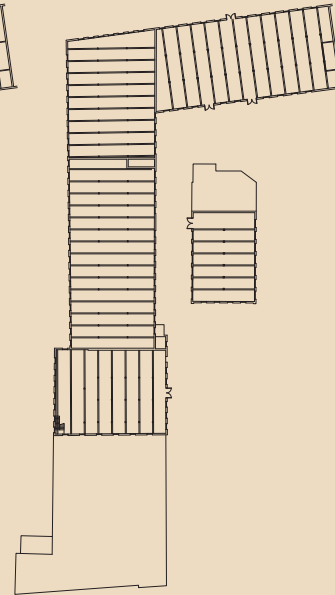
Basement



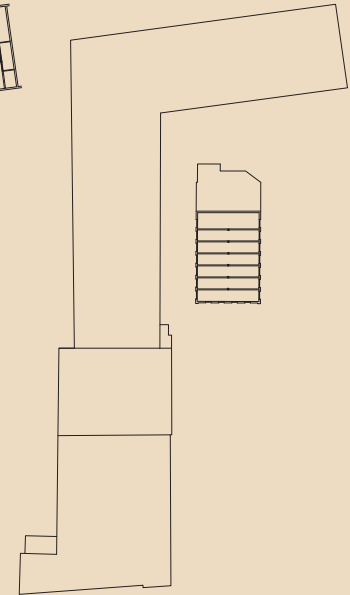
First Floor



Second Floor



Third Floor



Fourth Floor

1' = 1/128"



The smaller building's (Section 1) total areas are as follows:

First Floor: 4,909 square feet
Second Floor: 4,909 square feet
Third Floor: 2,882 square feet
Fourth Floor: 2,882 square feet.

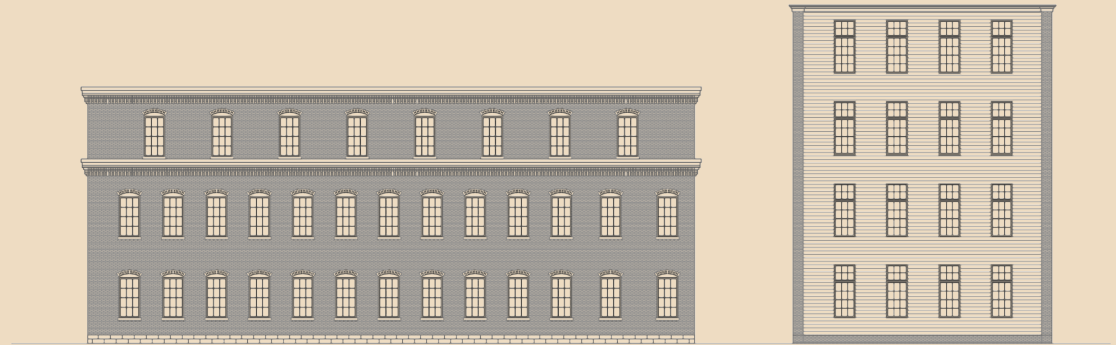
This building's total square footage is 15,582 square feet.

The construction of the interior structure is comprised of heavy timber with the columns roughly 1'-0" in diameter in sections 3, 4 and 5 and 0'-9" in sections 1, 2 and 6. The heavy timber beams are 0'-8" wide and range from 1'-6" to 2'-0" in depth. The exterior walls are constructed in brick masonry. The regular framing of the building allows for the rhythmic and even placement of windows.

While the structure throughout the building is even, each section's framing is unique. It is this point that makes the unique portion of the building the most obvious, as the aesthetic appearance of the exterior building appears highly cohesive. The spacing of timber beams in the main building is consistent, 8'-0" on center, between columns north to south and 20'-0" between columns east to west. The spacing of the beams in the secondary building (section 1) is identical to the main building, 8'-0" on center. The distance from the exterior walls to the center of the beam, though, is slightly larger (20'-6") than in the main building.

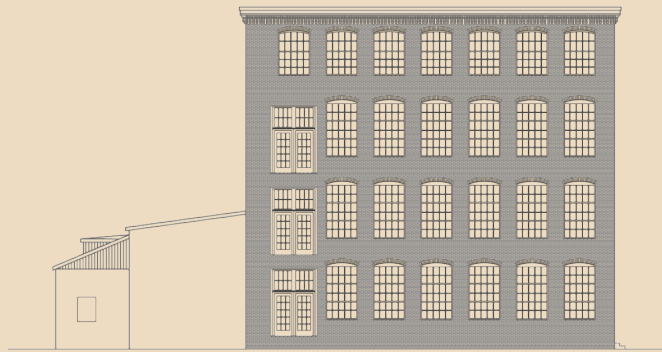
Overall, the buildings are supported by the columns and beams





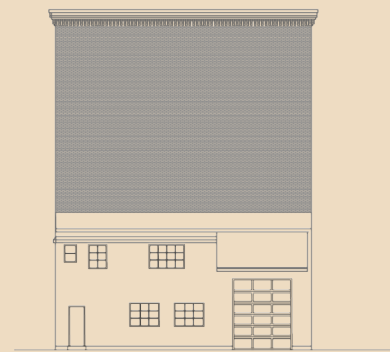
Southeast Elevation 1' = 1/32"

Section 1



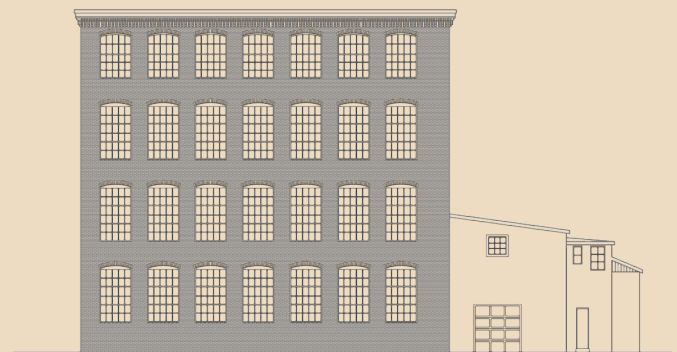
Section 1

Southwest Elevation 1' = 1/32"



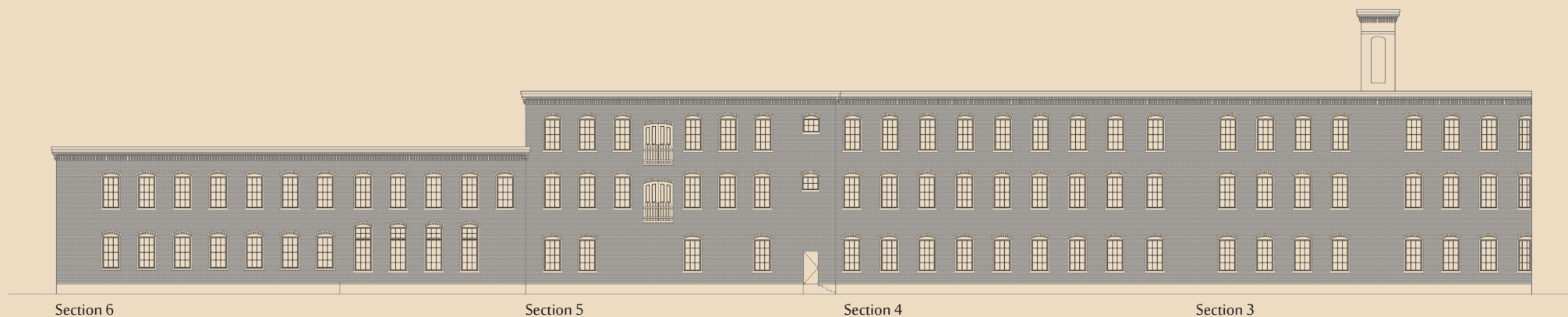
Section 1

Northwest Elevation 1' = 1/32"



Section 1

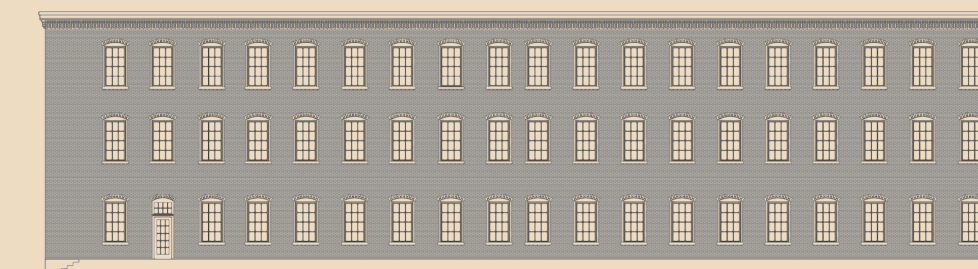
Northeast Elevation 1' = 1/32"



Northeast Elevation 1' = 1/32"

while loadbearing walls are restricted only to the walls that separate each section from one another. In the case of section 1, the beams are supported by a central loadbearing wall running the length of the building.

Sectionally, the building floor to floor height is exaggerated to accommodate the building's original purpose of housing large industrial equipment. These heights are slightly inconsistent between floors and also vary between sections. While the structure is highly regular, the heights range from 14'-0" to 13'5", with the tallest height on the ground floor and smallest on the top floor.



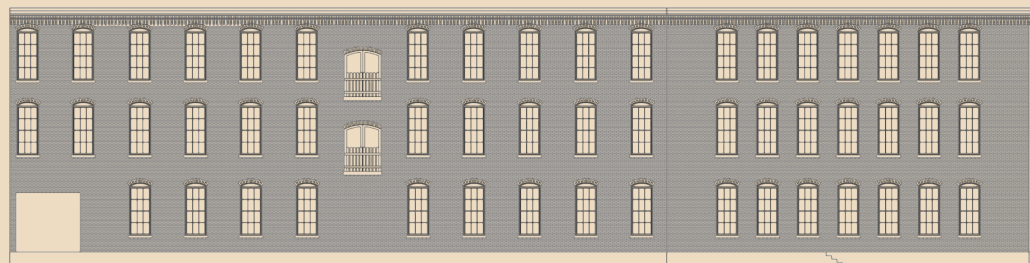
Section 3
Southwest Elevation 1' = 1/32"

Section 4



Section 2

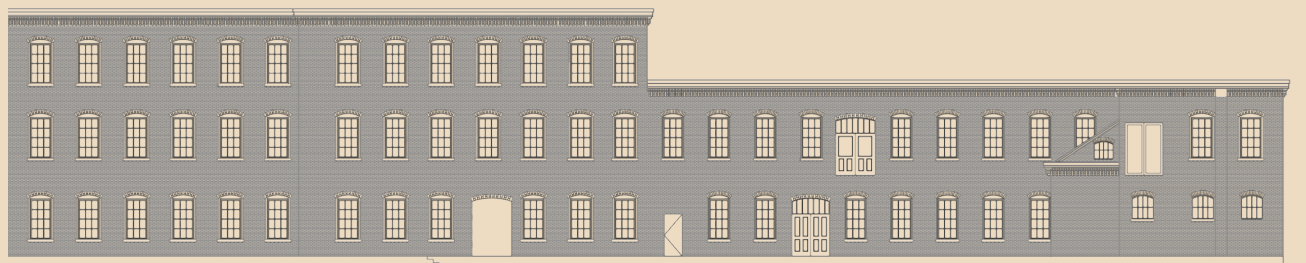
Southeast Elevation 1' = 1/32"



Section 2

Section 3

Northwest Elevation 1' = 1/32"

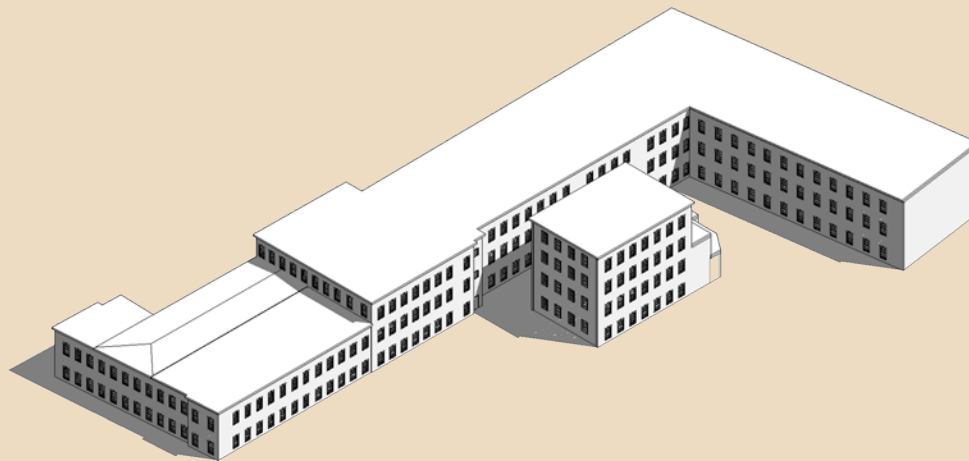
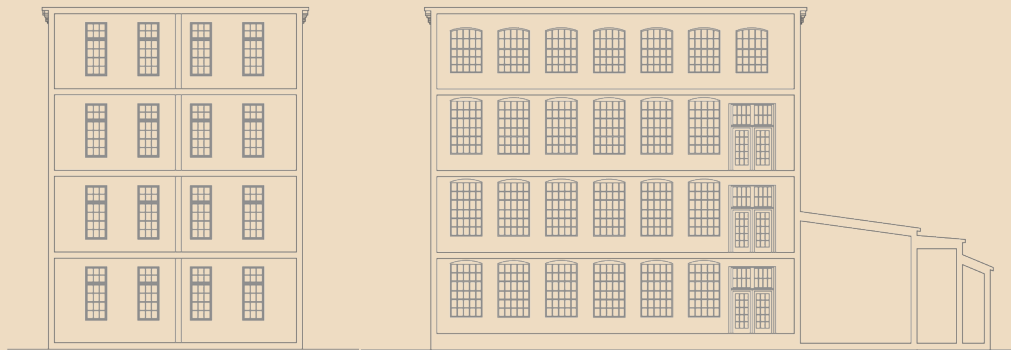


Section 5

Section 6

Section 1



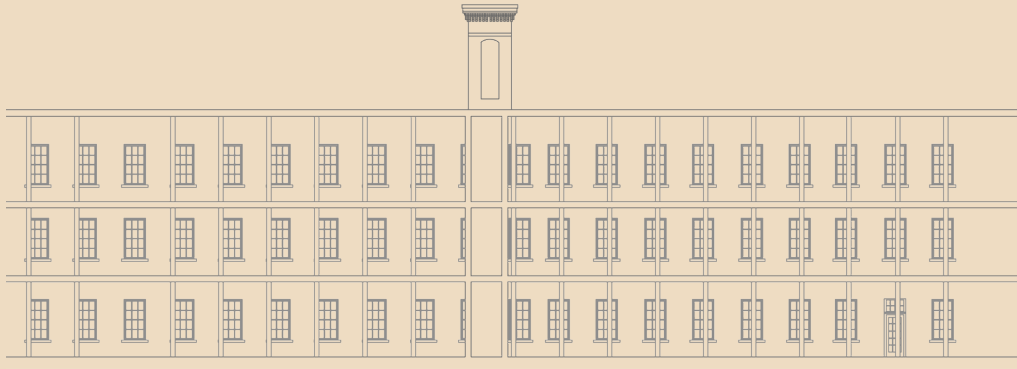


Eastern Perspective of Original Building

The “L-shape” of the main building, along with the smaller four-story building, creates larger, enclosed courtyard conditions. The area framed by sections 1, 5 and 6 creates an open, more undefined courtyard and the area between section 1, 2 and 3 is more sheltered and defined. Though more of an alleyway and less of a courtyard, the space between section 1 and section 4 is roughly 24’ -0” wide.

Section 2 - 6





Section 3



Section 5

Section 6



Final Design

Site Development



Public Transportation

The Union Wadding building is located on a lot that sits adjacent to the intersection of two major roadways (indicated in the red circle on the *public transportation* diagram). While the lot is technically considered to be part of the commercial sections of the city, the site is only roughly two blocks from the waterfront and downtown of Pawtucket. Following the desires of Pawtucket city officials, this intersection also serves as a potential location for the development of greenways and green connections to the river. In addition to the goals and guidelines outlined for the Arts and Entertainment district, the city hopes to promote the notion of the walkable city since the city is highly dominated by vehicular circulation and pedestrian friendly areas are hard to come by. The downtown waterfront is seen as an underutilized natural resource and the hope is to encourage the development of larger greenways extending away from the water's edge as far as the city's former industrial section. Currently green, landscaped areas are highly lacking in the city especially in the area around the Union Wadding building. Only two small parks are available for residents in the neighborhood to use for recreation as well as the Slater Mill Park in the city's downtown. Further developments in this area are encouraged to introduce instances of landscaped and green areas to counteract the current dominance of pavement.

The majority of the city, especially the industrial area of Pawtucket, is essentially flat. The most significant grade change occurs near the water's edge and beyond. The water, as well as the highway, which is actually at a higher elevation than the Union Wadding site. The total change in grade from the highway to the site is roughly fifty-five feet. This change in



Proposed Greenways: Only three small park spaces exist around the Goff Street site but even so these spaces are not easily accessible. The closest green space is roughly two blocks south of the site and is very minimal in size. Overall, the city of Pawtucket is in desperate need of landscaped, green space to be given back to the public. With this notion in mind the city is proposing the concept of creating “greenways” that will extend up from the water through the major roadways and filter into the surrounding areas. This plan will not only bring more greenery into the surrounding areas but will make the area more walkable and pedestrian-friendly.



elevation is quite substantial, but because it stretches over seven blocks, the grade change is hardly noticable. The change from contour to contour is also generously spaced, minimizing the sensation of grade change.

The grade change on the site itself is equally as minimal as the surrounding area. From the northern edge to the southern edge of the site the change in elevation is only five feet. Since

the change in grade extends over one hundred and sixty feet the site feel relatively flat.

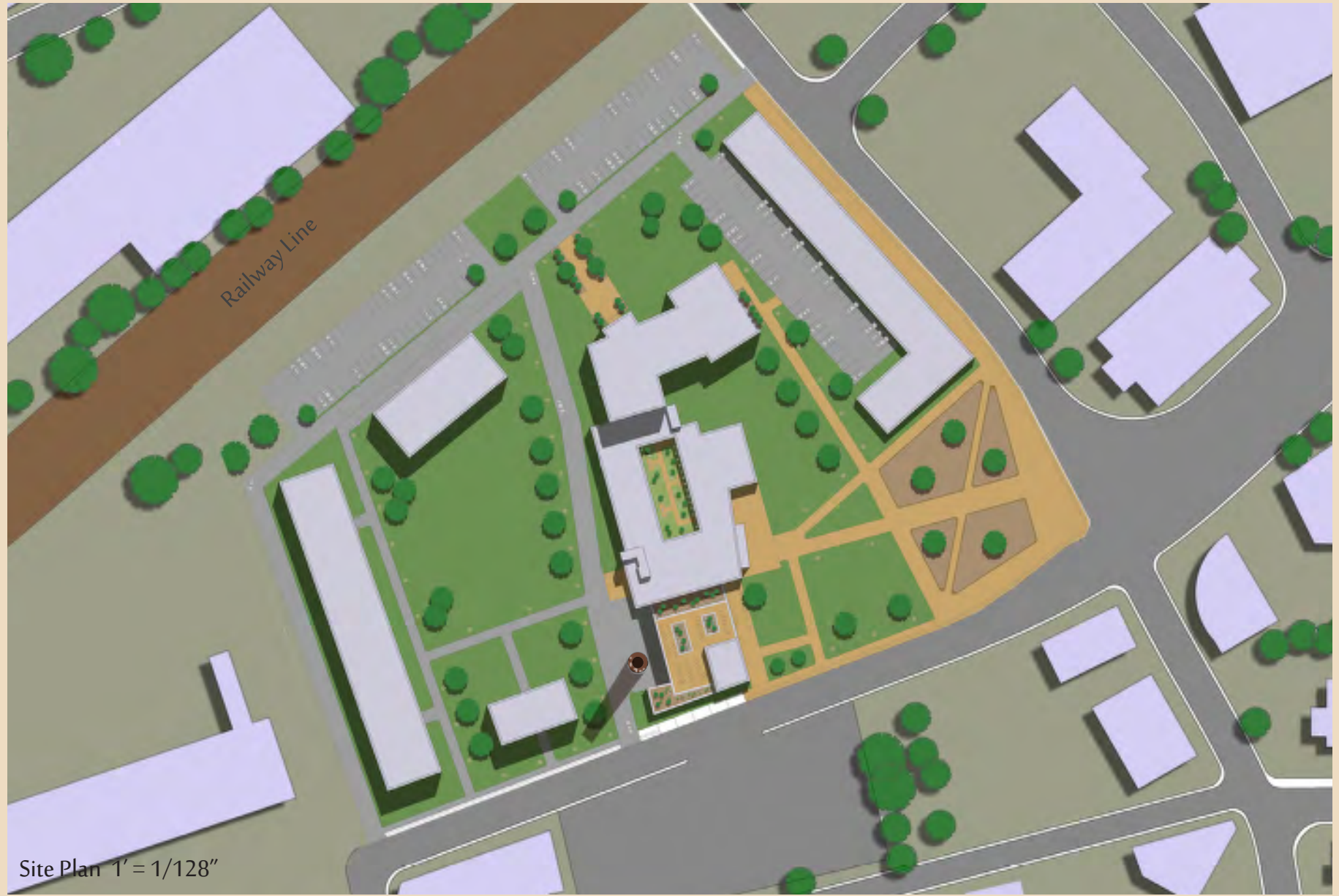
The lot that the Union Wadding Mill building resides on is roughly six acres in area. In addition to the mill, smaller, secondary buildings are also located on the site. Though not part of the mill's lot, these buildings are located on the corner of the site. One building is a gas station/convenience store, one

vacant building, which was previously a dance studio and the two remaining buildings are simple, single story storage structures. While these buildings exist outside of the mill's property line, the design for the Union Wadding Artist Complex utilizes the entire block for the restoration and development of the site. Because the additional buildings possessed no historical presence or serve no real service to the community, the design proposes that these buildings be removed and the artist community will claim the entire site.

Due to the fact that the overall block is close to seven acres, the site development of the project is broken down into four phases with the assumption that with the completion of each phase, the program developed for the restored mill would be expanded to new buildings on site. Taking this into consideration, theoretical buildings were proposed with their potential locations, as well as, an overall site strategy centered around minimizing the presence of vehicles and the establishment of large green spaces to be given back to the public. These spaces were to be seen as outdoor “rooms” and were established by creating zones between the different buildings. These “rooms” would also serve to educate the public about the building and its services by providing a platform for outdoor art installations.

The overall development of the site is broken down into four phases, the first of which being the restoration and development of the Union Wadding building. Beginning with this portion of the site would allow the buildings that exist on the lot to remain until further development of the artist community is needed. In approaching the site's development in this way, the





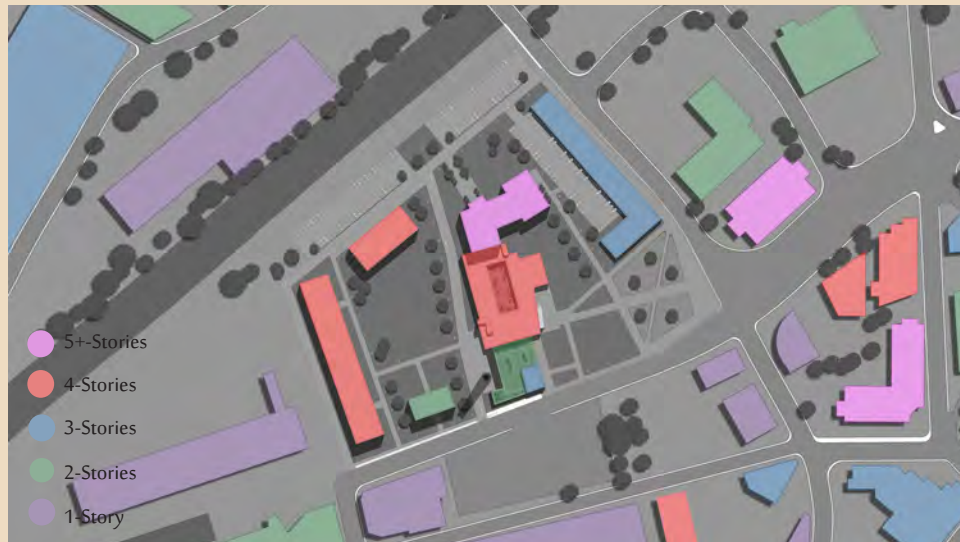


South-East Aerial Perspective

overall reclamation of the block would not be considered extreme. Overall, the subsequent phases, after phase one, would expand out over the western portion of the site. The final phase would involve the demolition of the adjacent minor buildings.

The four proposed buildings, rectilinear in massing to allow for future design freedom, vary in height and size to accommodate different programmatic uses. While the main building houses many uses under one roof, the theoretical planning of the remaining site segregates uses to a greater degree. Smaller buildings could serve as primarily public spaces, such as more developed and formal galleries or educational classrooms. The larger “block” buildings would be more diverse in use and explore what the original buildings brings to fruition, mixed-use living. Facing the major roadway, the “L-shaped” structure could further expand the retail opportunities provided in the original building. Upper stories could provide more artist housing. Similarly, the long rectangular building at the far west of the site could also serve as additional artist housing and provide more studio spaces.

The variation in heights of the proposed buildings respond to the creation of views and the development of the courtyards. Just as the main building increases in height as it moves away from the street, the proposed buildings increase in height the farther away from the street they are. Keeping the buildings that border the street between two- and three-stories helps to define the edge without creating a closed in feeling. In juxtaposition, the taller buildings to the west of the site shield the view of the industrial surroundings, as well as, the adjacent railway.

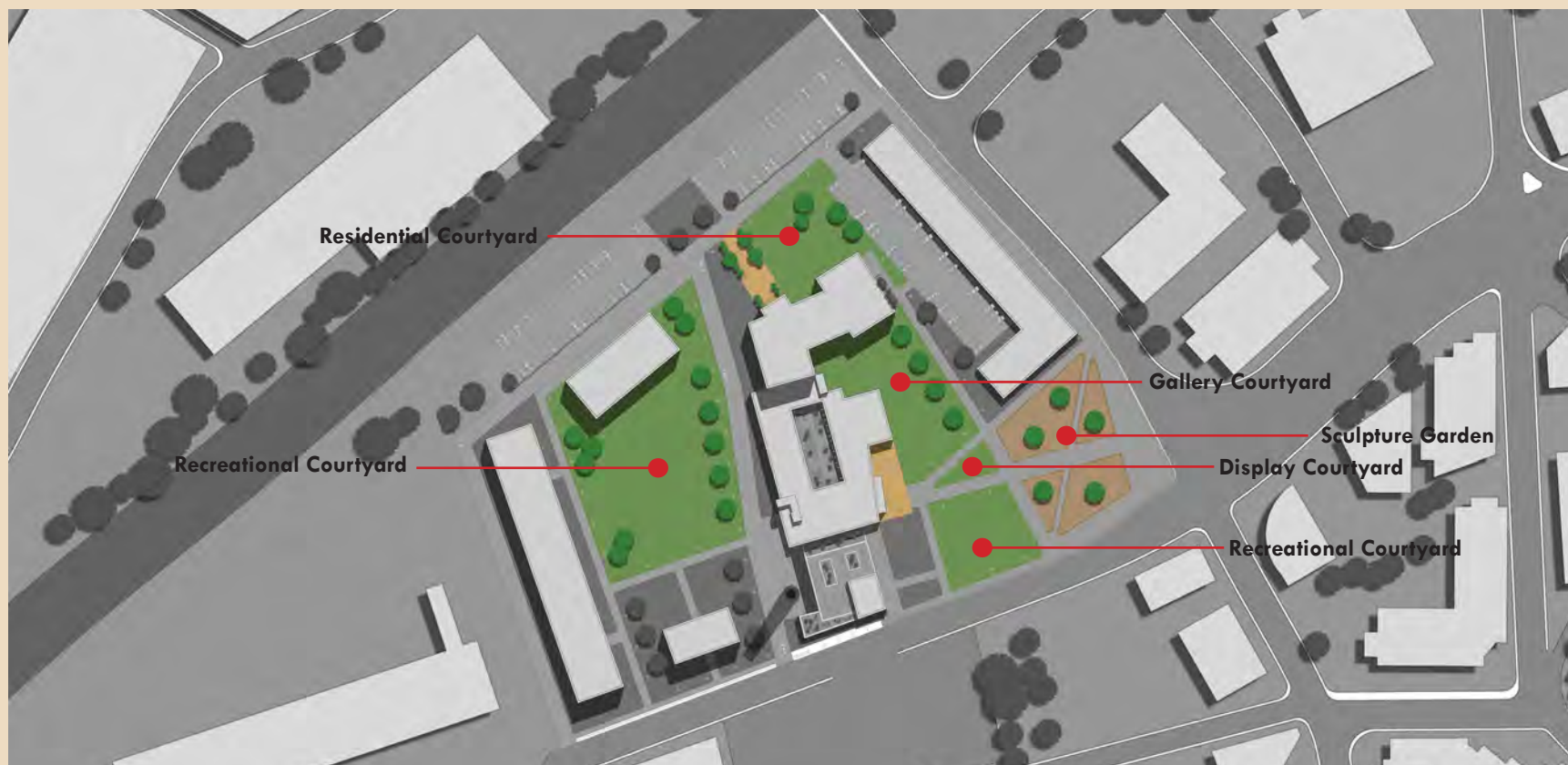


South-West Aerial Perspective

The site development strategy involved segregating, to the greatest extent possible, pedestrian and vehicular traffic. Vehicles are primarily kept to the northern portion of the site. With the site's adjacency to an active railroad line, pulling the building's back from the north edge of the site was the best solution for buffering the building from extreme noise. The interior circulation was primarily dedicated to pedestrians. The roadway that cuts through the site acts more like a service road for the restaurant and the retail stores. Providing parking for ____ vehicles satisfied the requirement for the building program. Breaking the building down into public program and private program (the residential portion), the total number of spots needed totalled 149 with the public program requiring 77 spaces (1 per 300 sq. ft.) and the residential units calling for 72 spaces (2 per dwelling).

Courtyards

The placement of the paths and the way in which they bisect the site creates interstitial spaces that can be treated as outdoor "rooms". These spaces, through their size and location on-site, appeal to different activities and different users. Working in conjunction with the goals outlined by Pawtucket city officials, the landscape acts like exterior park spaces for not only the users and residents of the building, but also for the surrounding public. Keeping some of these interstitial "rooms" larger and more undefined than others allows for the public to claim it as their own and develop their own relationship to it. While the large "rooms" are relatively abstract, the smaller rooms can be utilized as display area for sculptures and installation pieces. The most defined of the courtyards is in the eastern corner of the site, serving as the focal point for those passing by the complex.



Bisected diagonally by two intersecting pathways, this sculpture garden displays more permanent works of art. The close placement of trees and their close proximity to the promenade-like walkway establish a gradual transition into the site from the busy intersection and its traffic, to the quieter, green courtyards.

The courtyard directly adjacent to the gallery acts as a pos-

sible setting for gallery openings to filter out into the site. Similarly to the exterior entry platform, this courtyard is a seasonal option for art shows to utilize the site's potential.

The northern courtyard, which leads up to the residential entry, is intended to help buffer the residents from the surrounding vehicles, as well as, provide them with their own portion of the site.



This area works in conjunction with the shaded pathway, which functions similarly to sculpture garden, distancing the resident from the traffic and parking. Having this separation in the residents only entrance to the building, allows for a sense of separation from visitors without creating a physical separation .

Of the numerous courtyards, the large “room” on the western side of the building, is the most informal and open for interpretation. This space provides an area for students and artists to work in plain air, residents to enjoy the natural landscape and the general public to recreate.

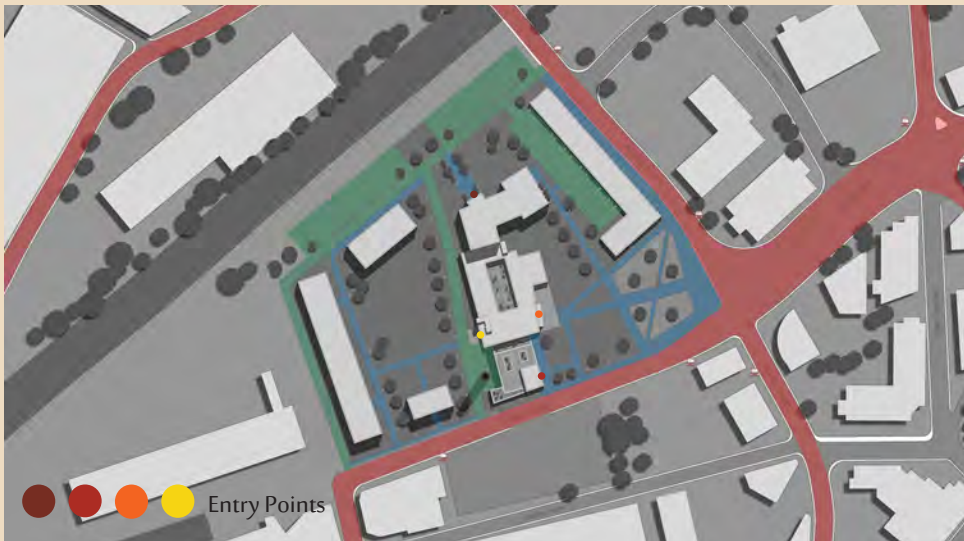
Treatment of the Facade

Integration of Old and New

Restoring and renovating the Union Wadding Mill Building required sensitivity to the original aesthetic of the building and serious consideration as to the appearance of the new construction. Establishing a strong contrast between new and old maintained the mill’s integrity. Rather than mimic the same aesthetic and try and mask the new construction, presenting a strong juxtaposition between new and old materials helped to draw out the historical portion of the building, rather than recede into the overall facade. The decision was made that any new construction would use materials and a palette that was



The major “promenade-like” path that extends from the major intersection to the primary entrance provides an opportunity to use the site as exterior gallery spaces. This linkage draws pedestrians from the street into the site where artistic creations dot the landscape. The abstract interstitial spaces, created as a result of the crossing pedestrian walk-ways, act as informal display areas, not unlike the open foyer of the building. While the interior galleries are generous in size, the expanse of the landscape provides an interesting opportunity to bring the art from the interior of the building into the surrounding area. In addition, displaying artwork outside helps promote the building’s facilities.



a complete departure from the heavy brick and masonry of the mill. Therefore, new construction consisted of glass, metal mullions and gray zinc panels. New construction simply grew out and around from the original building giving the sense that the new is extending out from the old and working alongside existing conditions.

In the case of the restaurant and central portion of the building, the materials used in the new construction are primarily glass and metal mullions. Considering the northeast angle, the building follows the building's eastern facade would remain highly glazed, as the sun's filtration was not a large concern. In contrast, the western facade was treated with more sensitivity, as this facade would need to be shaded and kept more opaque.



It is on this facade that zinc panels are implemented. Being that this facade is designated for loading and delivery and a service entry, the use of zinc panels, rather than glass, designates this portion of the building as secondary to the eastern facade.

The residential portion employs the greatest usage of zinc paneling. With the desire to create a large contrast between old construction and new, the facade also needed to respond to the inner program as well. The central portion of the building is designated as the public domain and uses the most glazing. The residential level of the building has smaller windows to respond to the size of the windows in the original building.



North-West Aerial Perspective



Due to the fact that some apartments are located in the old structure and some in the new, establishing a correlation between the two facades demonstrate the similarity of program. In this section, the gym is highly glazed to make the clear distinction that this portion of the building is a public space.

Entry into the Building

The building has three major entrances and one minor entrance. The primary entrance is situated on the eastern facade of the building (labeled orange in the diagram) along the major axis that extends from the southeastern corner, the location of the

major intersection of roadways. The other entry points are located on the eastern facade of the building (yellow), which is more of a service entrance, the entry into the restaurant (red) and the final entrance (maroon), restricted only to residents, located on the northern facade. By providing separate entrances for residents and visitors, those that live on the site can feel a sense of ownership of their portion of the building.



Residential Entrance



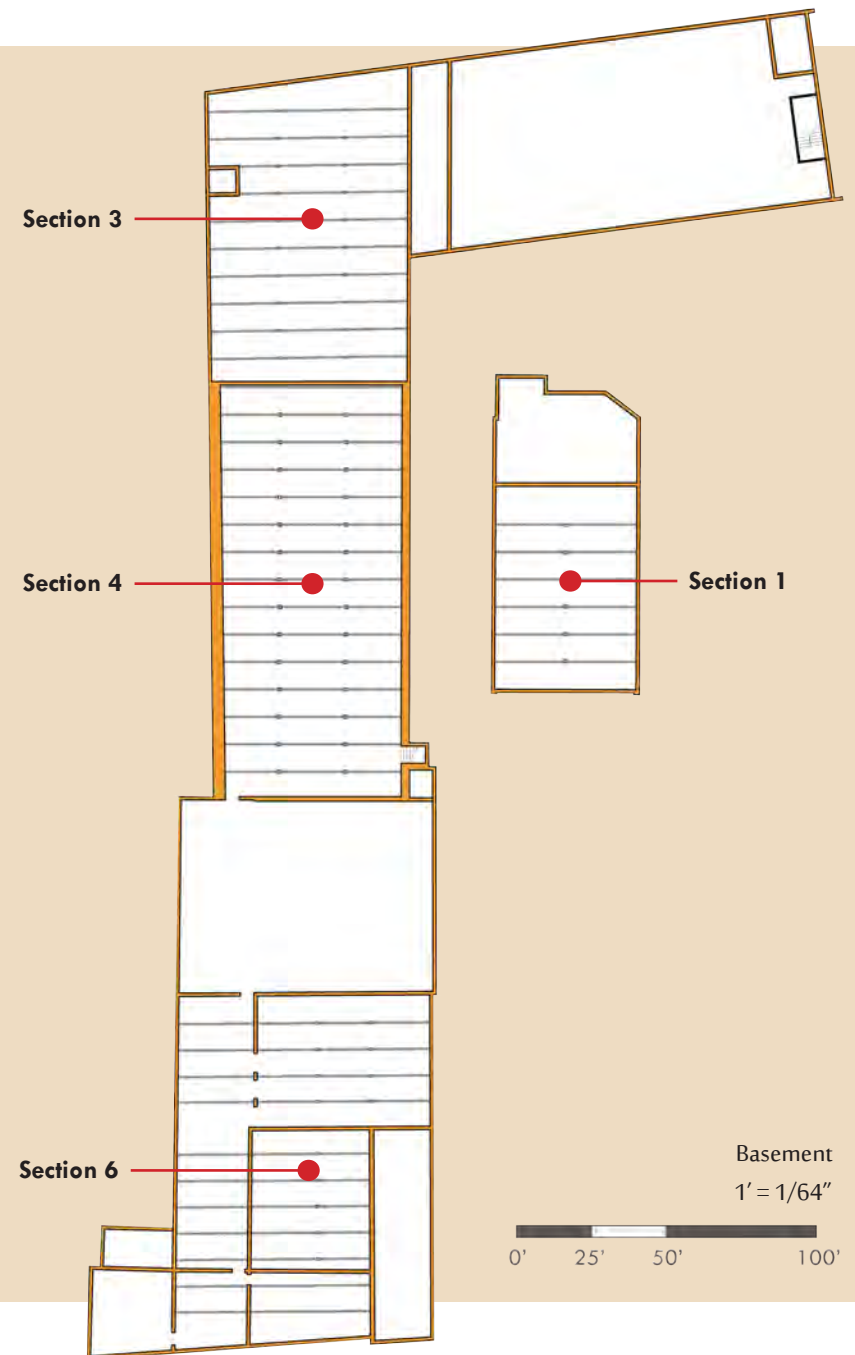
North Elevation 1' = 1/64"

Basement

The basement level of the artist complex is the only level of the building that was simply restored and not altered. No real program, aside from storage, was assigned to the basement level. The basement does not exist under each portion of the building and the only real usage space exists under Section 1, 3 and 4. In the case of each area, providing prime storage opportunities for programmatic components that exist above was the more appropriate solution.

Section 1's basement, at 2,400 square feet, provides localized storage for the galleries above and the basement at the center of the building (section 4, 6,200 square feet) will not only benefit the retail boutiques, but also provide the artist studios a place to store large equipment and supplies not needed in their studios. Section 3's basement, at 5,000 square feet, will provide accessible storage for the residents.

The area of the basement that exists below the restaurant (section 6), though structured, provides little to no storage possibilities. The majority of this basement is designated as crawl space ranging in height from 5'-0" to 7'-2". The northern most corner of the section 6 basement has the highest ceiling height (7'-2") but can only be accessed through the 5'-0" portion of the basement making proper storage slightly inconvenient.





Program Key

1. Restaurant
2. Gallery
3. Retail
4. Offices
5. Mailroom
6. Residential Lobby
7. Community Room
8. Locker Rooms
9. Gym

Ground Floor

The building's ground level is the most public of the six floors. At this level a more generalized program is offered to the public and is geared toward a wide ranging demographic. It is at the ground level that the restaurant is entered from its private entrance and the main lobby, the retail shops reside and the first level of the gym is accessed from its own entrance. The gym and the restaurant book-end the building with public program. This arrangement promotes circulation from the southern to the northern end of the site and activates the landscape. Giving the landscape back to the general public was a major goal behind the design of the Union Wadding Artist Complex and encouraging visitors to move throughout the site enforces this desire.

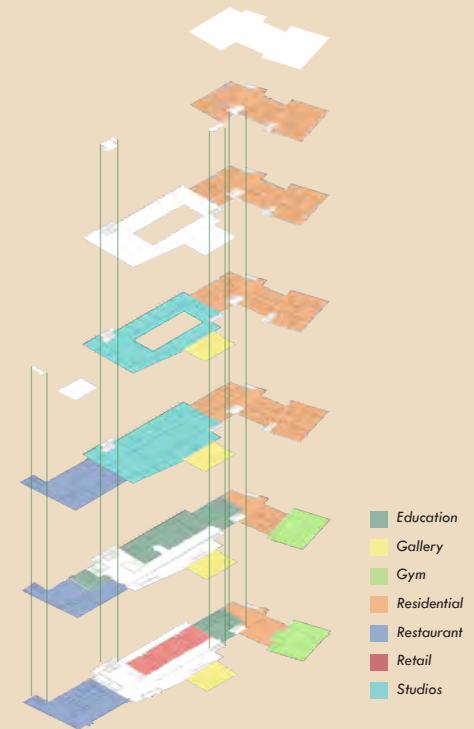
To maximize opportunities for displaying the artist's work, creating a large, informal foyer provides a place for large group gatherings and a suitable juxtaposition to the more formal, structured gallery. This foyer unites the most public programmatic components together, making for easy circulation through the ground floor and promotes transitions from one space to the next. Transitions, over all, were a major concern in both the development of the inner workings of the building, as well as, relating the interior to the exterior site planning. The establishment of smooth filtration from exterior to interior in the case of the retail, gallery and informal foyer is accomplished through various entry points. Allowing entry into the retail shops directly from the exterior engages the western portion of the site, especially once this area is further developed. The secondary entry into the foyer also works to achieve the same goal.

Though the art classrooms and educational portion of the program are situated on the second floor, the offices are located at the ground level and are connected by a service stair. Rather than siting them alongside the classrooms, placing the offices on the first floor shows that the classrooms are publically accessible and makes connections between art instructors and the general public easier.

It is at the ground level that the residential program begins. The residential foyer, community room and mail rooms are concentrated in the northern corner of the building. The notion of generating community was a prime consideration in the public portion of the building, the same goal was desired between the residents. The large foyer and spacious mail room, in juxtaposition with the community room, provide spaces for informal meetings and interactions between those living in the building. The separate entrance also promotes a communal spirit by designating a private portion of the complex for only residents.

Programmatic Layout & Organization

The program is organized into sections: educational, gallery, residential, studios which are organized vertically. Numerous circulation cores also run vertically to link each of these sections. Aside from the two public stairs in the main foyer there are three major fire stairs, with a fourth concentrated in the restaurant.





Restaurant

The restaurant serves as the primary link between the artist community and the general public. Located in the two-story, section 6, portion of the mill, the restaurant takes advantage of its location near the street to draw in passerbys, and individuals not necessarily aware of the building's artistic offerings. The restaurant not only encompasses the two floors of the original



building and highlights the open and spacious quality of the building's structure, but introduces new facets of design. Allowing for the exterior seating, not only at the ground level, but on the roof as well, adds additional character to the complex.

The extension of the ground plane onto the roof allows the entire structure to be activated and coincides with Pawtucket's plan to increase the presence of greenery in the industrial



Restaurant lobby

district. Elevating the landscape onto the roof shows that such a desire does not only pertain to the ground plane, but also can be extended into the building as well. Making the seating in the restaurant accommodating enough for a large crowd would maximize the gallery, studios and individual artist's exposure to a large group of people. This outdoor roof terrace can work in conjunction with the rest of the building's program as it provides an interesting and unique venue for art galas and functions that

may be taking place in the gallery.

While the restaurant is its own separate entity with a designated program, parlaying its highly public quality as a means of transition from the street, to the restaurant, to the heart of the building, (the gallery) adds dimensions to the inner workings of the complex.

Retail

Just as the restaurant acts as the direct link between the surrounding population and draws a wider demographic to the site, the retail component of the program also acts as a method of bringing visitors to the site that may not initially be drawn to the gallery and studios. There are four designated retail boutiques on the ground floor of the building, all roughly 1,100 square feet. Though the number of boutiques is minimal, the intent is to increase this number with further site development. The proposed Phase 2, 3 and 4 buildings could also provide more retail shops into their programs that would work in tandem with the original four spaces. The retail components provide opportunities for artists to sell their work for a profit after or during a showing or when the occasion for more traditional gallery displays are not possible. In the case of smaller art work, or more fashion- or housewares-oriented pieces, typical showings are not the most appropriate. In situations such as these, artists are afforded the same exposure as artists that display in the galleries.

Establishing a retail zone at the public, ground level of the building facilitates movement into the body of the building and helps experience the space. The primary entrance into each shop is through the main foyer and exposes visitors to the informal gallery (the foyer), art classrooms as well present the possibility of visiting the formal gallery. To facilitate loading of merchandise, as well as, allow for easy access from the western side of the site, there are secondary entrances into each shop on the western facade as well.

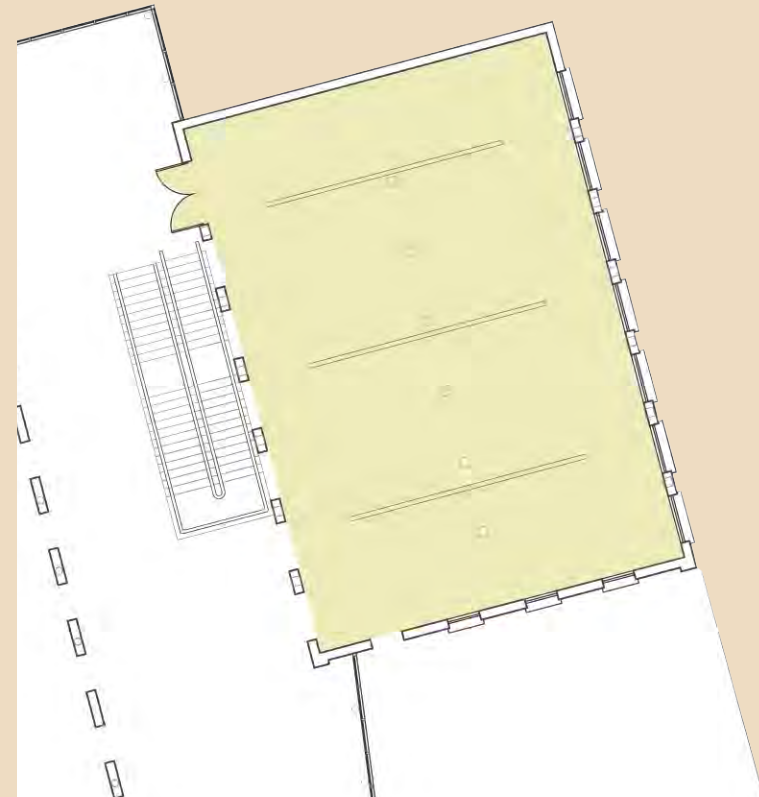


Gallery

The gallery encompasses all of Section 1 of the original building. To accommodate large art pieces, as well as respond to the double height of the foyer, the second story of the original space was removed. Aside from the removal of this floor, the third and fourth floors remain intact.

The verticality of the gallery helps to draw the visitors up into the building. While the public program of the ground floor works to bring people into the building. The gallery continues the progression by bringing individuals up to the third and fourth floors where the artist studios are located. To express the original appearance of the building, as well as keep the gallery clearly defined, the three original brick walls were maintained. The western wall, now enclosed by new construction, has its windows and ledges removed to open up this space to the main foyer, without losing its defined sense of enclosure. The maintenance of the window openings provide a juxtaposition between the light and open feeling of the new addition.

The top two galleries, on floors three and four, are single story in height. To maximize the impact of the main gallery space directly adjacent to the main foyer, the second floor was removed to create a double height condition. Having the two-story main gallery differentiates the space from the other galleries. Providing a variety of floor to ceiling heights in the galleries also allows each space to accommodate different sized art pieces. The double story height allows for large sculptures and/or installations to easily fit within the space.



*Gallery Floor Plan, all levels are identical
1/32" = 1'*



Evening perspective of main approach; the illuminated gallery and studios become, in a sense, informal installations in their own right due to the large amounts of glazing

The brick of the northern, western and eastern walls aesthetically respond to the historical quality of the mill, but the least successful of the facades occurred on the southern facade, which was only enclosed with wood siding. The departure from the use of brick provided an opportunity to interject contemporary details into the facade. Opening up this wall by using light mullions and large plates of glass, not only illuminates the space naturally, but creates an interesting opportunity for the gallery to act as a beacon when illuminated at night. The glass wall facing the street allows people on-site, and those passing the site, an inside look into the inner workings of the building without even entering into the space.



Exploded Axonometric of Gallery



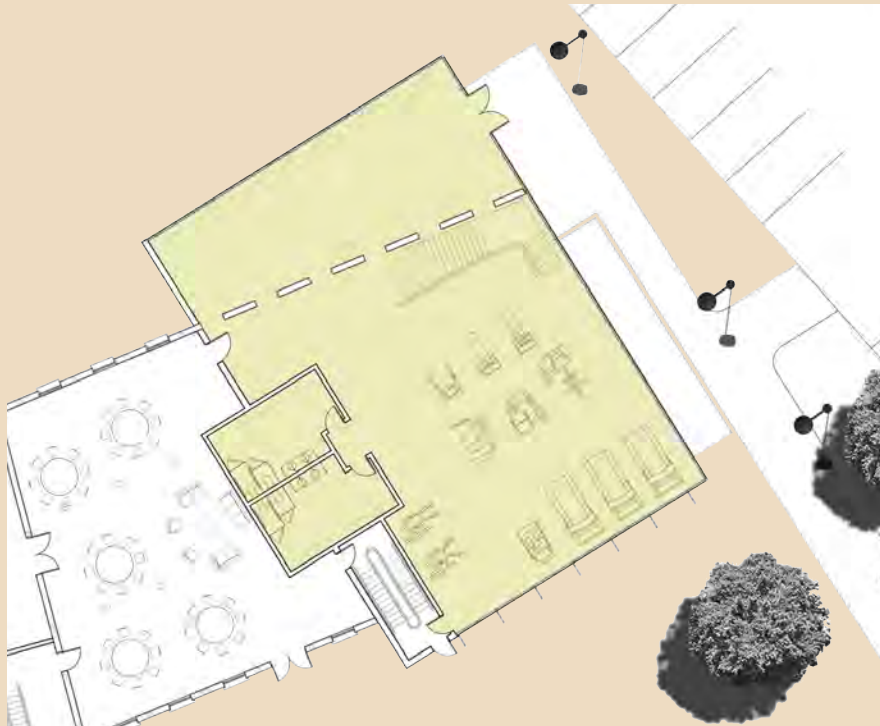


Informal Gallery/Foyer; this large and spacious area provides opportunities for the displaying of paintings and sculptures and works in tandem with the formal gallery

Gym

The two story gym provides a public service to the residents of the building, as well as, those living off-site. Working to attract a wider demographic to the site, much in the same way as the restaurant, the gym works to introduce the general public to the services within the building. The predominately glass facade indicates that this portion of the building is public in nature, and aesthetically resembles the central glazed section of the Artist Complex. Keeping the ends (restaurant and gym), as well as

the center of the building, transparent opens up the inner program to the exterior landscape. Much in the same way as the foyer and gallery integrate the structure of the original building into the new aesthetic, the gym uses the original exterior walls as means of breaking up the interior space. Establishing a distinction between the entrance and the heart of the gym on the first floor, and the predominately cardio-oriented machines, with the weight machines on the second floor, gives the sense of multiple rooms without actually partitioning off the space.



Gym, Floor One
1/32" = 1'



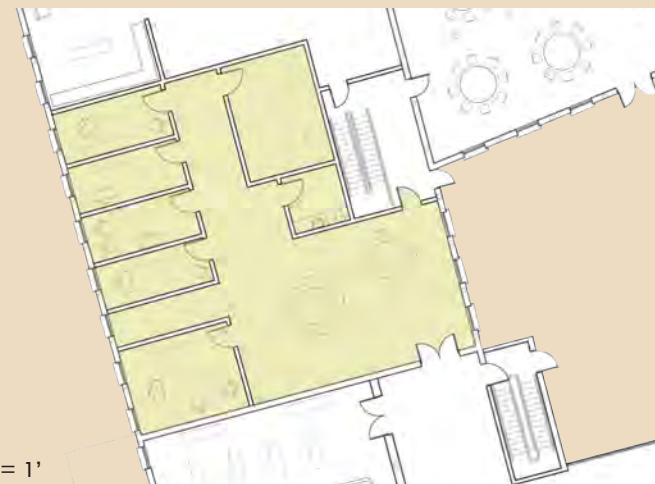
Gym, Floor Two
1/32" = 1'



Ground Floor of Gym

Offices

The offices, which are part of the educational portion of the program, provides space for teacher and art directors to work together, as well as, meet with students and residents in a more professional setting. There are four smaller offices and one larger office in this area. In addition, the teachers and directors are given their own informal staff area and meeting space, designated with tables, but is open for interpretation and arrangement. While the classrooms are open in plan, they do not afford the chance for more professional and intimate meetings. The offices act as the counterpoint to the classrooms.



Offices
1/32" = 1'

Second Floor

The second floor has an extremely diverse program, the most diverse compared to the other five floors. This level houses the second level of the restaurant with its own access to the rest of the second level program, which is connected to the second level mezzanine. While the ground level foyer below provides a space for groups of visitors to gather for art shows and gallery events, this public mezzanine provides a setting for large gatherings pertaining to the art students and on-site educational events. This area is adjacent to both the art classrooms and a lecture hall, a space that is intended to work in tandem with the educational component of the complex. The numerous art classrooms, ranging from painting and silkscreening, to pottery and sculpture classrooms, are all organized in one centralized location, allow students to filter from classroom to classroom and receive the most diverse experience at the center. Though this floor has programmatic components that are intended to work independently, the double height foyer also helps to unite the ground floor foyer and gallery with the upper level foyer. Creating a dialogue between the students, artists, their artwork and the general public generates a sense of community within the facility.

Similarly to the southern portion of the second floor, the northern-most portion of the second floor houses the gym's second story. It is also at this level that the apartments are introduced, one one-bedroom unit and one two-bedroom unit.



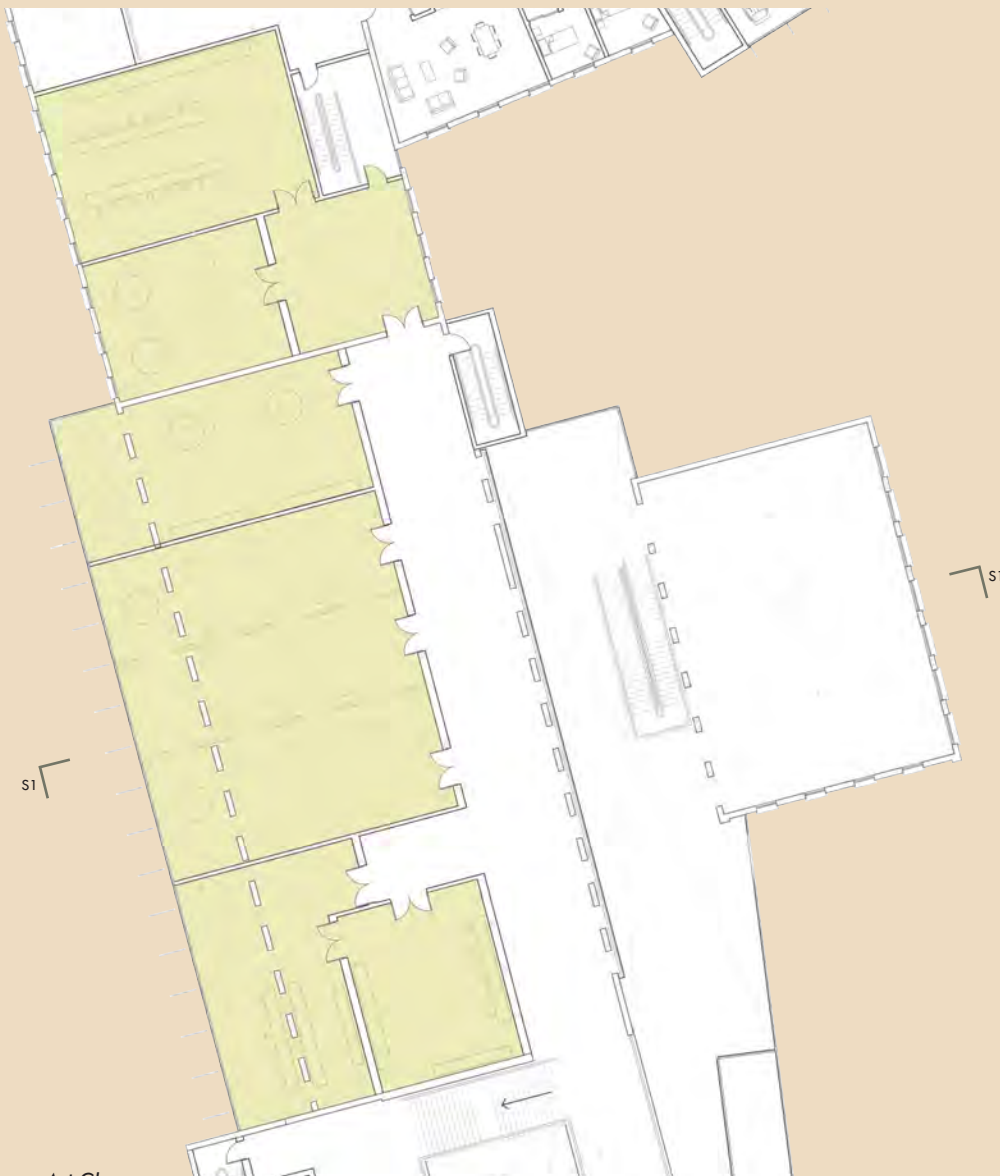
Program Key

- 1. Restaurant (2nd Floor)
- 9. Gym (Open to Below)
- 10. Lecture Hall
- 11. Dark Room/Photo Studio
- 12. Silkscreening Work Room
- 13. Painting Studio
(3 dividable rooms)
- 14. Pottery Classroom
- 15. Sculpture Classroom
- 16. Woodworking Studio

Second Floor
1' = 1/64"

0' 25' 50' 100'





Art Classrooms
1/32" = 1'

Art Classrooms

The educational component of the program is made up of numerous classes in a variety of mediums. In order to expose children and young adults to the widest variety of artistic possibilities there are six different classrooms, all of which provide a different service. Two-dimensional mediums include a traditional painting studio, photography studio and silk screening classroom. Three-dimensional classes include sculpture, pottery, and wood working. The intent of the facility's educational component is to bring out the inherent talent of the city's youth by providing the widest range of opportunities. This will ultimately yield the greatest result.



Lecture Hall
1/32" = 1'

The primarily user of this portion of the program is outside youth that come to the site to partake in classes and have the opportunity to show in student based art shows at the facility. The on-site artists can work with the students to share their artistic knowledge in this educational setting and help draw out a students' creativity. Fostering an artistic environment, the primary goal of the facility, not only applies to the artists working and creating in the studios, but also instills this spirit in those that visit the stie and take part in the available programs.



Third Floor/ Fourth Floor

The third and fourth floors of the Artist Complex are relatively identical in plan. While the complex has six floors, the fourth floor is the uppermost in this section of the building. The artist studios, single height gallery spaces and apartments are located on these floors. It is at this level that the public program transitions into semi-public, with only portions of the building accessible to the general population.

Individual apartments at this level and above can only be accessed by residents, but the studios can be viewed by visitors to the site. Those travelling through the formal gallery are afforded the opportunity to view the artists working and designing in their studios. The third story also houses a large central atrium and exterior roof garden. At the heart of the plan presented, the opportunity is afforded to integrate landscaping into the building's design.

Though the restaurant introduces the exterior roof garden, the atrium further demonstrates the integration of the "outdoors" into the structure. While this atrium can only be accessed from the third floor, the area can be viewed on the fourth floor from all sides. This exterior space creates a platform for a variety of individuals (artists, visitors, students) to co-mingle in an informal gathering space and further promotes a sense of community in the complex.

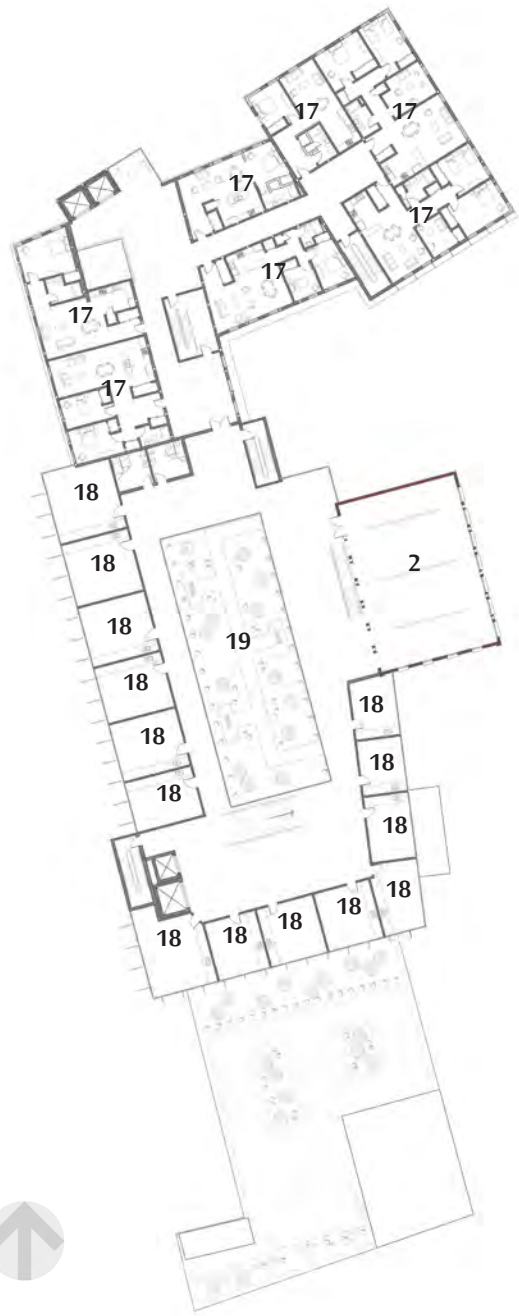


Third Floor
1' = 1/64"



0' 25' 50' 100'

- Program Key
- 2. Gallery (Second Floor)
 - 17. Apartments
 - 18. Artist Studios
 - 19. Exterior Green Room



Fourth Floor

1' = 1/64"

0' 25' 50' 100'

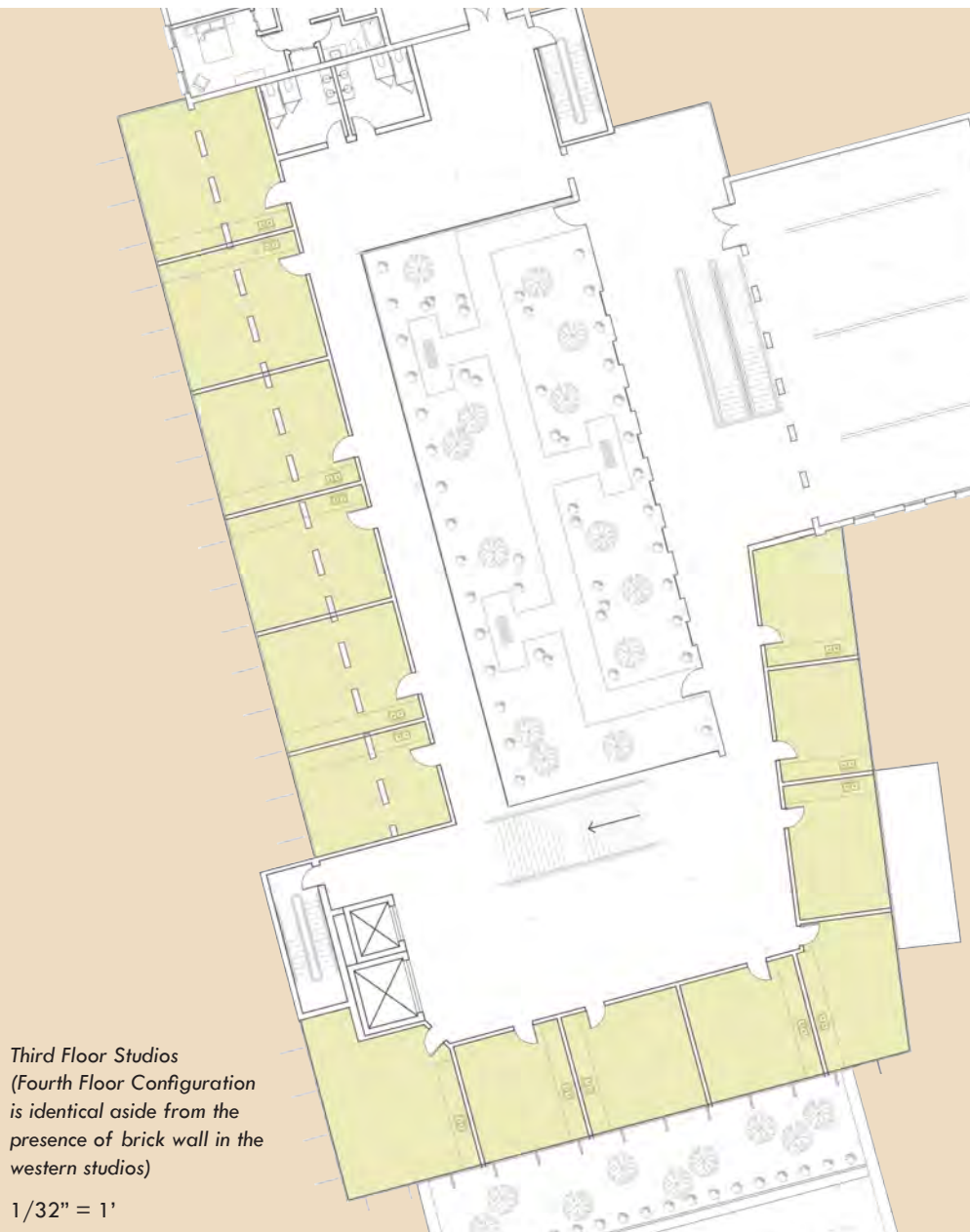


Atrium view from third floor perspective



Atrium view from fourth floor perspective

- Program Key
- 2. Gallery (Third Floor)
 - 17. Apartments
 - 18. Artist Studios



Art Studios

The studios are designated spaces where the artists can design and create. Designed to act as a counterpoint to the resident's apartment, these spaces provide an open, undefined work place. These studios are situated on the third and fourth floors and are therefore considered to be part of the semi-public portion of the artist complex.

Running parallel to the top two gallery floors, these work-spaces can be viewed, to a certain extent, by visitors. Though not completely transparent, partially glazed doorways allow glimpses into the work being created. Concentrating these studios in one distinct area, rather than connecting studios to the apartments, creates a sense of community and collaboration. Placing studios directly next to apartments would not provide the opportunity for different artists to meet and interact. Such a configuration would also restrict artists from choosing a studio location and size that best accommodates their medium.

The twenty-eight studios all vary in size to respond to different medium requirements. Taking into consideration that two-dimensional and three-dimensional art needs different sized work spaces. Square footage for the studios range from 276 square feet to 600 square feet. Location within the building also presents another option for artists. Studios on the western facade are shaded (both with vertical and horizontal panels) and utilize the original walls of the Union Wadding Mill. As a result, these spaces are the darkest. Moving counterclockwise around the building's facade, the shading diminishes and the

Third Floor Studios
(Fourth Floor Configuration
is identical aside from the
presence of brick wall in the
western studios)

1/32" = 1'

spaces become more naturally lit. The interior of the studios are essentially blank canvases for artists to mold to accommodate their own personal needs. The only pre-established amenity within each studio is a counter running the length of the one wall and a sink for cleaning materials. Aside from providing this service and plumbing, the studios are completely open for interpretation.

The studios are pushed to the periphery of the building's edges to allow for suitable glazing. This design decision therefore

forces the circulation to be pushed to the interior of the building. Integrating landscaping and natural light into this area provided the opportunity to create informal gathering spaces, for not only the artist's but visitors as well. Interior gathering spaces occur near the elevators and near the formal gallery stairs. In the case of both areas, their adjacency to the atrium allows them to be well lit and inviting spaces. The atrium, the exterior gathering space, can only be accessed at the third level, but is open to the sky and therefore glazed walls are carried up to the fourth floor.

Axonometric of third floor studio spaces: Rather than make each studio identical, in regards to size, lighting capabilities and configuration, providing options that are more suited to various artistic mediums and styles allows the studio spaces to appeal to a wider demographic of artists.



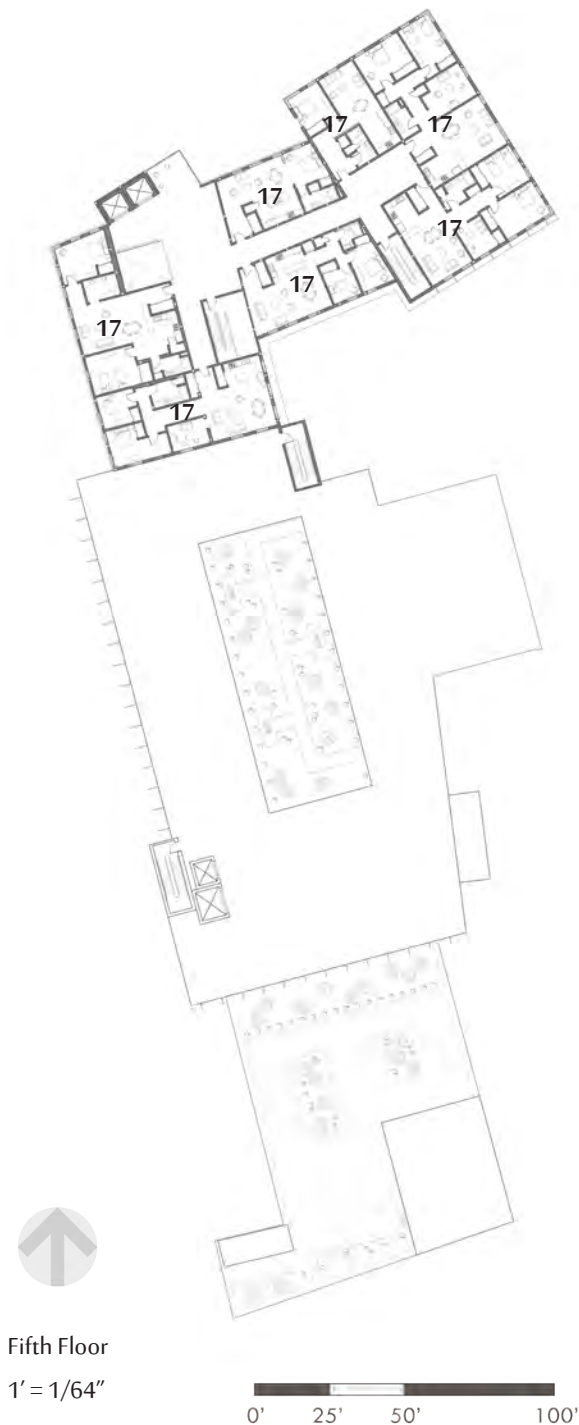
The southwestern facing studios are the the most shaded. The wooden shading panels are widest on this facade, extending out four feet from the glazing, to accommodate the highest levels of natural light infiltration. The floor slabs also extend past the building's facade 4' to meet the edge of the shading panels and provide horizontal shading. In the case of the third floor (pictured), these studios incorporate the mill's original brick wall. Just as in the gallery and foyer, the windows and sills are removed.

The southern facing studios have shading panels, that run the entire floor to ceiling height, to block some infiltration of sunlight. These are not as deep as the western panels, extending out only two feet from the glazing. As a result of the building's angle, managing daylight on this facade is a concern but not the most severe.

Due to the northern angle on which these studios are situated, shading panels were not necessary. Natural daylighting is mild enough to not require the wooden shading panels.

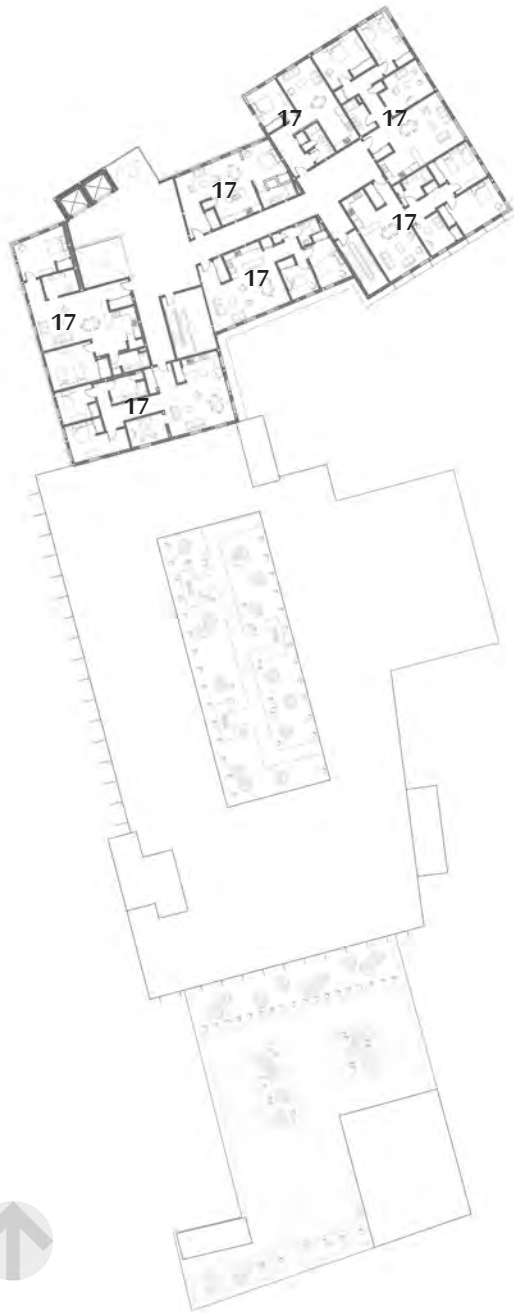
Fifth Floor/Sixth Floor

The fifth floor is solely designated for apartments. No other program exists on this floor. Similarly, the third and fourth floors, below the apartments in the new portion of the building, are identical. The other two apartments introduce a new apartment typology that is not on the floor below. Both units are two bedroom typologies with a flex room available to be used as office space or an additional bedroom. Since there is no other program on these floors, larger units could be replaced with the smaller units, which enable circulation into the artist studio areas.



Fifth Floor
1' = 1/64"

Program Key
17. Apartments



Sixth Floor
1' = 1/64"

0' 25' 50' 100'



Living Space, Apartment 2.1

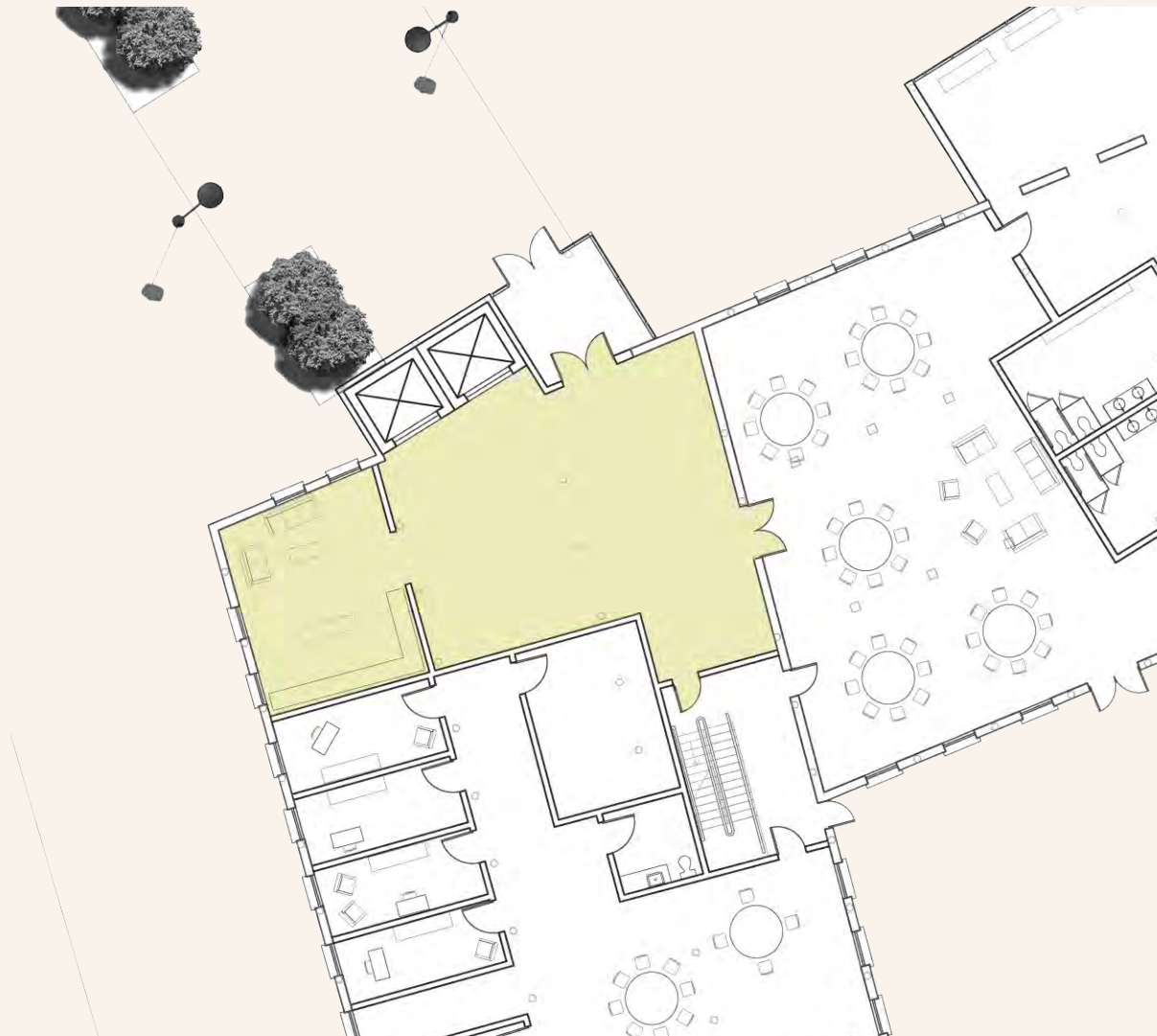


Master Bedroom, Apartment 2.4

Program Key
17. Apartments

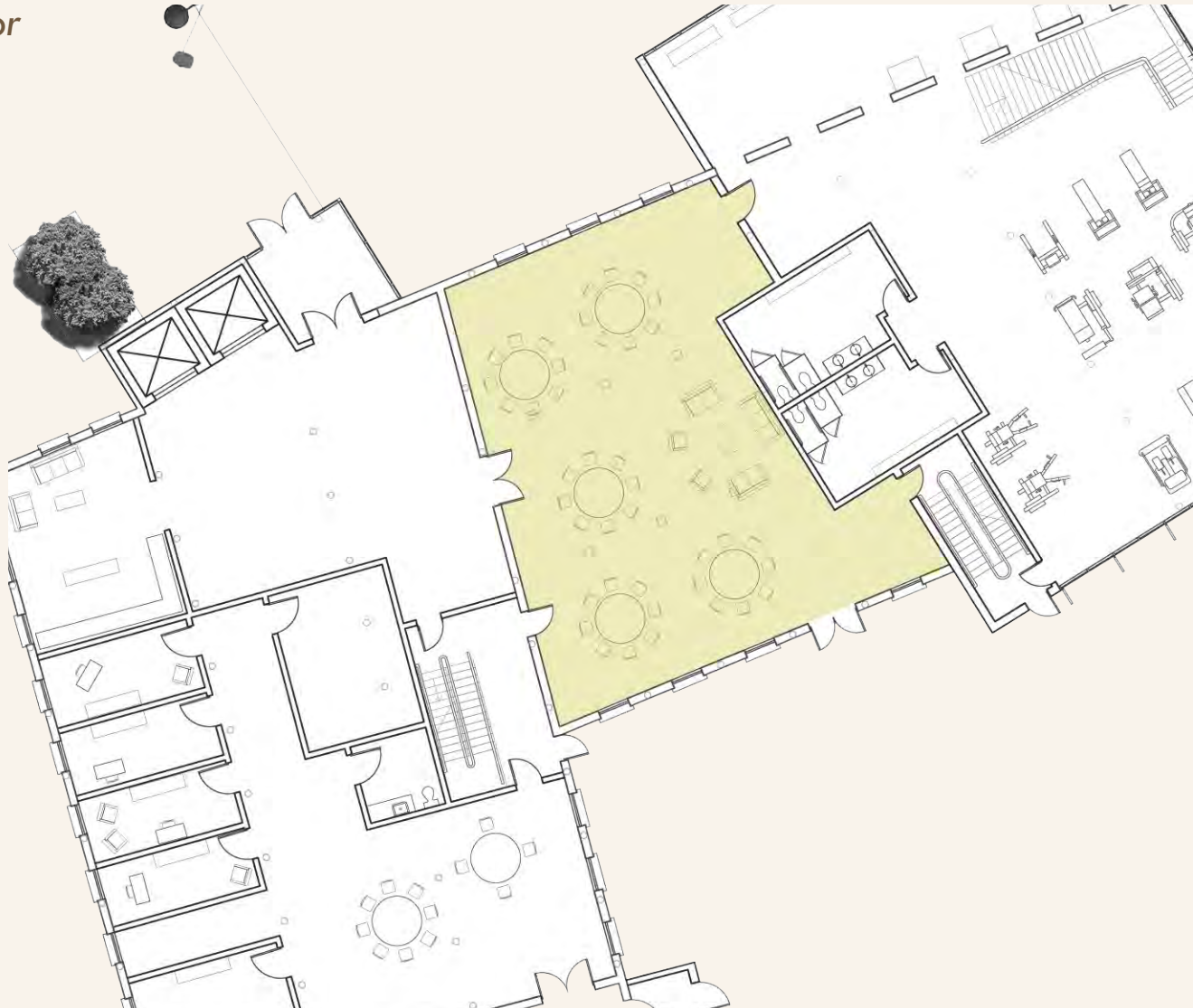
Residential Foyer & Mailroom *Ground Floor*

1/8" = 1'



Community Room
Ground Floor

1/8" = 1'



Residential Units

To accommodate a variety of users, there are multiple apartment types in the complex. Apartments range from studio units, one bedroom units, two bedroom units and two bedroom with a flex room. Within these types there are slight variations as well. Overall, the units range in square footage from 800 square feet to 1500 square feet.

0.0	Studio	801 sq. ft.
1.1	1-Bedroom	1030 sq. ft.
1.2	1-Bedroom	1030 sq. ft.
1.3	1-Bedroom	830 sq. ft.
2.1	2-Bedroom	1250 sq. ft.
2.2	2-Bedroom	1230 sq. ft.
2.3	2-Bedroom	1115 sq. ft.
2.4	2-Bedroom w/flex	1380 sq. ft.
2.5	2-Bedroom w/flex	1550 sq. ft.
2.6	2-Bedroom w/flex	1460 sq. ft.
2.7	2-Bedroom w/flex	1430 sq. ft.

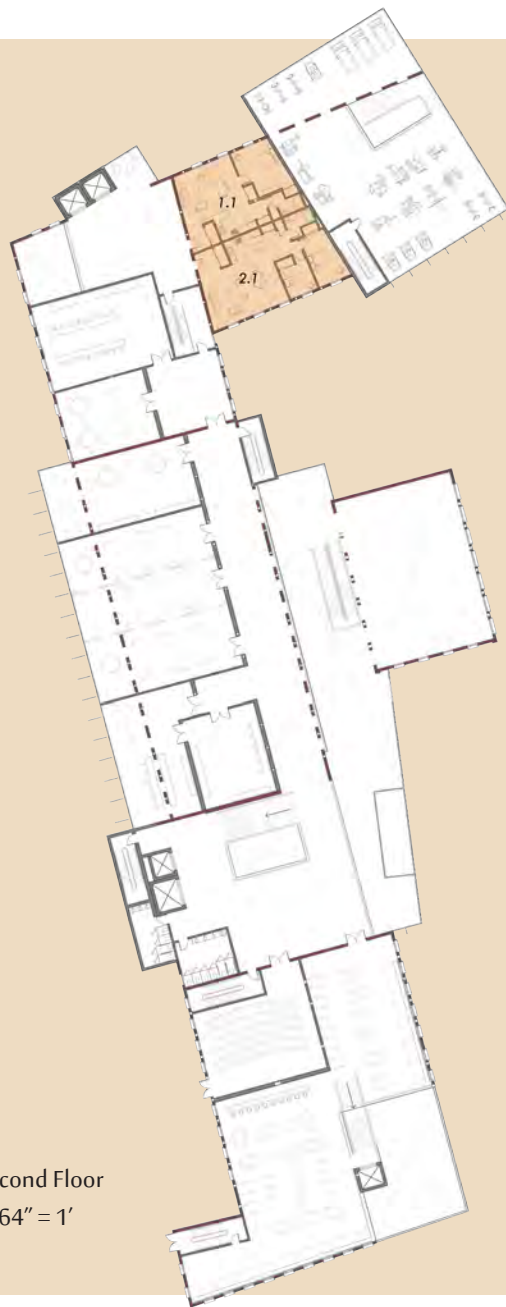
The programs for the apartments, regardless of square footage and typology are essentially the same: kitchen, living room, bathroom and bedrooms. In the case of the larger two bedroom units, there is an additional room that can act as an office, studio or a third bedroom. Each unit has the ability to have their own washer and dryer, as well as, another pantry in the kitchen. Having these services on site aid in allowing the

residents to remain self-sufficient, rather than forcing the residents to travel off-site for such services.

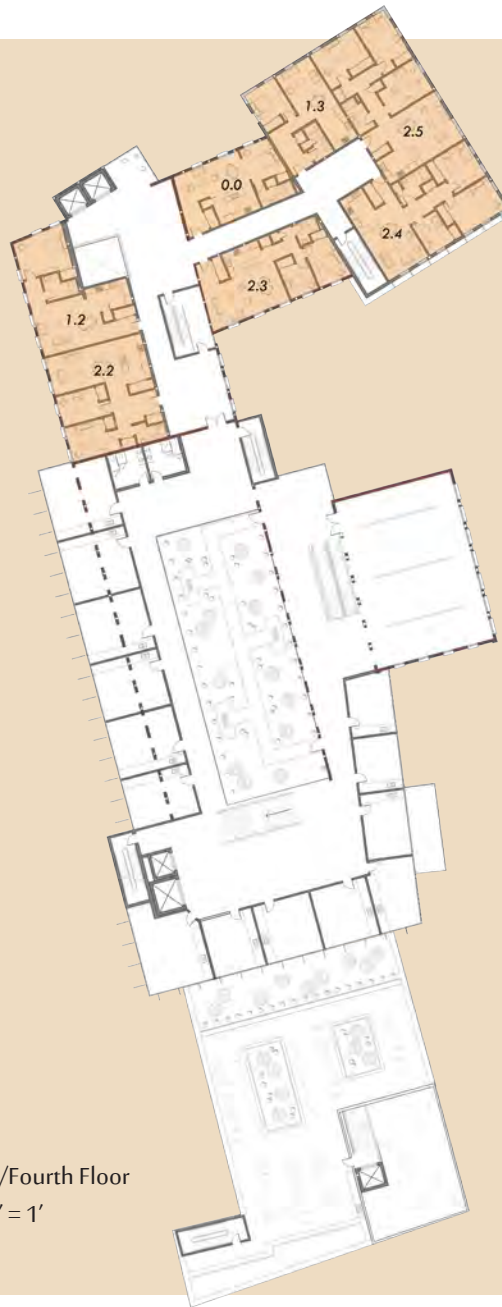
Keeping in the spirit of the open spacious character of the original mill building, the apartments keep the number of interior partitions to a minimum. Kitchen, living and dining areas are located within one open area, creating a free-flowing progression through each space. This treatment of the major living spaces also ensure that ample natural light will filter into the apartments. Working with the high ceilings and large windows, natural light cuts down on the need for artificial solutions, as well as, causing the apartments to feel larger than they actually are. In certain instances, the columns are exposed and the beams are kept visible. Just as in the case of the more public portions of the building, expressing the structure is highlighted, regardless if the apartment is located in the original or new portion of the building.

Interior circulation also follows in the same vein as the apartments by remaining open and spacious. Hallways range from eight to ten feet wide. Taking into consideration the exaggerated floor to ceiling heights in the original building, the hallways followed in kind, ensuring that a restricted feeling was avoided.

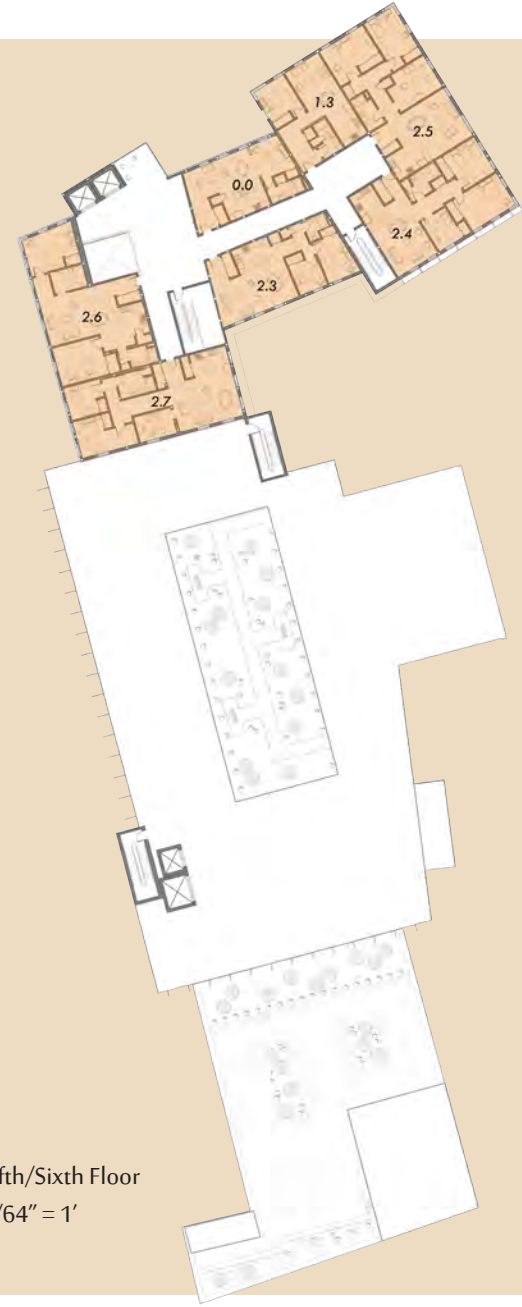
Second Floor
1/64" = 1'



Third/Fourth Floor
1/64" = 1'



Fifth/Sixth Floor
1/64" = 1'



0' 25' 50' 100'

Detailed Plans

0.0 - Studio

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Bedroom



1.1 - One Bedroom

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Bedroom Suite



1.2 - One Bedroom

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Bedroom Suite



1.3 - One Bedroom

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Bedroom Suite



2.1 - Two Bedrooms

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Master Bedroom
- 5. Second Bedroom



2.2 - Two Bedrooms

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Master Bedroom
- 5. Second Bedroom



2.3 - Two Bedrooms

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Master Bedroom
- 5. Second Bedroom



2.4 - Two Bedrooms

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Master Bedroom
- 5. Second Bedroom
- 6. Flex Room/Office



2.5 - Two Bedrooms

1/8" = 1'

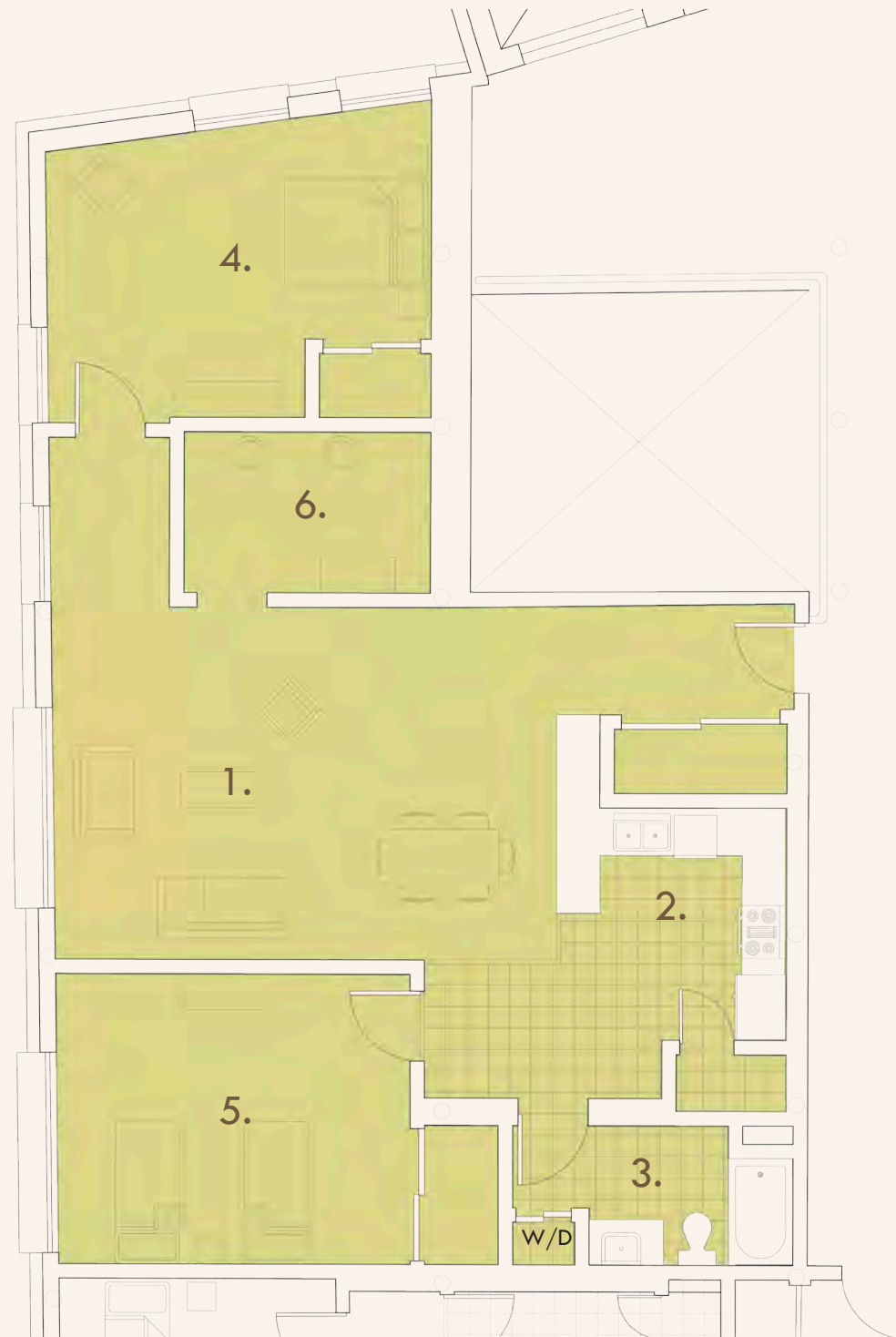
- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Master Bedroom
- 5. Second Bedroom
- 6. Flex Room/Office



2.6 - Two Bedrooms

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Master Bedroom
- 5. Second Bedroom
- 6. Flex Room/Office



2.7 - Two Bedrooms

1/8" = 1'

- 1. Living & Dining
- 2. Kitchen
- 3. Bath
- 4. Master Bedroom
- 5. Second Bedroom
- 6. Flex Room/Office





Studio Interior, Apartment 0/0



Structure

Structure

The manipulation and intervention of the existing structure of the Union Wadding Building was treated in a very different fashion from the exterior facade. While the intervention and new construction is clearly apparent from the outside, the handling and addition to the existing structure is more subtle. The building's original columns and beams are heavy timber, between one- and two-feet in depth. Depending on the section being considered, some columns are square and some are

round. Square columns can be found in sections 1, 2 and 6 and round columns are located in sections 3, 4 and 5.

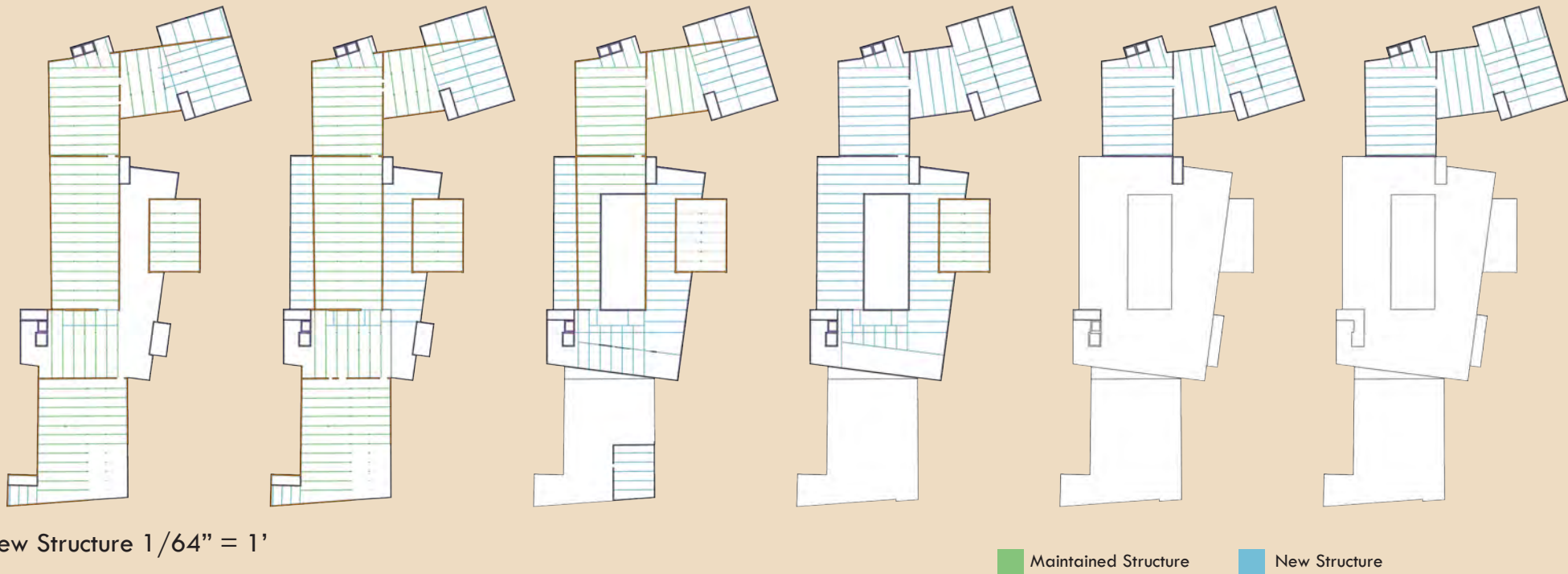
Responding to the regular pattern of the elevation, the structure was equally regularized. The intervention of the building's facade introduced abstract, angular lines and used light, contemporary materials to contrast the heavier, masonry material of the original building. Contrast was the main aesthetic concern externally. Structurally, maintaining the integrity and



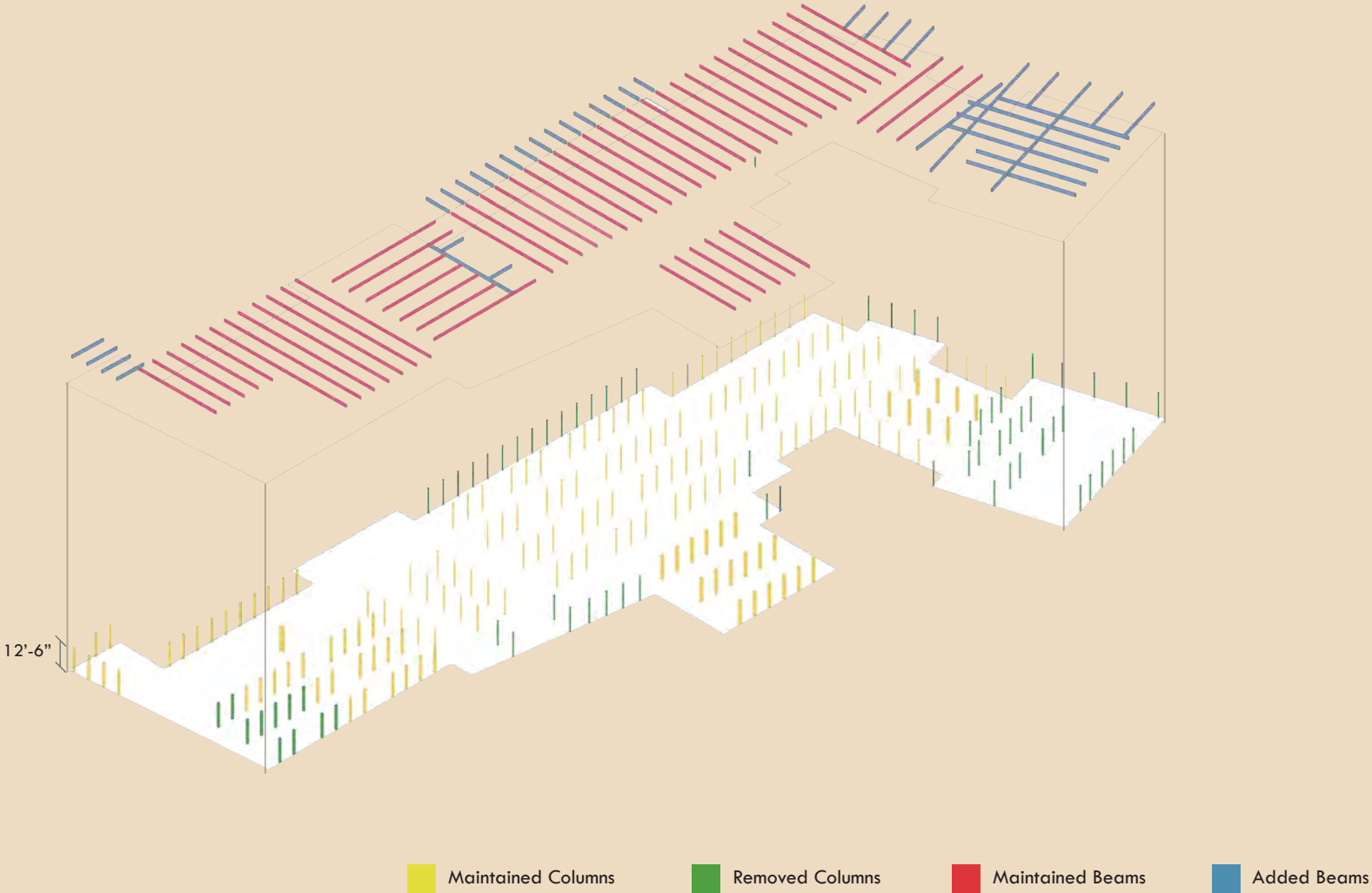
highlighting the rough, industrial texture of the beams and columns was a major aesthetic consideration in the building's interior.

Any new structure that was required, as in the case of the central portion of the building that extended away from the mill or the three additional floors, worked off of the original grid. Lines of the beams were continued, as well as the grid lines of the columns. The only departure from the original structural

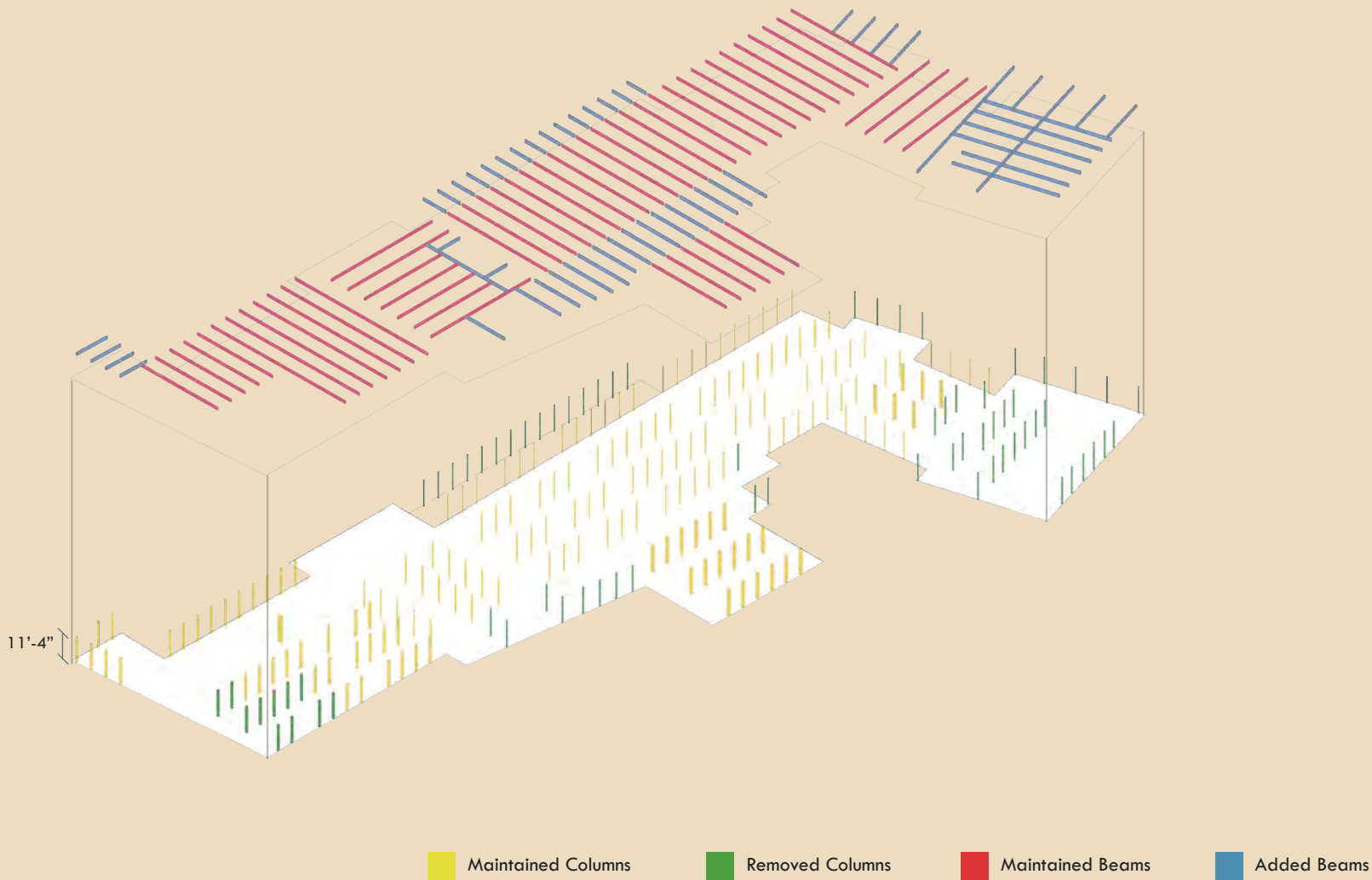
pattern occurs in the even spacing between the old beams and the more inconsistent spacing between old and new beams. Such conditions occur due to the shifting western facade. In regards to the new floors added, the vertical continuation of the existing columns was maintained as often as possible. Consistent stacking of apartment types, from floor to floor, made it possible to prevent structural manipulation at each level. In doing so, loads can be easily and consistently transferred from the upper-most floor to the basement.



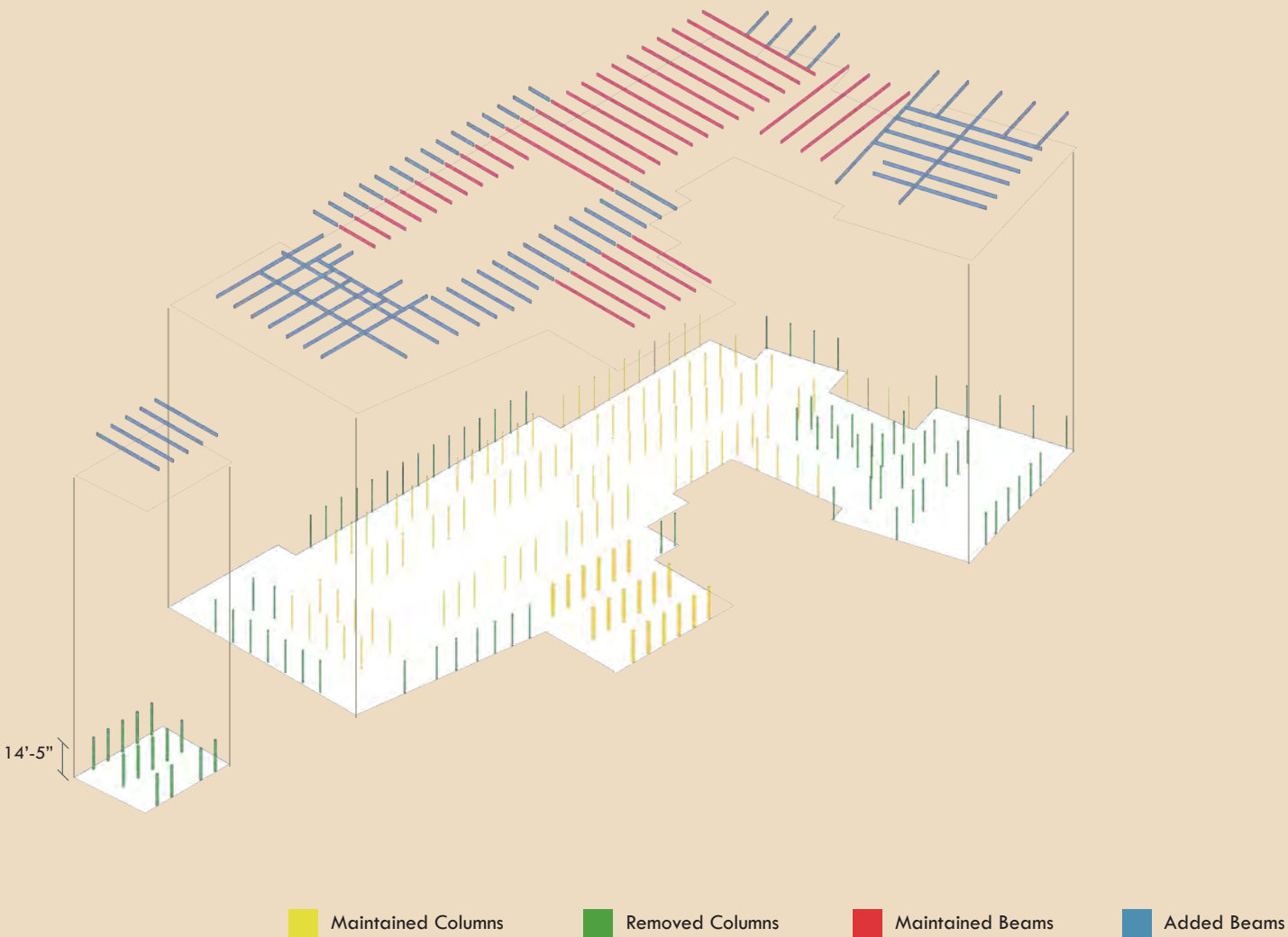
Ground Floor Structural Configuration
1/64" = 1'



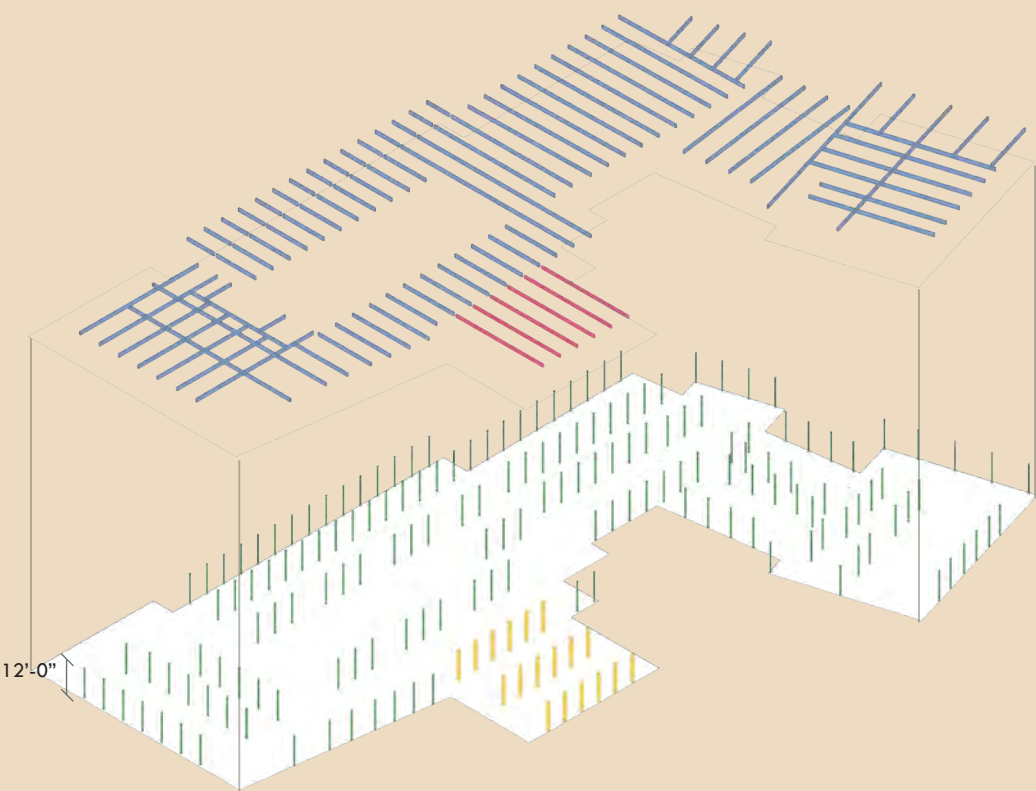
Second Floor Structural Configuration
1/64" = 1'



Third Floor Structural Configuration
1/64" = 1'

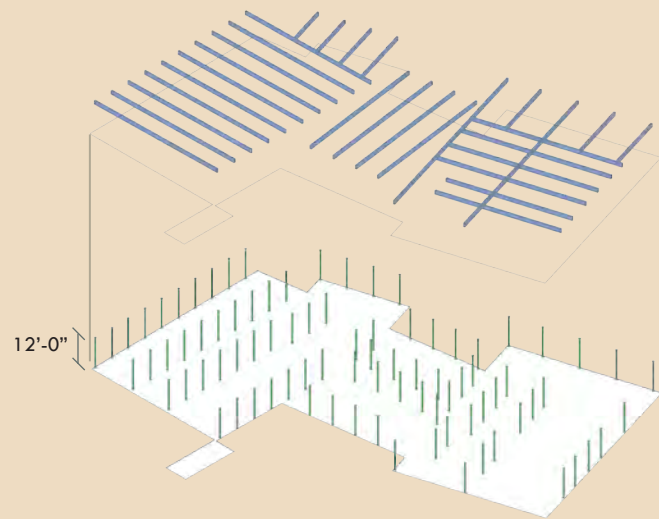


Fourth Floor Structural Configuration
1/64" = 1'

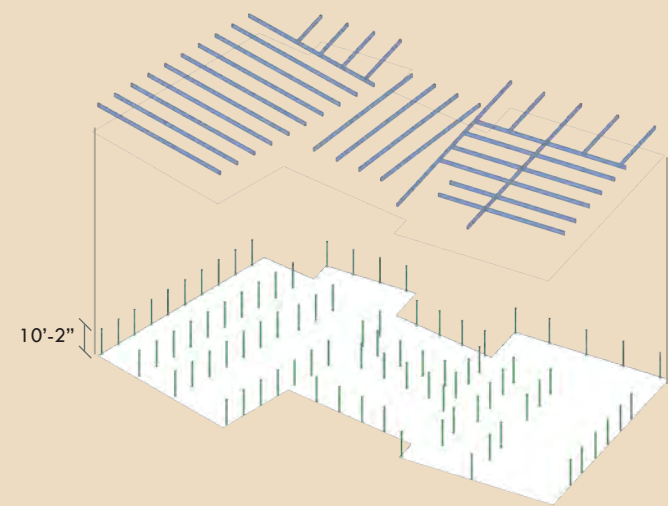


Maintained Columns Removed Columns Maintained Beams Added Beams

Fifth Floor Structural Configuration
 $1/64'' = 1'$



Sixth Floor Structural Configuration
 $1/64'' = 1'$



Maintained Columns
 Removed Columns
 Maintained Beams
 Added Beams

The treatment of the new structure directly correlates to the existing columns and beams present in the mill. The columns are positioned to align vertically with any beams on upper floors. Maintaining this structural configuration ensures that loads are transferred equally throughout the building and down into each subsequent floor. In the case of the upper floors (fourth, fifth and sixth floors) and the northeastern most addition, the spacing of new beams are kept at the same distances as the lower stories, to not only ensure structural integrity, but also to blur the line between new and old. Rather than deviate from the spacing, between 8'-0" and 10'-0" between beams, the interior aesthetic responds to the building's original configuration.

Each floor, based on the building's original sectional quality, is a different height and therefore the structure varies at each floor. The columns all have different dimensions, ranging from 14'-5" (third floor) to 10'-2" (sixth floor). The three uppermost floors, with primarily residential units, have the smallest floor to floor height and the most public floors (the first three levels) possess the largest floor to floor heights.



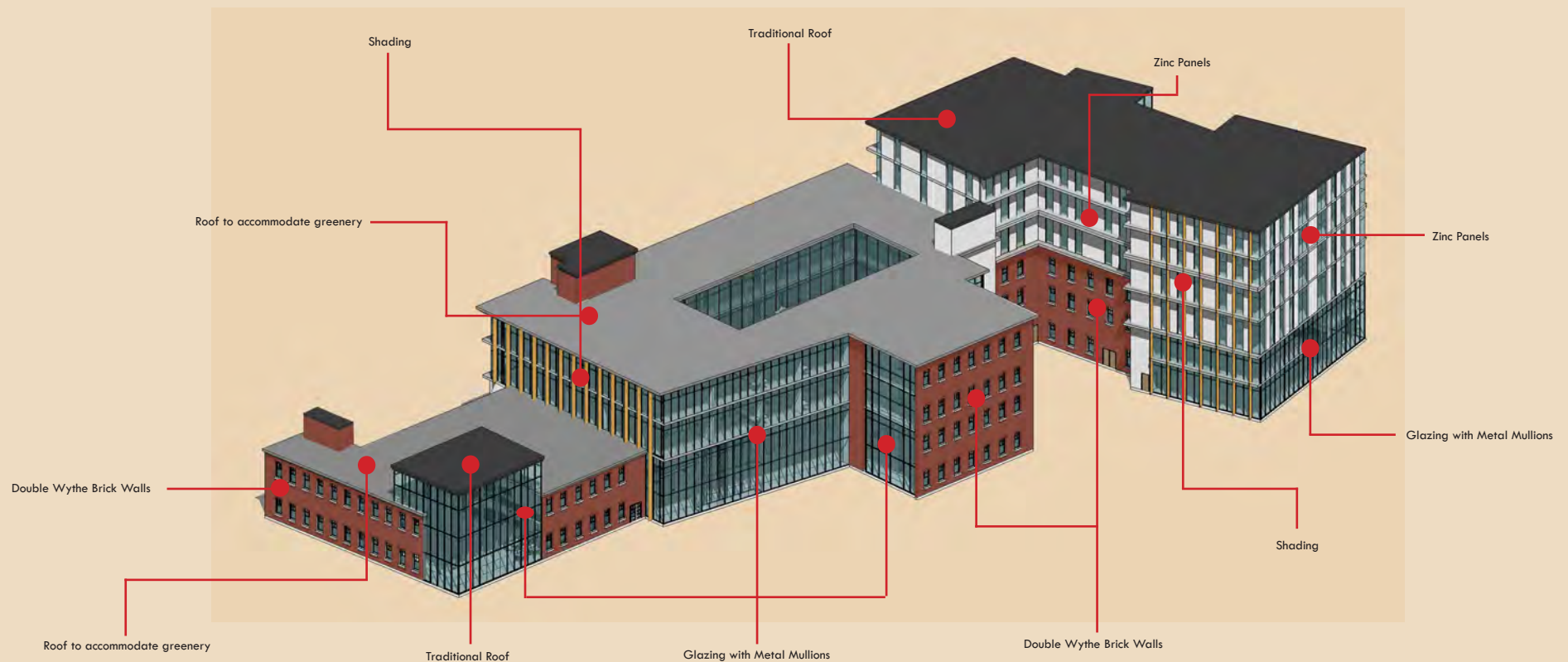
Materials

Materials

The pre-existing mill presented an initial palette to work from. Such materials consisted of double wythe brick walls, double hung wood frame windows and heavy timber columns and beams. These traditional materials acted as a base for any future material choices. The decision was made to both integrate these new materials into the contemporary portion of the building, as well as, establish an obvious departure through the use

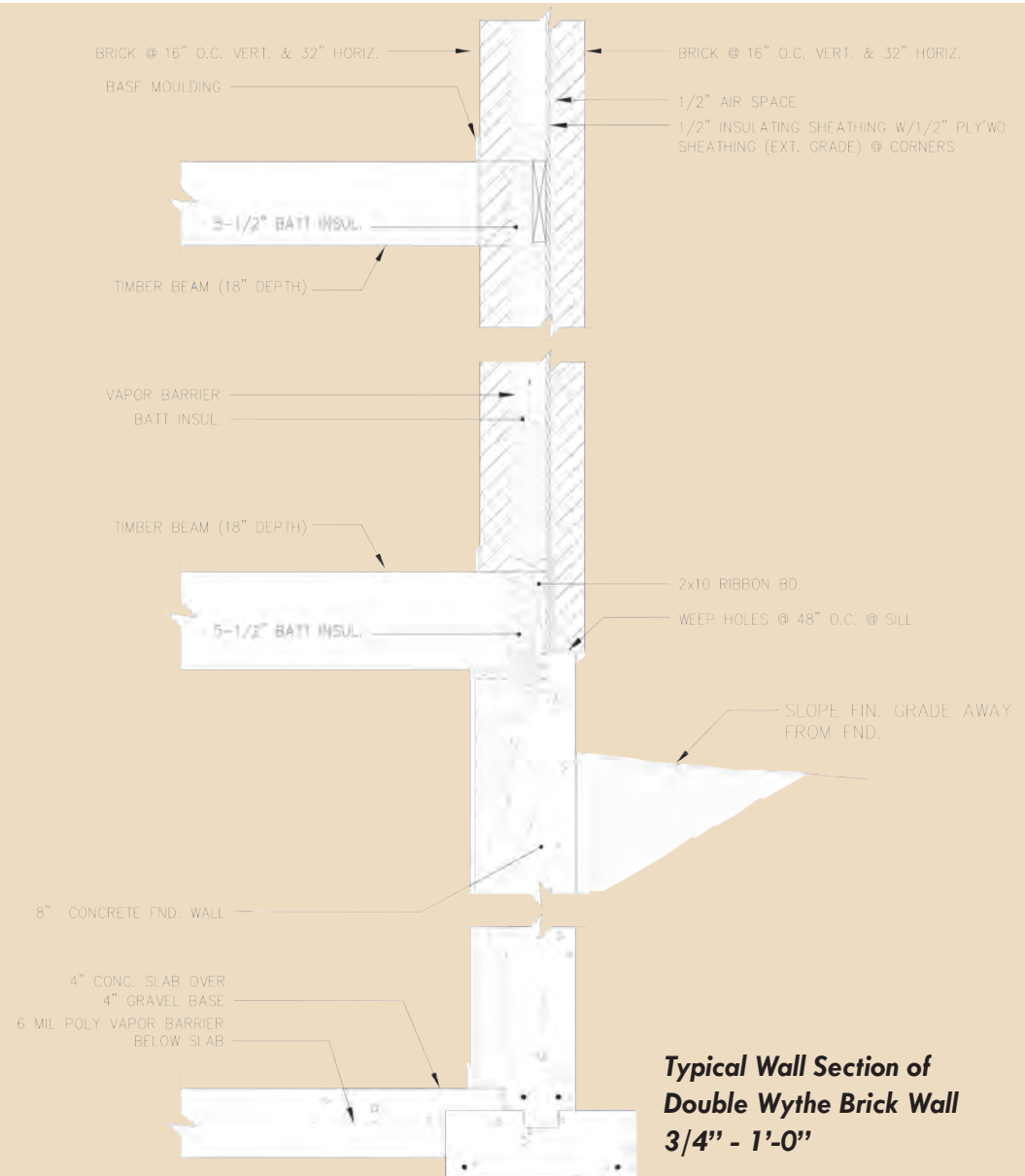
of more contemporary materials.

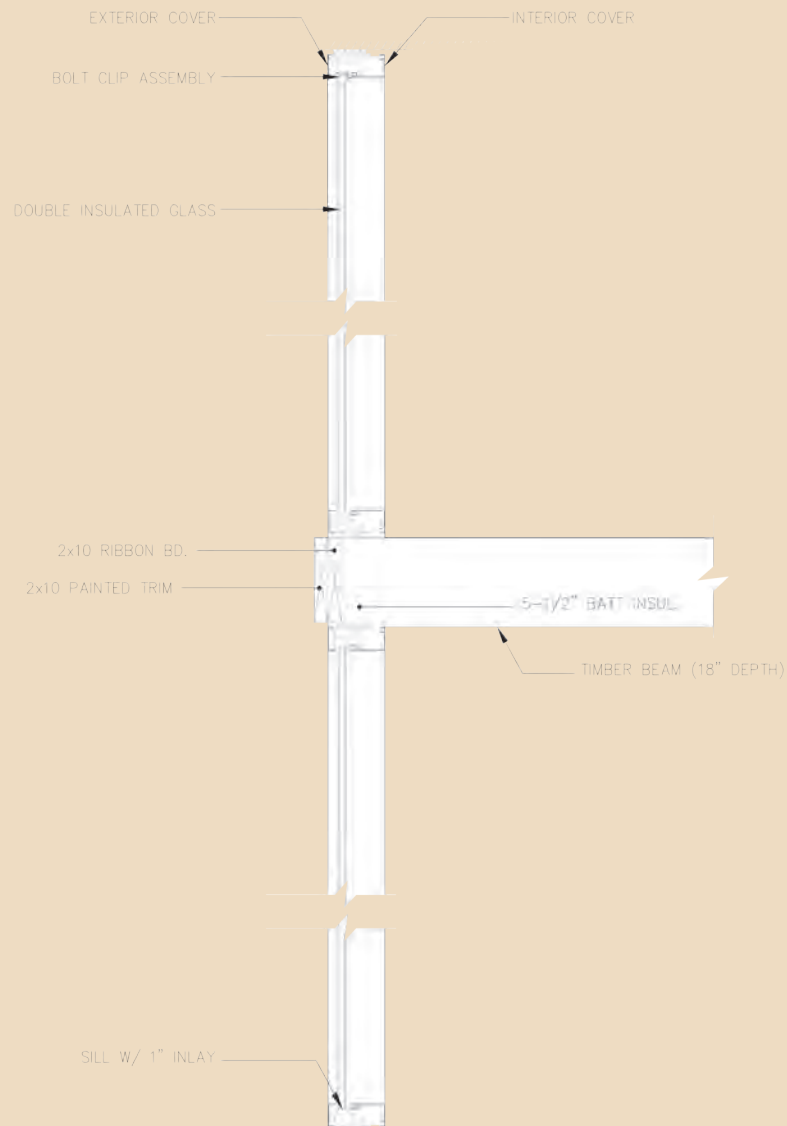
Structurally speaking, consistency of materials was important as the original grid of columns and beams was maintained and carried through to the new sections. The notion that consistency between old and new translates into a consistency of materials on the interior, established the reverse notion that departure from the original means the introduction of completely new materials on the exterior.



Aside from added structure (heavy timber columns and beams), the presence of brick (double wythe, in the case of both exterior walls and interior loadbearing walls) indicates where the original building was maintained. This maintenance was important in preserving the historical integrity of the original building. Preserving instances of brick, on both the exterior and the interior, created a dialogue between old and new. This “conversation” is most apparent in the main lobby. The exterior walls of section four and section one are maintained, but the windows, and subsequent sills, are removed, creating the appearance of the original building “opening up” to accommodate and interact with the new. These “opening up” conditions run throughout the building, the condition is the most dramatic in the lobby, as a result of the double height space. These brick walls run vertically, the height of the original building, in the case of section six: two stories, section four: three stories, and section one: four stories. Glimpses of the old can be seen in the classrooms and third story artist studios. The atrium also displays the interaction between traditional and contemporary. The north, south and western walls are fully glazed, but the eastern wall is made up of the mill’s original exterior wall at the base and glazing in the uppermost portion. This decision was derived as this wall coincides with the building’s original column grid.

Just as the decision to maintain the building’s structure was made, keeping the original walls works in direct correlation. Maintaining these walls secures the structure’s strength and integrity. Keeping the walls goes hand in hand with keeping the structure.

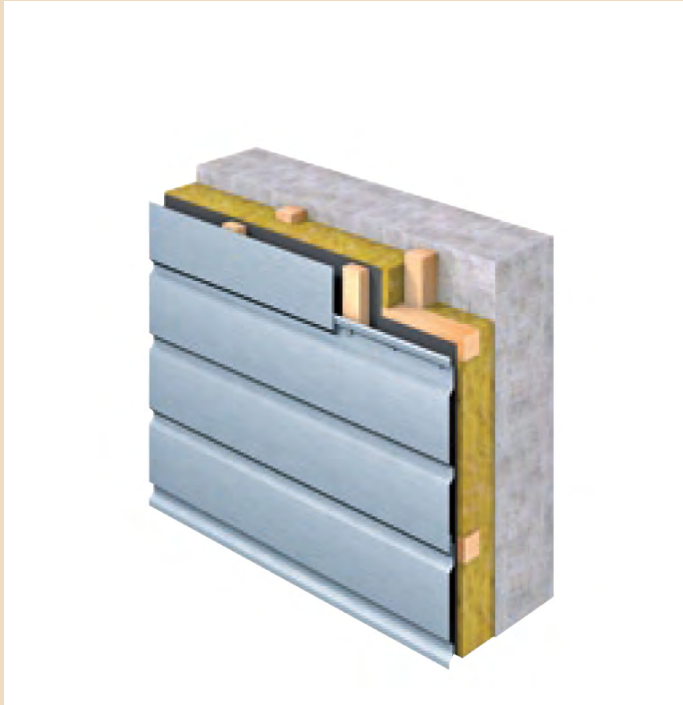




Typical Wall Section of Glazing with Metal Mullions
3/4" = 1'

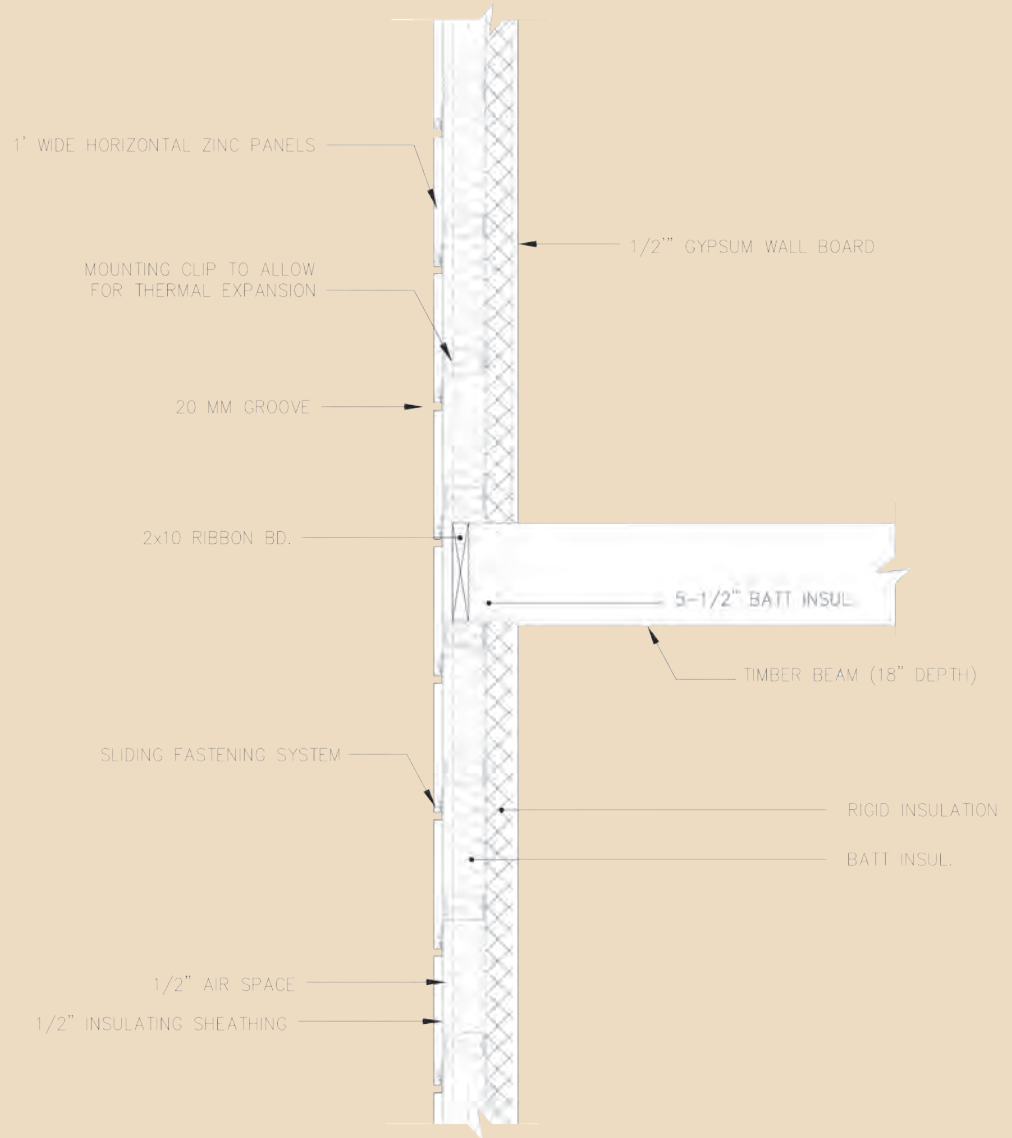
As mentioned previously, the use of new materials is more substantial in the building's facade. The two major materials chosen to enclose the space, in addition to the existing double wythe brick walls, were zinc panels and a glazed curtain wall system with metal mullions. The large glazed elements were only used in the public portion of the building, while the zinc panels, along with floor to ceiling windows, were more appropriate for the residential area of the building.

The glass facade opens up the building to the exterior and helps to break down the barrier between exterior and interior space. Such a condition would not be desired in the residential units and therefore a different facade aesthetic was required. To indicate this areas more private nature, the choice to use a panel system would mimic the repetitive appearance of the building's original facade. Certain apartment units are located in the maintained portion of the original building and continuing this aesthetic of smaller window operatures in the areas of new construction continue the desire for the building to have a dialogue between old and new.



Typical Wall Section of Zinc Paneling
3/4" = 1'-0"

The modular configuration of the zinc panels is complimentary to the brick that appears in the original walls of the Union Wadding Mill Building. The choice of contemporary material was married with a similar aesthetic appearance to the historical material.





Response to Environment

Response to the Environment

Exterior Roof Gardens

Introducing landscaping onto the roof's surfaces expanded on the development of the ground plane. Bringing landscaping up into the subsequent floors adds to the desire of Pawtucket City officials to promote the presence of greenery.

The large roof surfaces presented an opportunity to elaborate on the notion of the "outdoor room", initially discussed in the development of the site's courtyards. The abundance of roof surface area, if kept intact as flat roofs, could contribute

to the absorption of heat and cause the building's temperature to become elevated and uncomfortable. To ward off the symptoms of the heat island effect, covering these surfaces with landscaping and more reflective materials helps minimize the chance of overheating.

While exterior roof gardens are only present on the roof of Section 6 and on the third floor's atrium, the possibility of an additional, more expansive, roof garden directly above the fourth floor's artist's studios is a possibility. Currently this space, along with the sixth story's roof, houses the mechanical and HVAC systems.





The approach along Goff Avenue, moving toward the major intersection, gives the viewer an indication that the building's program extends onto the roof with an exterior roof garden. At the same time, in consideration of those residing on the roof, the wooden barrier and small plantings establish a buffer, both visually and in regards to noise, from the major roadway.

Respectively, the systems for the more public services, from the ground floor to the fourth floor, are located on the fourth floor's roof while systems assigned to the remaining program, the northern-most portion of the building are located on the sixth's floor roof.

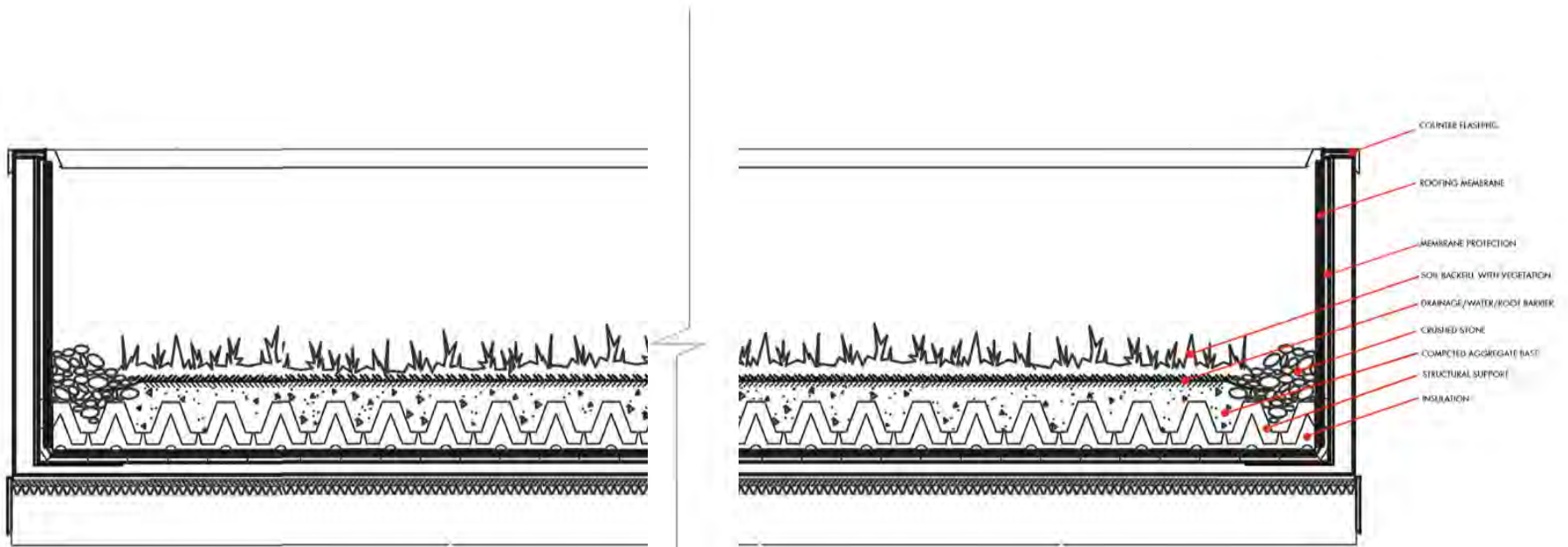
The landscaping of both gardens would coincide with the plantings on the ground plane and utilize native plantings. Additional materials, such as flooring, would try to remain as porous and reflective as possible. Keeping with natural materials,

such as wood, for example, will counteract the absorption of the sun's heat.

Pedestrian circulation in the third floor atrium remains highly porous by using gravel, rather than pavers, which will allow precipitation to be absorbed into the subsequent layer of soil.

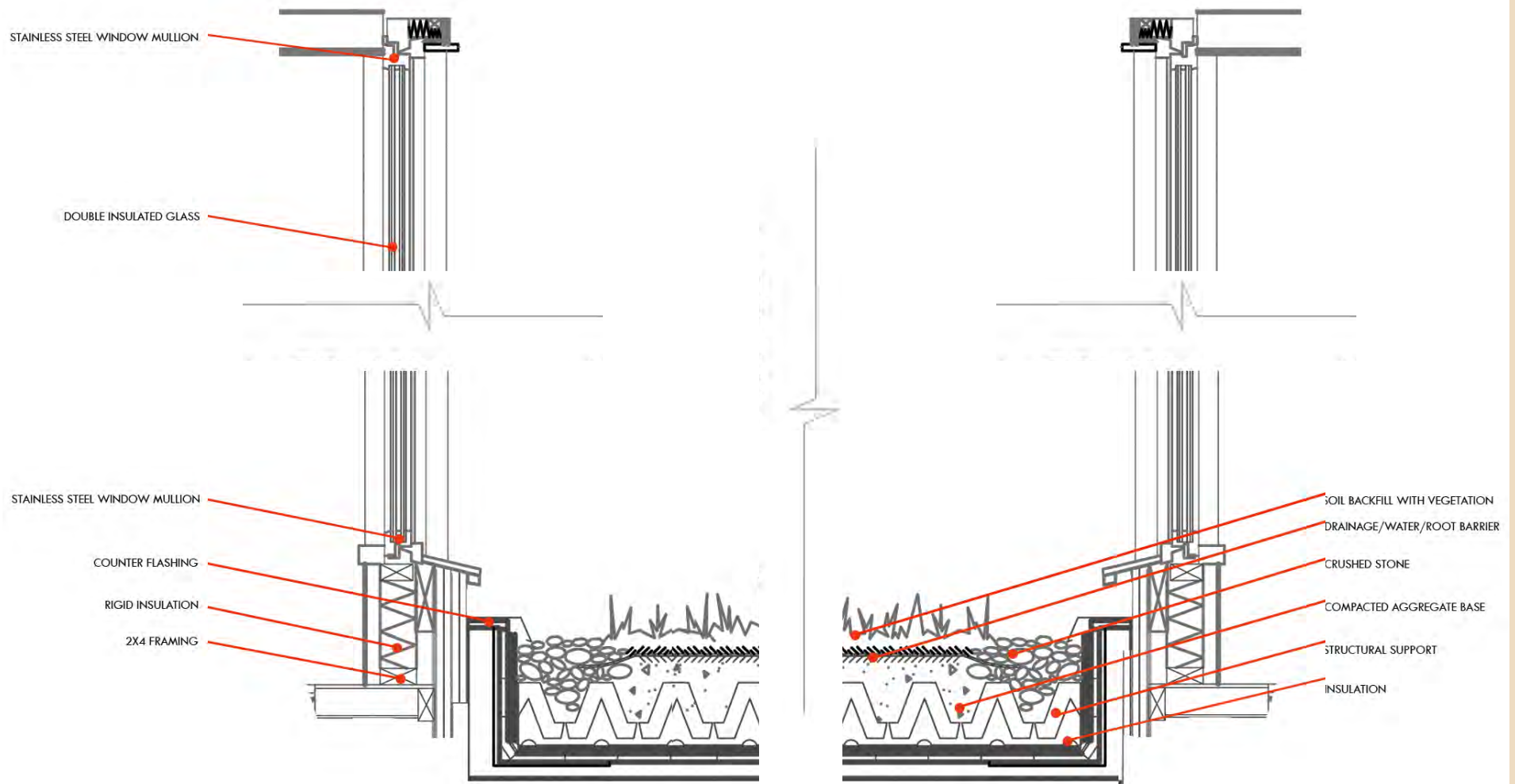
Roof Assembly of Planters on Restaurant Roof Deck

1/2" = 1'



Green Roof on Third Floor Atrium

1/2" = 1'

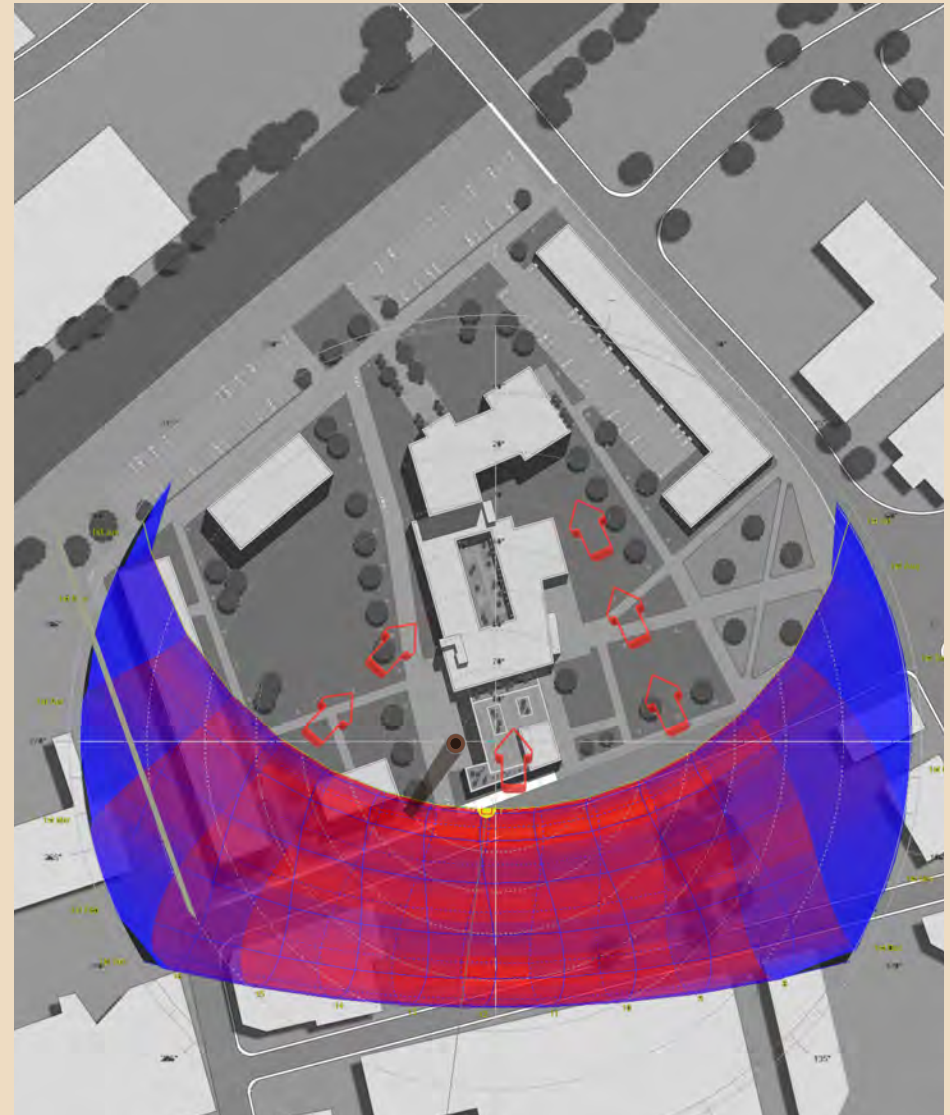


Shading

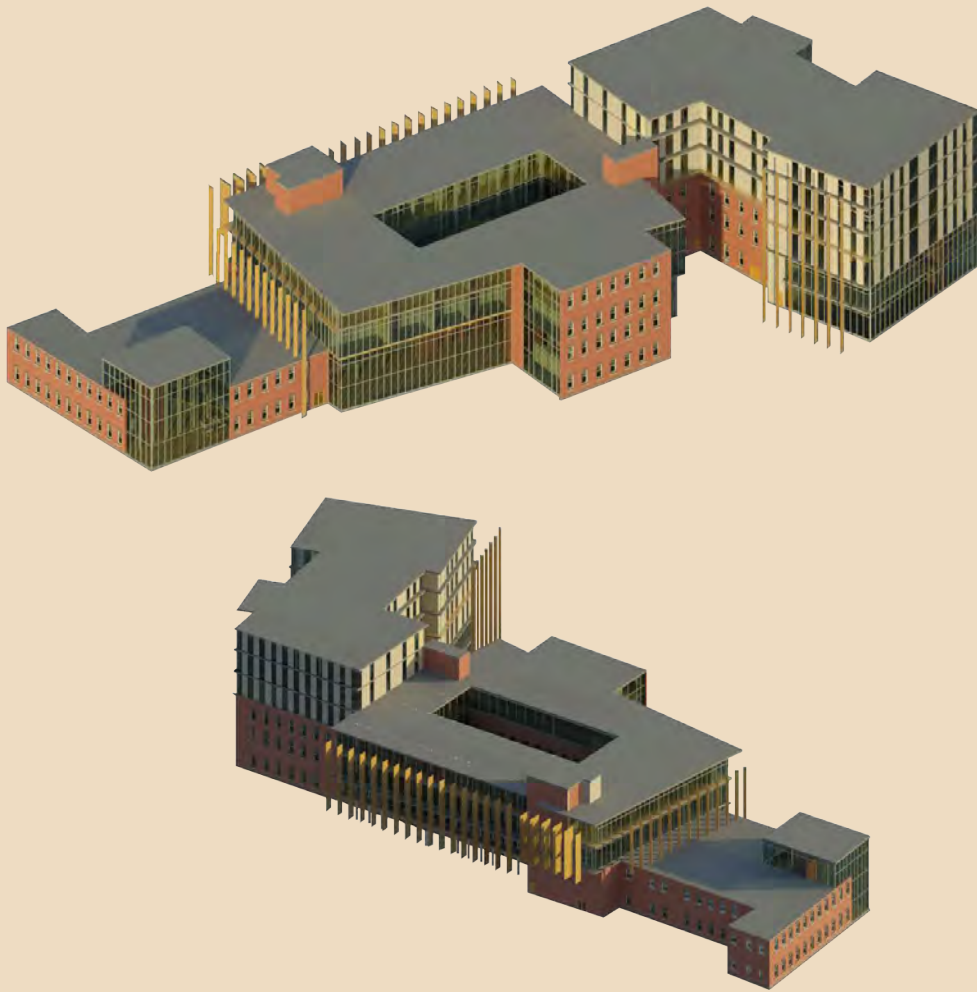
The building's exterior aesthetic expresses the juxtaposition between old and new construction. As a result, the presence of large expanses of glazing can lead to excessive infiltration of solar radiation. An overwhelming level of solar radiation can lead to uncomfortable interior conditions and overheating within interior spaces. While mechanical systems (i.e. central air, air conditioning, etc) will be necessary to cool the space in the warmer months, introducing more passive design strategies can help keep interior temperatures down.

Shading devices attached to the building's exterior were a minimal, unobtrusive solution to minimizing the amount of solar radiation entering into the building. Wooden panels, with their thin profile, would not disrupt the overall elevation, but would rather follow the pre-established "lines" created by the mullions. Such panels would vertically run the length of the building and be spaced roughly 7'-0" apart (every other mullion) and be attached using clips secured to the window frame. Such an assembly would allow for slight movement against the forces of wind or rain.

Taking into consideration the sun's movement and position on the site throughout the day, shading panels are not needed on each facade, but rather are implemented where direct sunlight hits. The sun moves from the eastern side of the site to the south and finally to the west. Solar radiation on the north facing facades is primarily indirect and therefore shading panels would not be necessary in such areas. The building's angle also allows the facades that face north to not require shading.

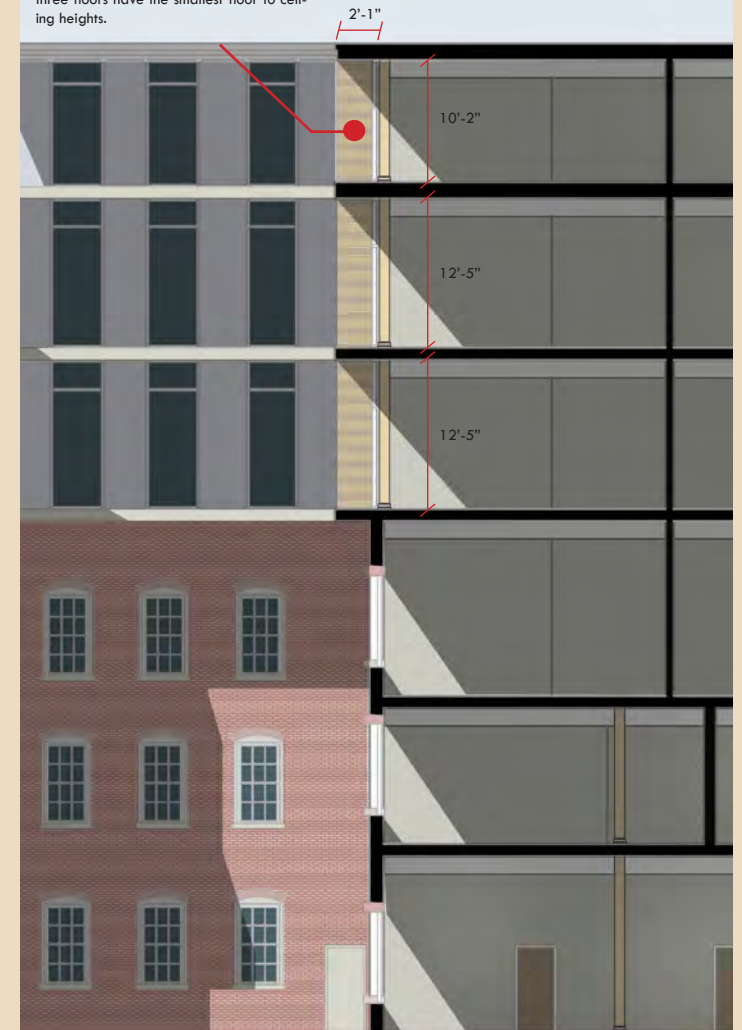


Directionality of the Sun

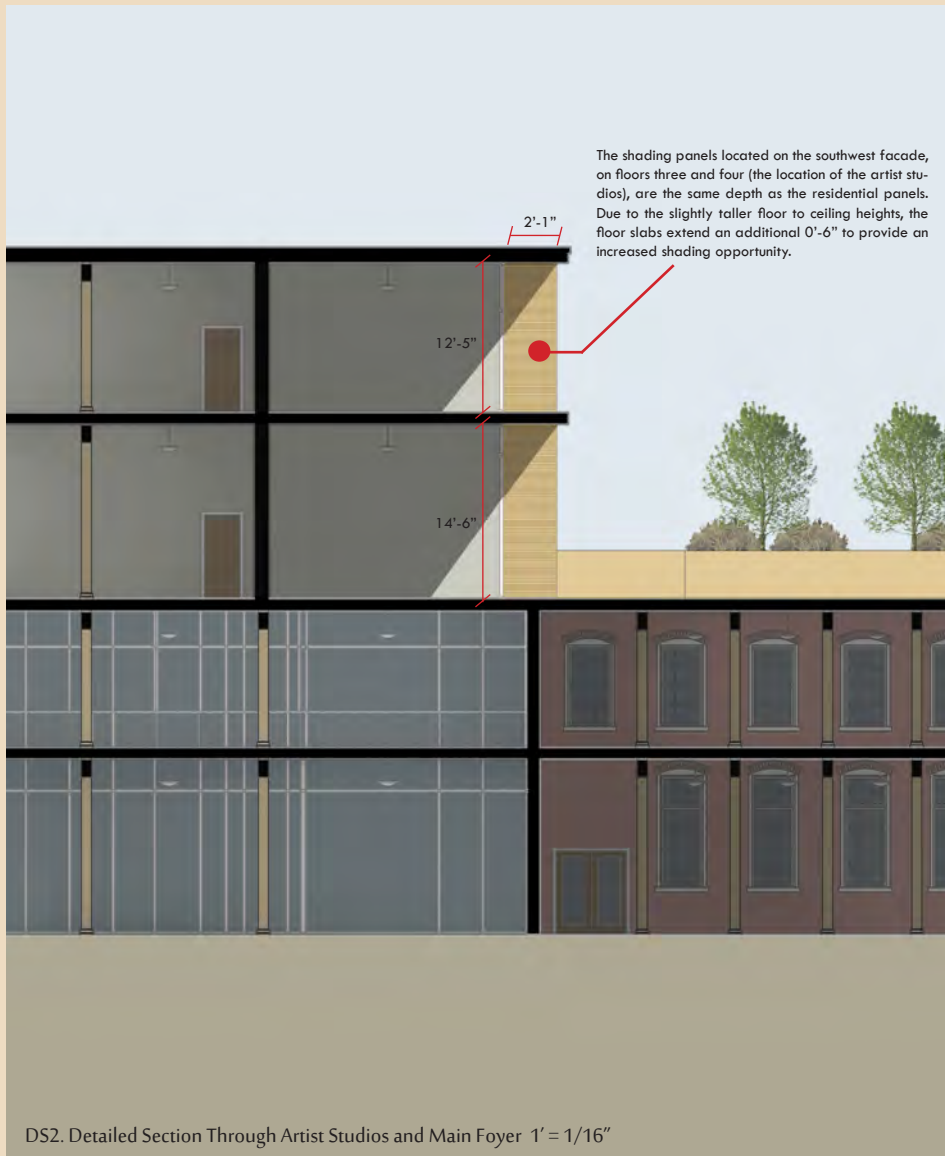


Axonometric Perspectives (Western and Eastern) with shading panels extended out from building's facade. Panels have a minimal profile that help express the building's verticality.

The shading panels in the residential areas are 2'-1" deep and are relatively minimal. The shading panels did not require extreme depth due to the fact that the top three floors have the smallest floor to ceiling heights.

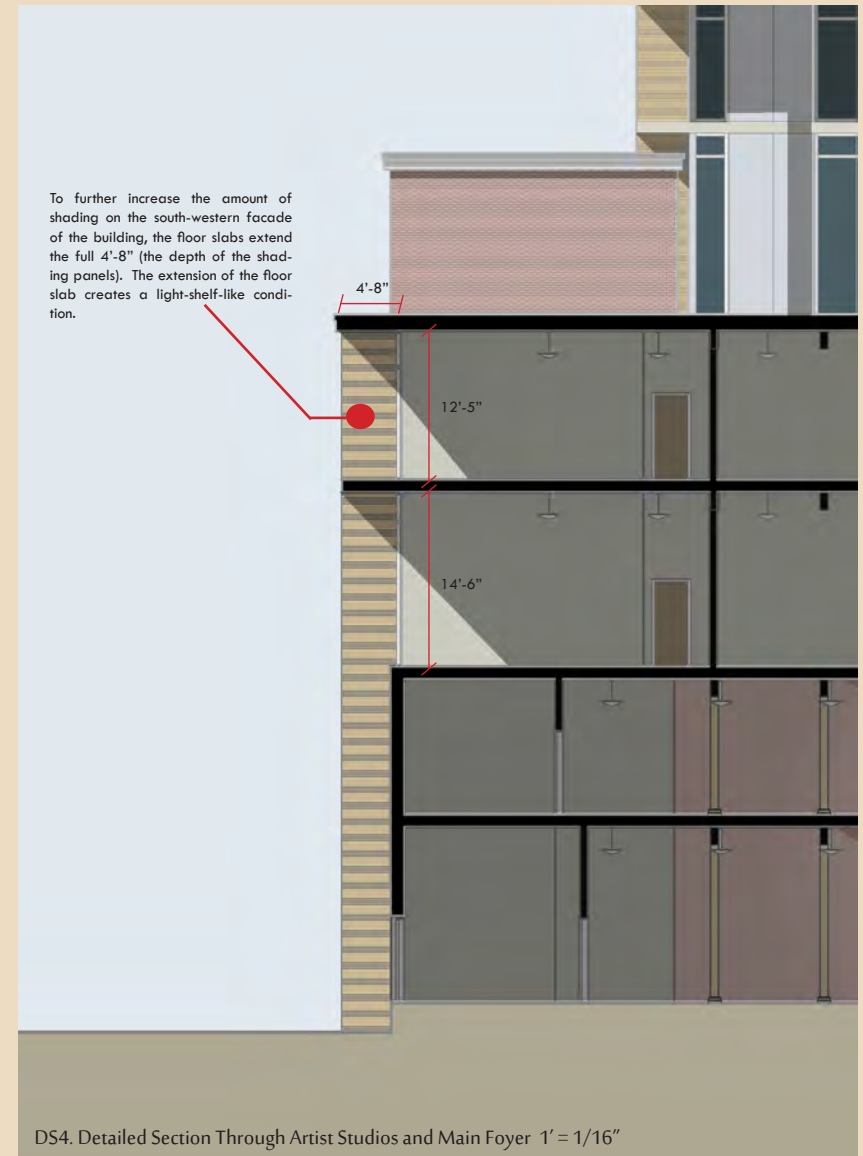
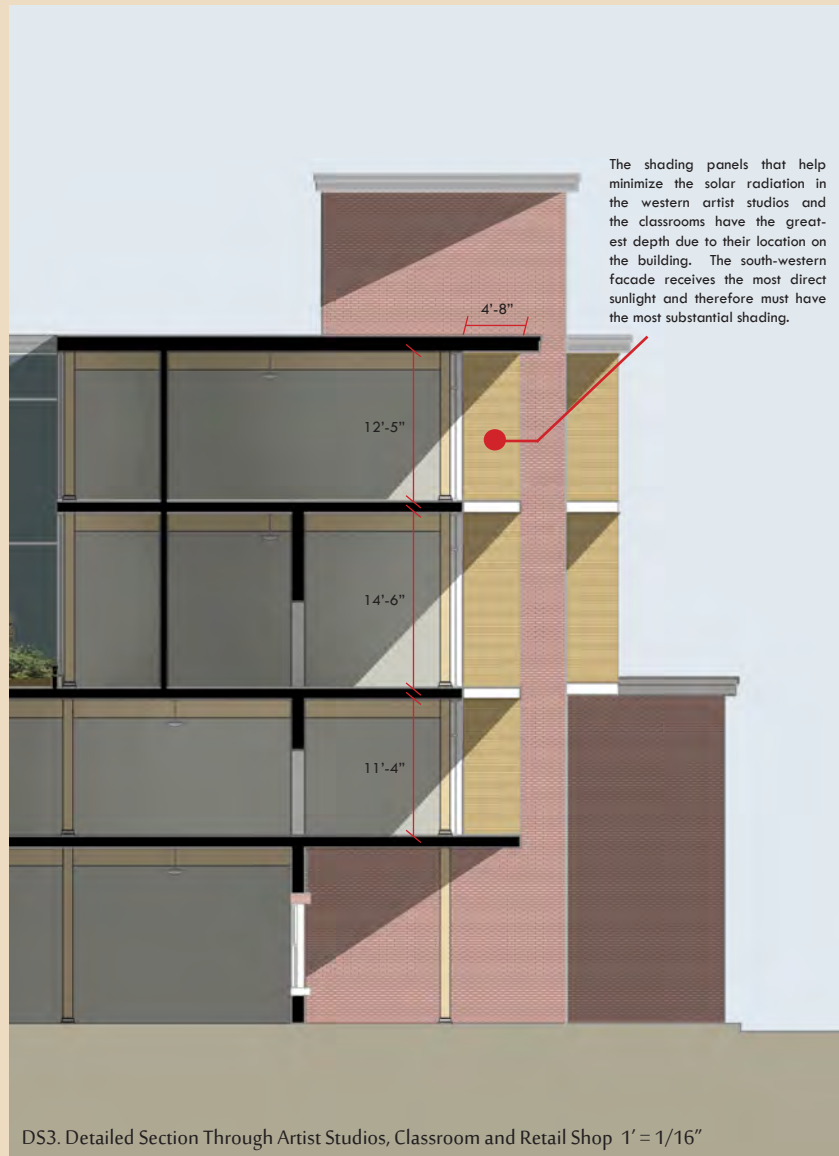


DS1. Detailed Section Through Residential Apartments 1' = 1/16"



Therefore the southwestern glass facade, the southern glass facade, and the southern residential facade require shading panels. In regards to the southwestern facade (the location of the classrooms and artist's studios), the direct solar radiation also calls for additional horizontal shading in conjunction with vertical panels. To accomplish this, the floor planes extend out from the building to rest flush on the exterior edge of the shading panels.

To respond to the location of the panels, as well as the interior program for which they are shading, various widths and heights of panels are used. The panels that shade the southwest facade (classrooms and artist's studios) are the widest (4'-8"). The southeastern panels that shade the artist studios are slightly shallower and the panels that shade the residential units are the most minimal in depth. Due to the smaller sized windows in this area, the need for shading is not as great as with the large glazed areas.





Appendix I *Research*

PERSONAL MANIFESTO + STANDPOINT

Architectural Themes and Theoretical Concerns

Jennifer Turcotte



The Enchanted Mill
Franz Marc
1913

I found I could say things with color and shapes
that I couldn't say any other way - things I had no
words for.

- Georgia O'Keeffe



- Involvement in the arts

a. Artist Communities

b. At a elementary level up to the high school level

c. Art therapy

* Pictures taken from diveintopabay.com, fiveprime.org and tomlindenart.com

THEME 1: The importance of the arts within the overall framework of a child's education.



- Involvement in the arts

- a. Artist Communities
- b. At a elementary level up to the high school level
- c. Art therapy

* Pictures taken from diveintampabay.com, fiveprime.org and tamilnadarart.com



- Architectural Rehabilitation

- a. Sustainability and Passive Design
- b. Reuse of building resources
- c. Redevelopment of industrial campuses

* Pictures taken from colorantshistory.org and teacherlink.org

THEME 2: Revitalizing the deteriorating industrial sites and the landscape around them.



- Architectural Rehabilitation

- a. Sustainability and Passive Design
- b. Reuse of building resources
- c. Redevelopment of industrial campuses

* Pictures taken from colorantshistory.org and teacherlink.org

What I aim to explore with my thesis project is the importance of art within the general framework of human existence in addition to redeveloping and exploiting an untapped and valuable resource.

PROJECT STATEMENT

Jennifer Turcotte

PROBLEM/PROJECT TITLE: Ideas & Concerns

There is a psychology to properly designing structures infused with artistic and spiritual aspects

The importance of art within the overall framework of development is a notion that is not being exercised to its full potential

In the spirit of sustainability the economical advantages of revitalizing a previously developed site should be exploited.

Exercise the idea of the cooperative spirit and communal living in conjunction with art therapy and education



The Enchanted Mill
Franz Marc, 1913

PROBLEM/PROJECT TITLE: Major Themes

What I aim to explore with my thesis project is the importance of art within the general framework of human existence in addition to redeveloping and exploiting an untapped and valuable resource.

Major themes:

- Importance of arts in development
 - a. Artist Communities
 - b. Art Therapy
- Adaptive Reuse/Architectural Rehabilitation
 - a. Sustainable/Passive Design
 - b. Reuse of building resources
 - c. Redevelopment of industrial campuses

PROBLEM/PROJECT TITLE: Design Proposal

Adaptive Re-use of an Industrial Campus to create an Art Community for all ages

- Residential Component
- Educational Component
- Historical Component
- Sustainable Component

PROBLEM/PROJECT TITLE: Design Proposal

Adaptive Re-use of an Industrial Campus to create an Art Community for all ages

- Residential Component
The complex will have a residential component for artists to live and work. The purpose of having on-site housing will allow for artists to build a creative atmosphere
- Educational Component
- Historical Component
- Sustainable Component



1

PROBLEM/PROJECT TITLE: Design Proposal

Adaptive Re-use of an Industrial Campus to create an Art Community for all ages

- Residential Component
- Educational Component
The promotion of art therapy and art education will provide the on-site artists the opportunity to reach out to the youth of the local community
- Historical Component
- Sustainable Component



2

PROBLEM/PROJECT TITLE: Design Proposal

Adaptive Re-use of an Industrial Campus to create an Art Community for all ages

- Residential Component
- Educational Component
- Historical Component
In keeping with the spirit of place the building will provide opportunities for inhabitants to understand and learn about the industrial history of the campus
- Sustainable Component



3

PROBLEM/PROJECT TITLE: Design Proposal

Adaptive Re-use of an Industrial Campus to create an Art Community for all ages

- Residential Component
- Educational Component
- Historical Component
- Sustainable Component
Bringing together modern sustainable practices without changing the overall aesthetic of the industrial building will cohesively tie modernity with historical precedent



4

CANDY FACTORY LOFTS, Toronto, Ontario, CA

Architect: Quadrangle Architects & Metrontario Group
Completed: 1999

Original Use: factory for the Ce De Candy Company (makers of Smarties); the building is roughly 90 years old ⁽⁵⁾

New Use: 121 unit residential building within the 6 story building ⁽⁶⁾

> Use of the original wood columns, wood beams, and wood ceilings (9' - 12' ceilings)

> Original arched headers maintain in windows, sill lowered to optimize daylight ⁽⁵⁾



CANDY FACTORY LOFTS Toronto, Ontario, CA

Architect: Quadrangle Architects &
Metrontario Group

Completed: 1999



CANDY FACTORY LOFTS, Toronto, Ontario, CA

Architect: Quadrangle Architects & Metrontario Group
Completed: 1999

Units range in size from 1100 sq. ft. to over 3500 sq. ft.

- 57 varieties of units (68 lofts, 23 two-story penthouses, 24 split-level units, 6 one-level units)
- large windows for natural daylight
- balconies
- penthouse units have access to rooftop gardens
- located directly next to the Trinity-Bellwoods Park
- easy road access to the city core ⁽⁵⁾



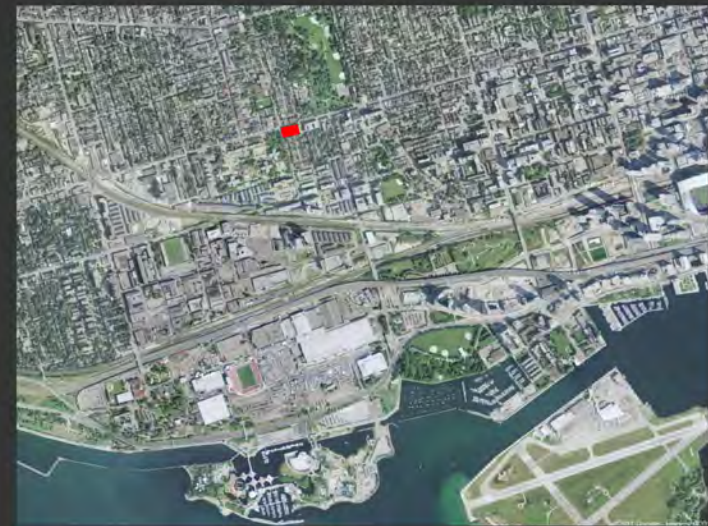
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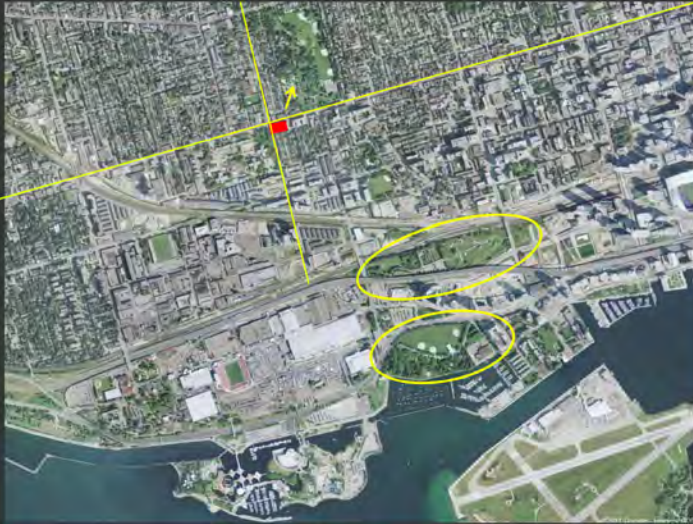
CANDY FACTORY LOFTS, Toronto, Ontario, CA

Architect: Quadrangle Architects & Metrontario Group
Completed: 1999



CANDY FACTORY LOFTS, Toronto, Ontario, CA

Architect: Quadrangle Architects & Metrontario Group
Completed: 1999



GHIRARDELLI SQUARE, San Francisco, CA

Architect: Wurster, Bernardi & Emmons
Completed: 1964

Original Use: Factory for the Ghirardelli Chocolate Company

New Use: Mix of retail and dining spaces (75 tenants)
: Secondary Luxury Homes (Fairmont Heritage Place)



GHIRARDELLI SQUARE, San Francisco, CA

Architect: Wurster, Bernardi & Emmons
Completed: 1964

Only one building in the campus was removed, the other six buildings were restored. An underground parking garage was added.

Restoration transformed the campus into a marketplace with accommodations for 75 tenants (9)

In 1982 the complex was granted National Historic Register status (10)



GHIRARDELLI SQUARE, San Francisco, CA

Architect: Wurster, Bernardi & Emmons
Completed: 1964



Fairmont Heritage Place offers opportunities for second home ownership

Fifty-three one, two and three bedroom options (12)



GHIRARDELLI SQUARE, San Francisco, CA

Architect: Wurster, Bernardi & Emmons
Completed: 1964



Fairmont Heritage Place offers opportunities for second home ownership

Fifty-three one, two and three bedroom options (12)



10

GHIRARDELLI SQUARE, San Francisco, CA

Architect: Wurster, Bernardi & Emmons
Completed: 1964



GHIRARDELLI SQUARE, San Francisco, CA

Architect: Wurster, Bernardi & Emmons
Completed: 1964

Green Initiatives

- Effluent Treatment plant converts organic waste into biogas
- Heat recovery to reduce thermal energy consumption
- Recycling Program
- Water Conservation
- Use of "green" cleaning products
- Ghirardelli Sign turned off at peak hours to conserve energy (10)



sources

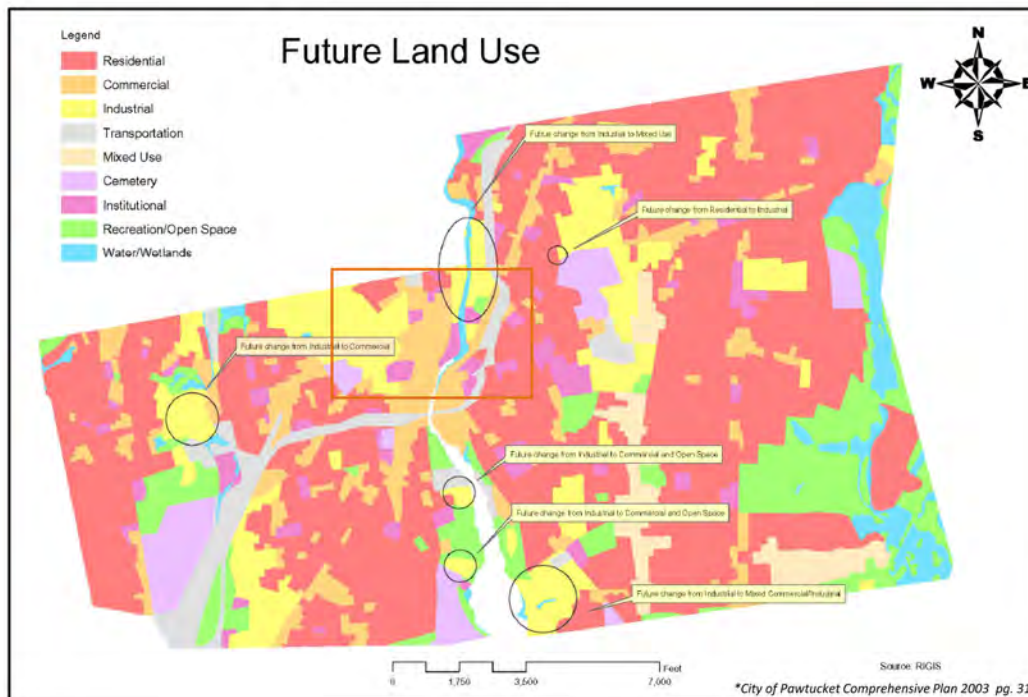
- 1 <http://www.quadrangle.ca/>
- 2 creativeartspaceforkids.org
- 3 scienceclarified.com
- 4 evanston-condos.com
- 5 candyfactorylofts.net
- 6 adaptivereuse.info/case-studies/the-candy-factory-lofts
- 7 loxmaxmanagement.com
- 8 mrloft.ca
- 9 ghirardelli.com
- 10 www.ghirardellisq.com
- 11 www.fairmont.com
- 12 fairmontheritageplace.com

Artist Community

Pawtucket, Rhode Island

1. Protect existing residential neighborhoods from undue encroachment of conflicting non-residential uses
2. Protect existing neighborhoods from increasing housing densities that lead to overcrowding, shortage of available off-street parking and traffic congestion
3. Protect viable vacant industrial sites for industrial uses. *Where industrial lands are no longer viable, consider rezoning to more appropriate uses*
4. Encourage infill development on vacant parcels that reflect the built character of the neighborhood
5. *Control strip commercial development by promoting neighborhood and regional shopping districts*
6. *Revitalize downtown with a variety of mixed uses including live-work space, offices, studios, galleries, restaurants and theaters*
7. Protect existing publicly owned open space and recreational areas.
8. *Promote and encourage appropriate development along Pawtucket's riverfront including well-designed commercial uses, the reuse of existing, vacant industrial buildings, the creation of public gathering places, and the provision of river access*

*City of Pawtucket Comprehensive Plan 2003 pg. 15



Plans to Change:

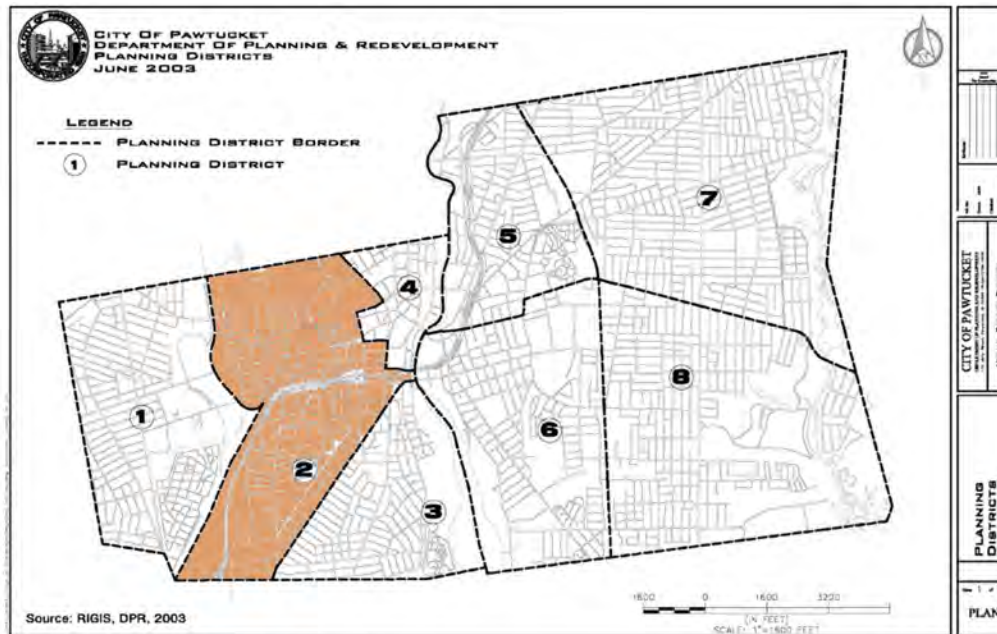
- Industrial Land to Mixed Use
- Industrial Land to Mixed Commercial/Industrial
- Industrial Land to Commercial
- Residential land to Industrial
- Commercial Land to Open Space

Land Use

1. Assist in forming an economic base capable of providing a desirable standard of living, creating job opportunities, and fulfilling reasonable government tax needs.
2. Maximize employment opportunities for Pawtucket residents at all skill levels.
3. Continue to support the maintenance and expansion of existing businesses in Pawtucket.
4. Continue efforts to attract new, compatible economic development that is sensitive to Pawtucket's historic, cultural and environmental activities.
5. Provide the adequate infrastructure including utilities, roadways, and parking facilities, at appropriate locations for economic development activities.
6. Continue to promote Pawtucket as an artist-friendly community and as a tourist destination.
7. Maximize business opportunities locally for Pawtucket businesses.
8. Seek and promote local, state, and federal economic development initiatives that will assist Pawtucket businesses.

*City of Pawtucket Comprehensive Plan 2003 pg. 77

Economic Development: Goals



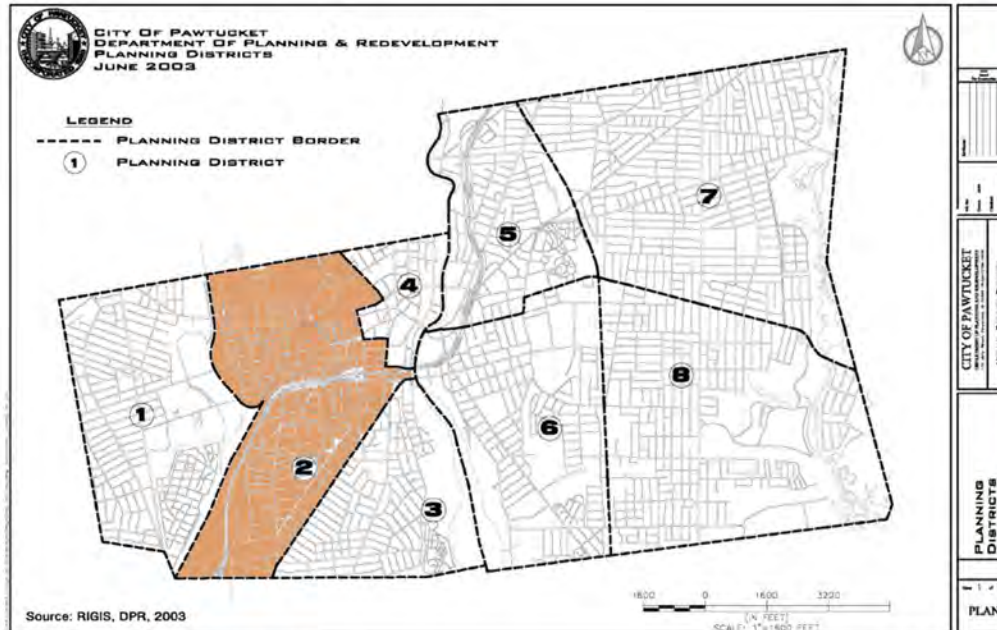
*City of Pawtucket Comprehensive Plan 2003 pg. 55

General Zoning Provisions

- build with the city's general welfare in mind
- provide a wide range of building/recreational uses with future development in mind
- control/protect/manage air, water, noise pollution and soil erosion
- protect the natural, historic, cultural and scenic character
- preserve and protect open space and recreational areas
- any area not occupied by building/structure must be landscaped
- efforts should be made to save on-site trees/vegetation whether it be to maintain its location or relocate to another area of the site

*City of Pawtucket Zoning Ordinance 2010 pg. 410:5

Sites: Planning Districts



*City of Pawtucket Comprehensive Plan 2003 pg. 55

District 2

Continues park rehabilitation and reconstruction

Upgrade, improve and expand resources at Morley Field

Evaluate and develop school sites for potential development of additional neighborhood recreational facilities

All Districts

Review all land parcels on the City's rivers and all street rights-of-way for public water access and **recreational potential**, including view sites, walking, biking, fishing and boat launching

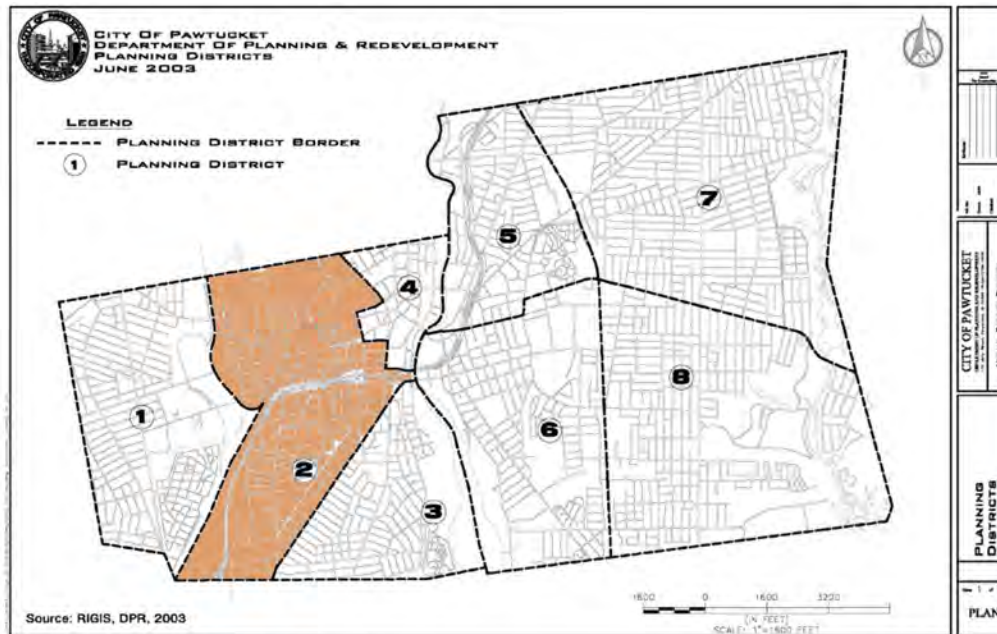
Evaluate sites for acquisition and development for additional athletic facilities throughout the City

Improve landscaping and plantings in neighborhood parks

Explore opportunities for additional passive parks in all neighborhoods

*City of Pawtucket Comprehensive Plan 2003 pg. 152, 155

Sites: Planning Districts



*City of Pawtucket Comprehensive Plan 2003 pg. 55

District 2

Zone: Commercial Downtown CD ("intended to enhance and restore the downtown area")

Minimum Lot Size: 5,000 sq. ft.

Minimum Lot Frontage: 50 ft.

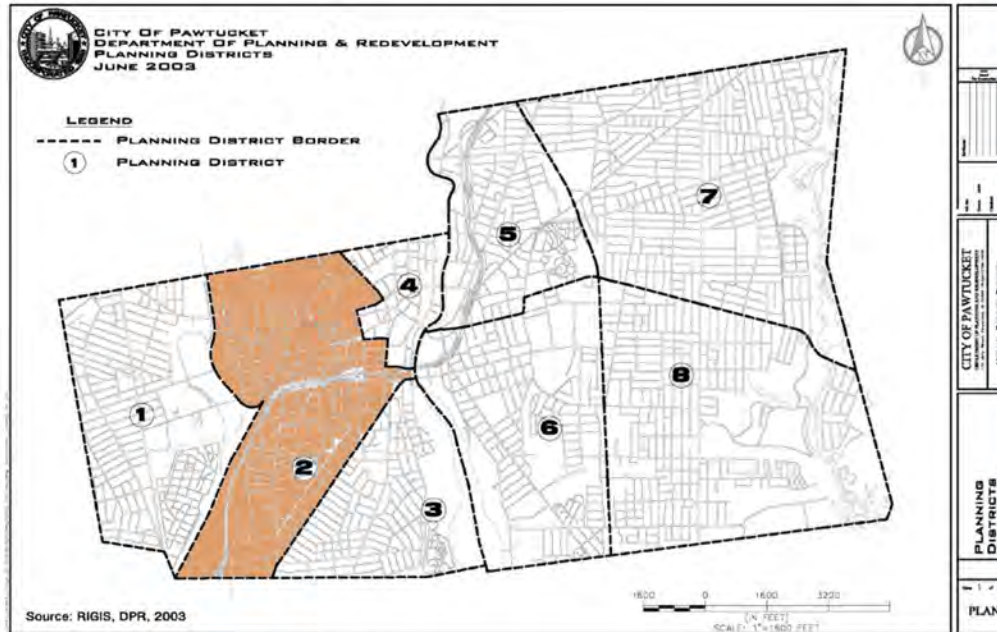
Minimum Lot Coverage: 100%

Minimum Yard Setback Line
 Front: 0 ft.
 Side: 0 ft.
 Rear: 0 ft.

Maximum Height
 Main: 100 ft.
 Accessory: 15 ft.

*City of Pawtucket Zoning Ordinance 2010 pg. 410:44.2

Sites: Planning Districts



*City of Pawtucket Comprehensive Plan 2003 pg. 55

District 2

Required Off-Street Parking
 Parking must be within 400 feet from structure.

Multi-family dwellings with 3+ units require 2 parking spaces per unit.

Commercial uses require 1 space per 300 sq. ft. leasable floor space.

Off-Street Loading Spaces
 Not part of parking allotment.

1 loading space 20,000 square feet gross floor area.

Loading Spaces: 55 x 12 x 14.

*City of Pawtucket Zoning Ordinance 2010 pg. 410:69 - 410:74.1.

Sites: Planning Districts

USE REGULATIONS

Allowed:

- Multifamily dwelling units (5+ units)
- State licensed community residence
- Artist Studios/Display/Sales
- Storage shed (150+ square feet)
- Home occupations
- Sale of homemade craft products
- Public museum or library
- Historical Museum/Art Gallery
- Community center
- Retail under 2,500 square feet each (retail space over 2,500 square feet if it services the city)
- Eating spaces under 2,500 square feet each
- Service business under 2,500 square feet each
- Physical fitness facility
- Photographic studio
- Performing arts venue
- Parking garage/parking area
- Artist studio/display/sales

Special Permit:

Mixed residential residential/commercial uses

*City of Pawtucket Zoning Ordinance 2010 pg. 410 Attachment 1:1

Sites: Planning Districts



Special Use Permit Requirements for Specific Uses

Number of dwelling units based on one dwelling unit per 2,000 square feet of land area

Allowed commercial uses include:
 Personal Services
 Business Services
 Office Use
 Entertainment
 Amusement/Recreation
 Commercial Services
 No Restaurants with Dancing

*City of Pawtucket Zoning Ordinance 2010 pg. 410 Attachment 1:1

*taken from Google Maps

Site 1



Existing Building
125 Goff Avenue, Pawtucket, RI

Lot Area: 262,010 sq. ft. (6.015 a)

Construction: Type IV Heavy
Timber

Building Area: 101,906 sq. ft.

Building #1
Ground Floor: 32,156
Second Floor: 32,156
Third Floor: 23,600
Total: 87,912

Building #2:
Ground Floor: 4,090
Second Floor: 4,090
Third Floor: 2,882
Fourth Floor: 2,882
Total: 13,994

Occupant Load: 509 occupants
200 GSF per person

Parking
Required Spaces: 242
Handicap Spaces: 5

Site 1

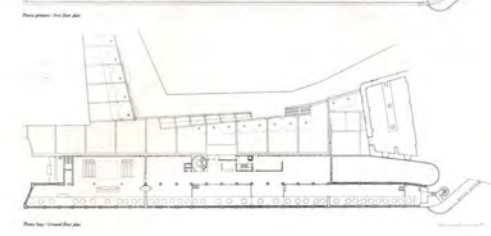
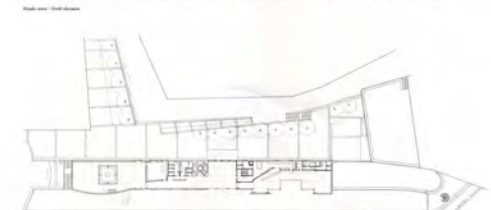
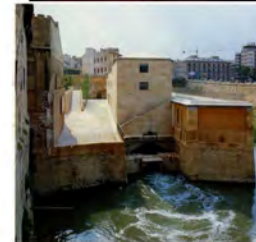


PRECEDENT INVESTIGATIONS

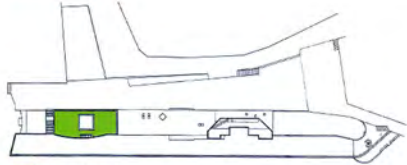


Plano de situación / Site plan

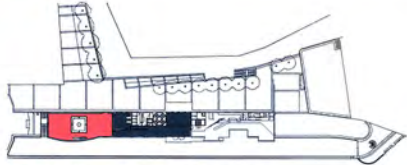
HIDRAULICO MUSEO MOLINOS DEL RIO SEGURA Murcia, Spain Juan Navarro Baldeweg



Planta segunda



Biblioteca/Dirección
Planta primera



C.R.E.A. (Centro de Recursos Educación Ambiental)
Administración

Planta baja



Exposición Hidráulica Permanente
Sala de Exposiciones
Auditorio - Sala de Conferencias y Audiovisuales
Sala Caballeros
Acceso al Museo Hidráulico Los Molinos del Río Segura



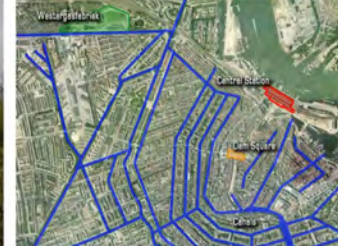
Section through Westergasfabriek showing the new design of the building and the existing structure of the canal



Section through the building



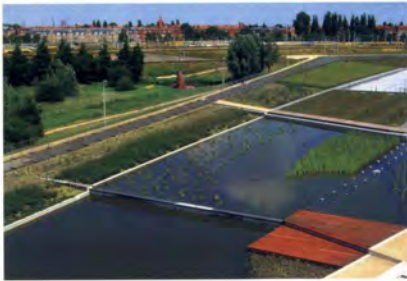
CULTUURPARK WESTERGASFRABRIEK
Amsterdam
Gustafson Porter (Kathryn Gustafson)



Site Plan

- a. Cite des Arts
- b. The Village
- c. Children's Village
- d. Spectacular Village





SOURCES CITED

"Molinos Del Rio Segura: Rehabilitacion para Centro Cultural y Museo Hidraulico." *El Croquis* N.54 1984: 58-73

"El Museo Hidraulico" Museo Hidraulico Molinos Del Rio Segura, accessed April 1, 2011, www.molinosdelrio.org/museo/

Pörter, Neil. "Westergasfabriek Park, Amsterdam, the Netherlands." *Landscape Design* (February 2002): 24-25

Hinshaw, Mark. "Amsterdam opens a new culture park: Kathryn Gustafson transforms a Dutch brownfield into an amazingly complex landscape." *Landscape Architecture* (November 2004): 60, 62-66, 68,70-71

Pawtucket, Rhode Island



*taken from *Creative Providence: A Cultural Plan for the Creative Sector*

Surrounding towns and cities, in addition to Pawtucket, are seeking ways to increase a community for the arts.



Created in June 1999

Visual and Performing Arts

Interactive Workshops

Music theater

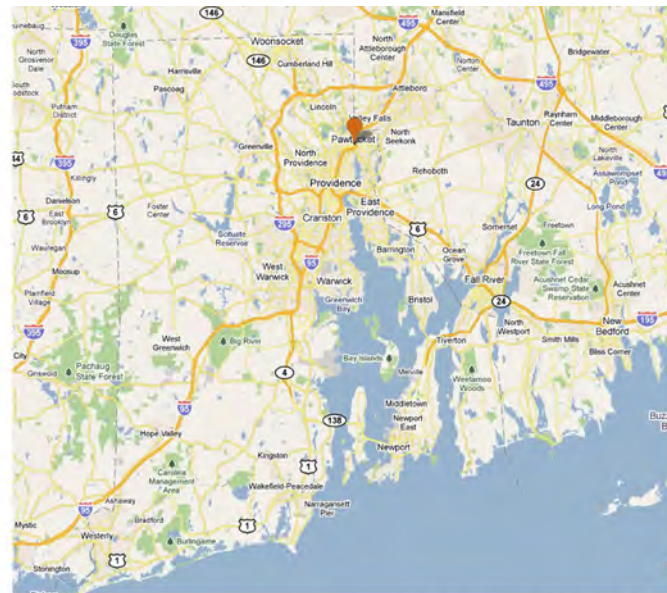
Dance performances

Donated four permanent sculptures to the City

Growing budget
\$20,000 (1999)
\$76,156 (2003)

*<http://www.pawtucketartsfestival.org/home>

Setting the Stage



Fourth largest city in Rhode Island

"economy is built on an intricate web of inter-relationships that stretch far beyond the City's borders"

- Comprehensive Town Plan pg. 81

7.1% unemployment rate (5.6%

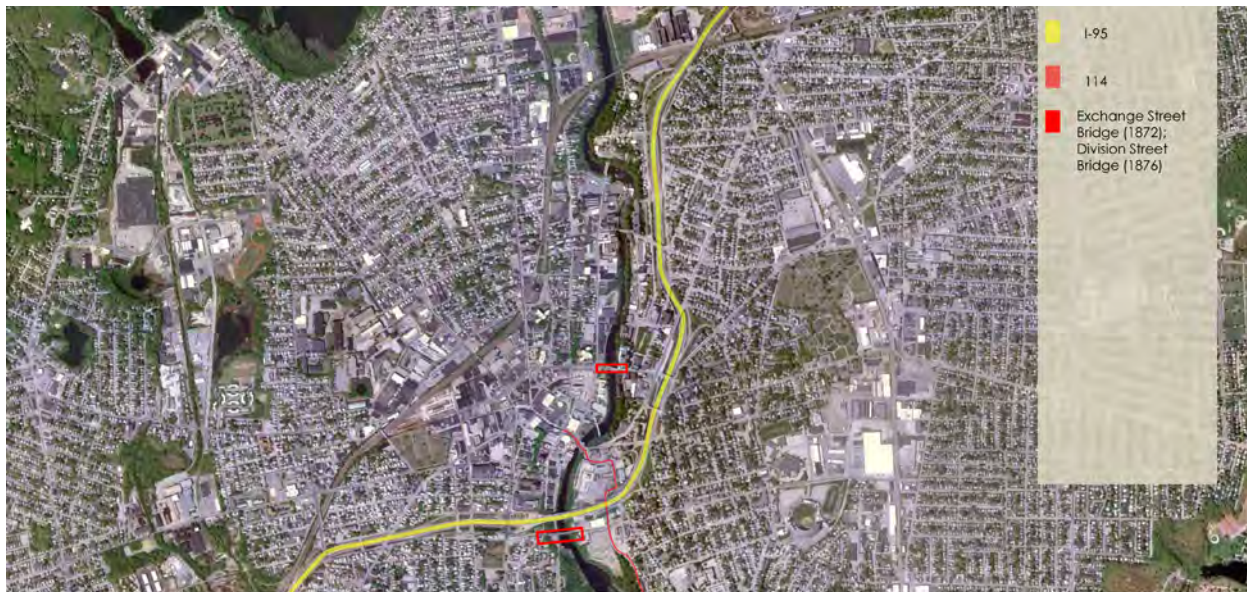
*image taken from Google Maps

Pawtucket, Rhode Island



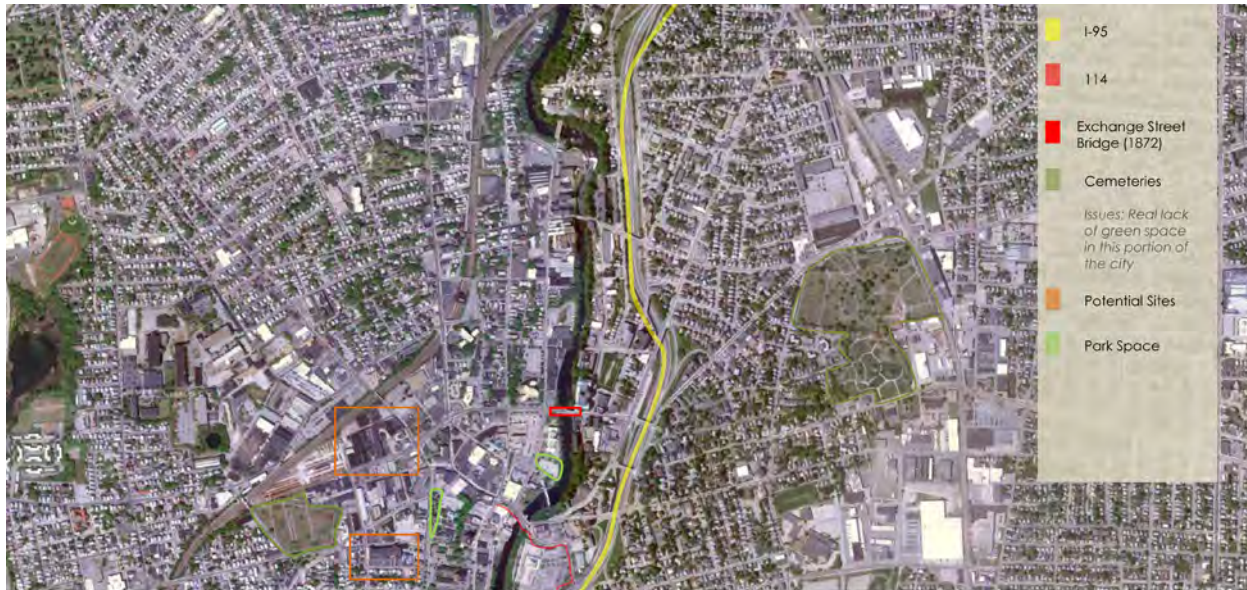
*image taken from Google Maps

Pawtucket, Rhode Island



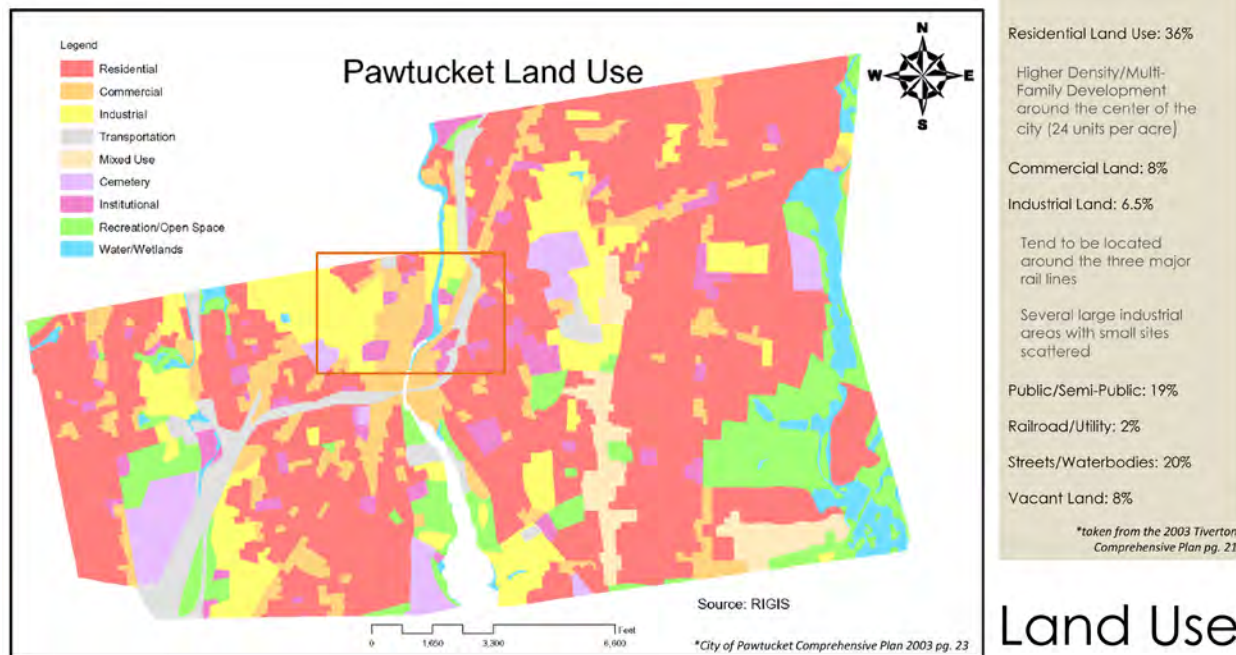
*image taken from Google Maps

Pawtucket, Rhode Island

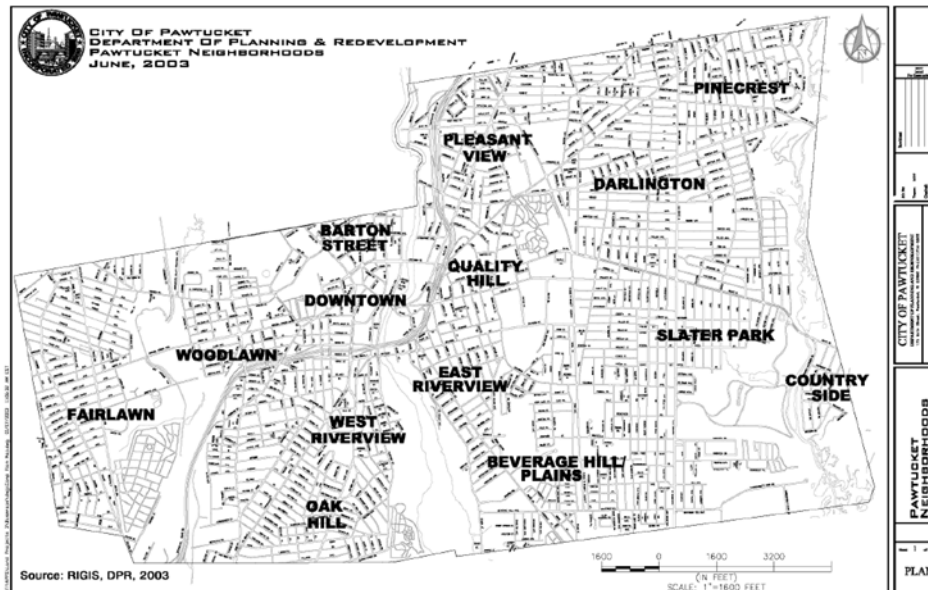


*image taken from Google Maps

Pawtucket, Rhode Island



Land Use



*City of Pawtucket Comprehensive Plan 2003 pg. 117

Pawtucket, Rhode Island



*City of Pawtucket Comprehensive Plan 2003 pg. 117

Commercial Downtown Area

- major business district
- land use is primarily commercial buildings, residential structures, government buildings
- located adjacent to the three railways that cut through Pawtucket

Buildings on the National Register

Public Library and Annex
City Hall
Slater Mill Historic Site

1998: Establishment of the Arts and Entertainment District (307 acres)...

....ongoing plans to develop an "educational/arts cluster"

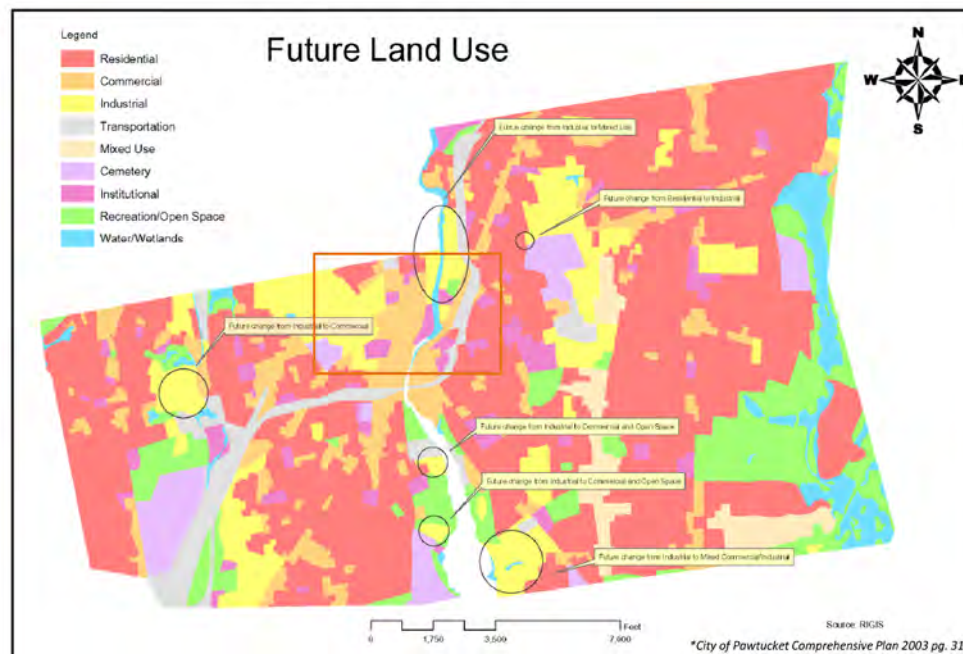
*taken from the 2003 Tiverton Comprehensive Plan pg. 20

Pawtucket, Rhode Island

1. Protect existing residential neighborhoods from undue encroachment of conflicting non-residential uses.
2. Protect existing neighborhoods from increasing housing densities that lead to overcrowding, shortage of available off-street parking and traffic congestion
3. Protect viable vacant industrial sites for industrial uses. *Where industrial lands are no longer viable, consider rezoning to more appropriate uses*
4. Encourage infill development on vacant parcels that reflect the built character of the neighborhood
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7. Protect existing publicly owned open space and recreational areas.
8. *Promote and encourage appropriate development along Pawtucket's riverfront including well-designed commercial uses, the reuse of existing, vacant industrial buildings, the creation of public gathering places, and the provision of river access*

**taken from the 2003 Tiverton Comprehensive Plan pg. 15*

Land Use: Goals



Plans to Change:

- Industrial Land to Mixed Use
- Industrial Land to Mixed Commercial/Industrial
- Industrial Land to Commercial
- Residential land to Industrial
- Commercial Land to Open Space

Land Use

1. Assist in forming an economic base capable of providing a desirable standard of living, creating job opportunities, and fulfilling reasonable government tax needs.
2. Maximize employment opportunities for Pawtucket residents at all skill levels.
3. Continue to support the maintenance and expansion of existing businesses in Pawtucket.
4. Continue efforts to attract new, compatible economic development that is sensitive to Pawtucket's historic, cultural and environmental activities.
5. Provide the adequate infrastructure including utilities, roadways, and parking facilities, at appropriate locations for economic development activities.
6. Continue to promote Pawtucket as an artist-friendly community and as a tourist destination.
7. Maximize business opportunities locally for Pawtucket businesses.
8. Seek and promote local, state, and federal economic development initiatives that will assist Pawtucket businesses.

**taken from the 2003 Tiverton Comprehensive Plan pg. 77*

Economic Development: Goals



Major Soil Types, Pawtucket, Rhode Island

Soil Type	Acres	Percentage
Marrimac Sandy Loam Series	2875	53.1
Windsor Loam Sand Series	1115	20.6
Paxton Sandy Loam Series	615	9.5
Hinckley Gravelly Sandy Loam	410	7.5
Cut and Fill	305	5.6
Miscellaneous Soil Groups	170	3.1
Landfills	20	0.6
Total Area in Acres	5410	100%

U.S. Department of Agriculture, Soil Survey of Rhode Island, 1981

90%+ developed land

Highest Elevation: 182 feet

Glacial Silt

Gravel

Boulders

Sedimentary Rocks (Shale or Conglomerate)

Bedrock formation is overlain by deposits of unstratified and stratified drift

80%+ covered in stratified drift roughly 50 feet thick in lower levels

unsorted fill in higher areas

**taken from the 2003 Tiverton Comprehensive Plan pg. 21*

1. Provide Pawtucket residents from all socio-economic groups with safe, decent and affordable housing.
2. Ensure that a consistent portion of the City's rental housing stock remains affordable and is in compliance with the provisions of the State of Rhode Island Low and Moderate Income Housing Act.
3. Ensure that residential growth does not adversely affect environmental, recreational and cultural resources.
4. Promote the expansion of owner occupancy in all neighborhoods.
5. Encourage the rehabilitation of underutilized commercial and industrial structures to residential units as possible.
6. Protect the City's residential neighborhoods by preventing encroachment from other non-residential land uses.
7. Discourage increased density in established residential neighborhoods throughout the City.
8. Encourage the development of mixed income housing through the City.
9. Promote and enforce the federal Fair Housing Law throughout the City.

*taken from the 2003 Tiverton Comprehensive Plan pg. 45

Housing: Goals

Low and medium-income families seek out residency in Pawtucket to escape the high housing prices of Providence

8.12% of Pawtucket housing is considered low-income

Primary housing values are between \$50,000-\$99,000

Table 2.12
Housing Value, 2000

Value	Pawtucket # of Units	% of Owner Occupied	Metro Core # of Units	% of Owner Occupied	Pawtucket as % of Metro Core
Less than \$50,000	136	1.5%	755	1.2%	18.2%
\$50,000 - \$99,999	4,553	50.9%	20,457	31.3%	22.3%
\$100,000 - \$149,999	3,714	41.5%	25,810	45.8%	12.5%
\$150,000 - \$199,999	362	4.0%	8,138	12.4%	4.4%
\$200,000 - \$299,999	128	1.4%	4,056	6.2%	3.2%
\$300,000 - \$499,999	45	0.5%	1,535	2.3%	2.9%
\$500,000 - \$999,999	-	-	523	0.8%	-
\$1,000,000 or more	13	0.1%	129	0.2%	10.1%
Total Specified Owner Occupied	8,953		65,403		13.7%
Median	\$99,000		\$111,743		91.2%

Census 2000

Majority of rents are between \$300 - \$749 a month

Table 2.13
Rental Costs, 2000

	Pawtucket # of Units	% of Renter Occupied	Region # of Units	% of Renter Occupied	Pawtucket as % of Region
Less than \$200	1,525	9.1%	9,593	10.9%	1.3%
\$200 - \$299	933	5.6%	5,563	6.3%	16.8%
\$300 - \$499	5,763	34.5%	23,085	26.4%	25.0%
\$500 - \$749	7,079	42.4%	36,113	41.0%	19.6%
\$750 - \$999	764	4.6%	9,608	10.9%	8.0%
\$1,000 - \$1,499	182	1.1%	3,092	3.5%	5.9%
\$1,500 or more	56	0.3%	945	1.1%	5.9%
Total Renter Occupied	16,690		88,009		19.0%
Median Rent	\$490		\$543		

Census 2000

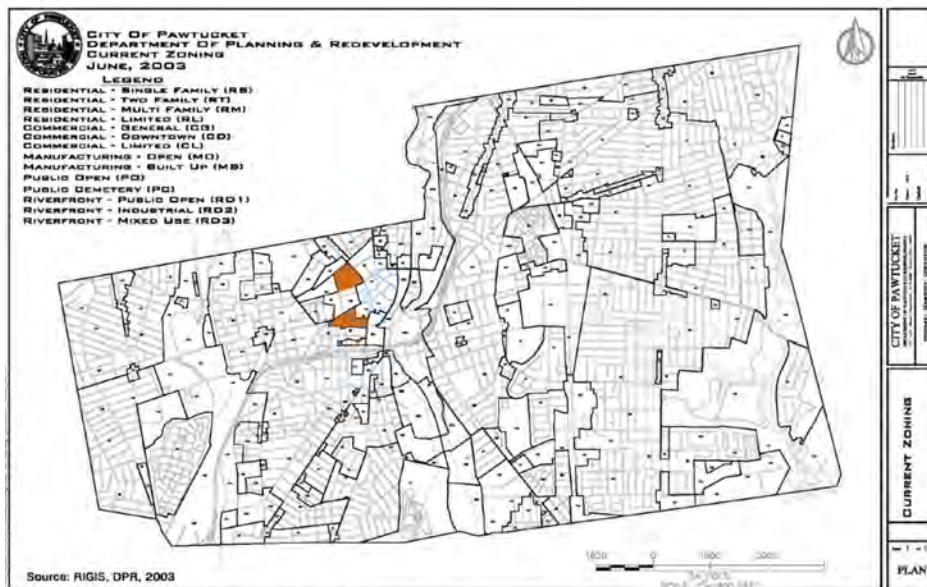
*City of Pawtucket Comprehensive Plan 2003 pg. 59

Demographics



*image taken from Google Maps

Sites: Surrounding Area



*City of Pawtucket Comprehensive Plan 2003 pg. 27

Site 1 : Golf Avenue

CG - Commercial Downtown

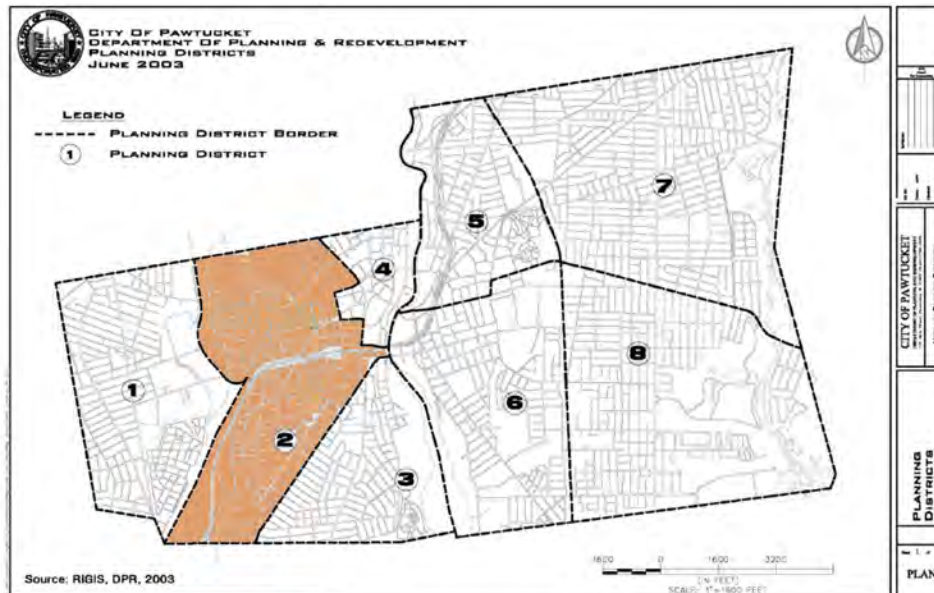
Minimum Lot Size - 5,000 sq. ft.

Site 2: Church Street

CG - Commercial General

Minimum Lot Size - 5,000 sq. ft.

Sites: Zoning



Source: RIGIS, DPR, 2003

*City of Pawtucket Comprehensive Plan 2003 pg. 55

District 2

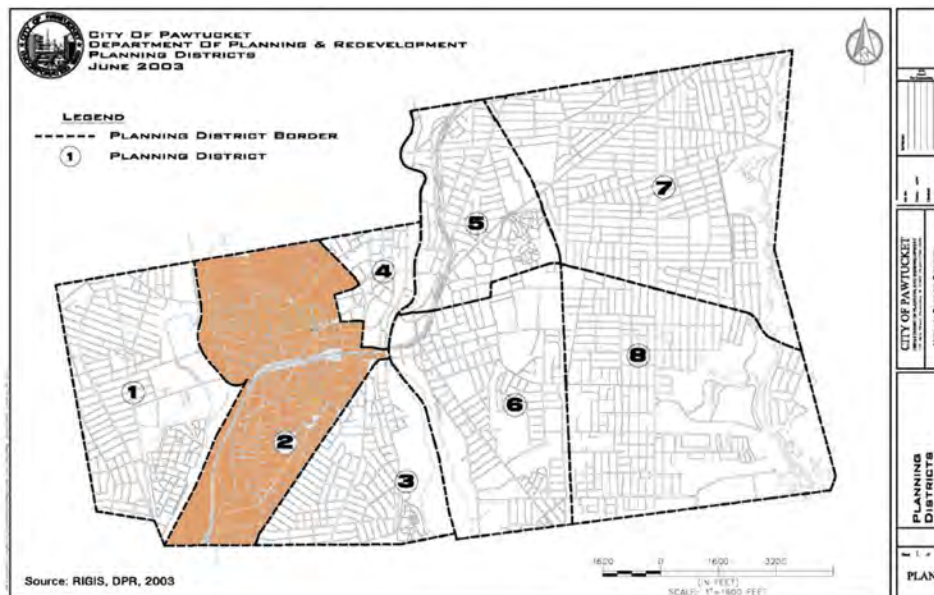
1990 – 5,924 Housing units

2000 – 5,868 Housing units
(-1% Change)

Primarily multi-family houses

Second largest housing
supply

Sites: Planning Districts



Source: RIGIS, DPR, 2003

*City of Pawtucket Comprehensive Plan 2003 pg. 55

District 2

Continue park rehabilitation and
reconstruction

Upgrade, improve and expand
resources at Marley Field

Evaluate and develop school sites
for potential development of
additional neighborhood
recreational facilities

All Districts

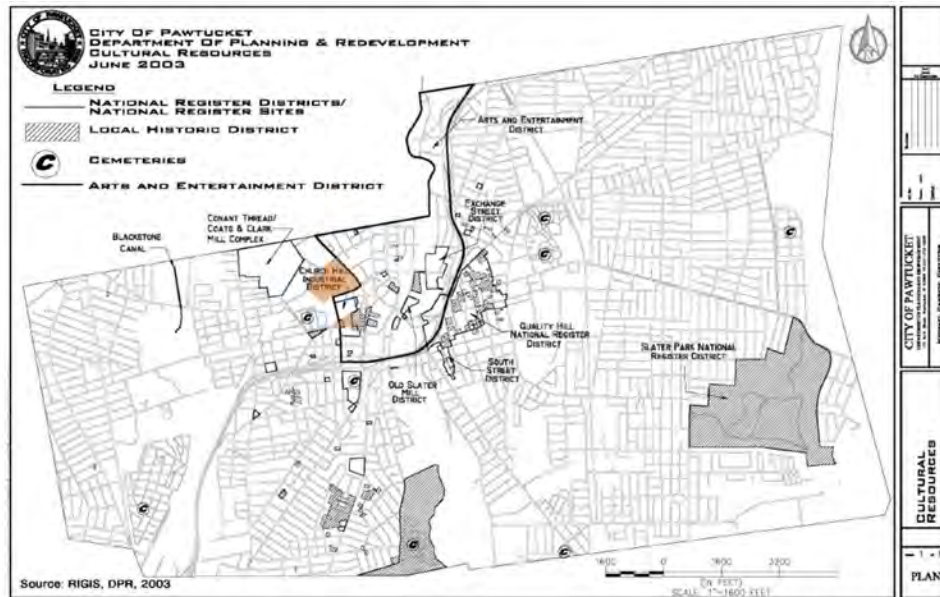
Review all land parcels on the
City's rivers and all street rights of
way for public water access and
recreational potential, including
view sites, walking, biking, fishing
and boat launching

Evaluate sites for acquisition and
development for additional
athletic facilities throughout the
City

Improve landscaping and
plantings in neighborhood parks

Explore opportunities for additional
passive parks in all neighborhoods

Sites: Planning Districts



*City of Pawtucket Comprehensive Plan 2003 pg.115

Sites: Planning Districts

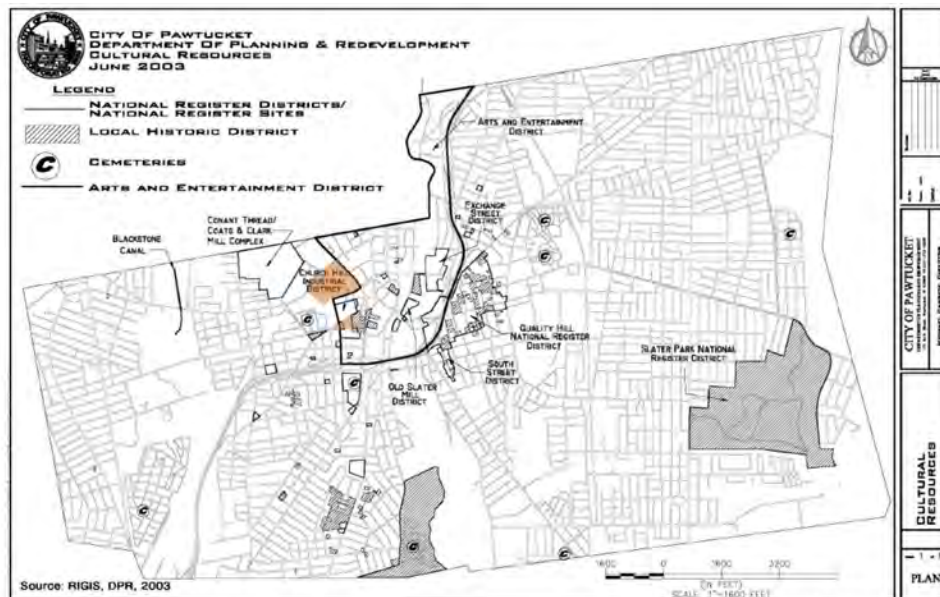
Arts and Entertainment District – Pawtucket's arts initiative

In the past 6 years hundreds of artists have relocated to Pawtucket

"Pawtucket's art district...has brought attention to the City and has become a powerful economic engine, revitalizing the community."

Pawtucket School Department opened the first state-wide arts high school in the Pawtucket Armory

To date 11 commercial buildings have been transformed to accommodate artists



*City of Pawtucket Comprehensive Plan 2003 pg.115

Sites: Planning Districts

Arts and Entertainment District

Artist Groups
Stone Soup Coffee House

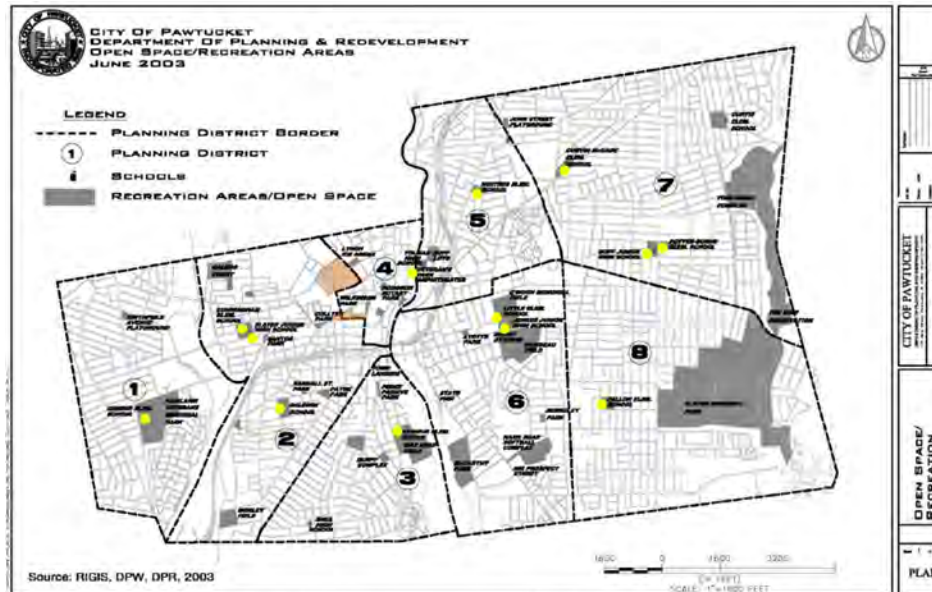
Sandra Feinstein Gamm Theater

All Children's Theater

Foundry Artist Group

Mixed Magic Theater

Pawtucket Arts Collaborative (150 artist membership)

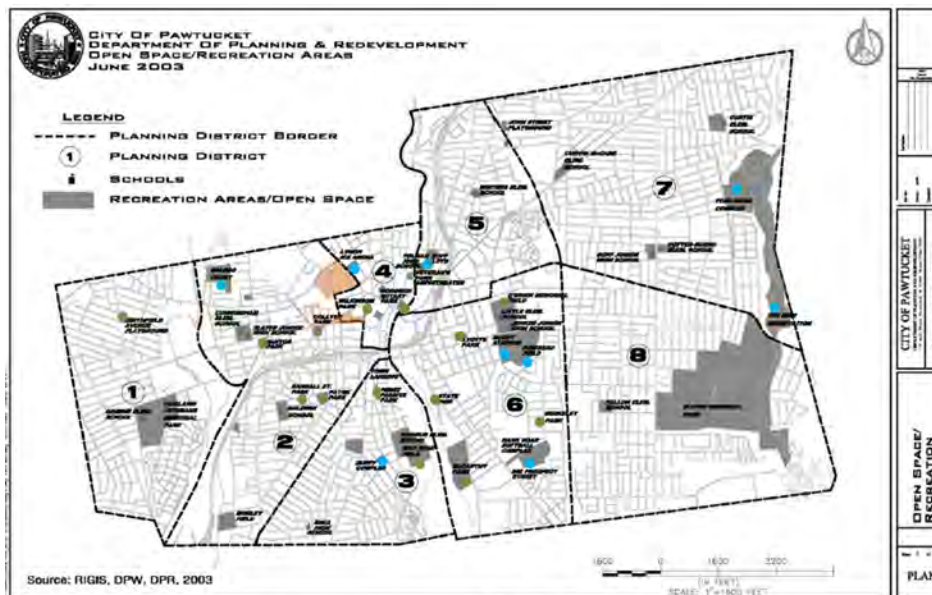


*City of Pawtucket Comprehensive Plan 2003 pg.141

Sites: Educational Buildings

Arts and Entertainment District

● Educational Buildings



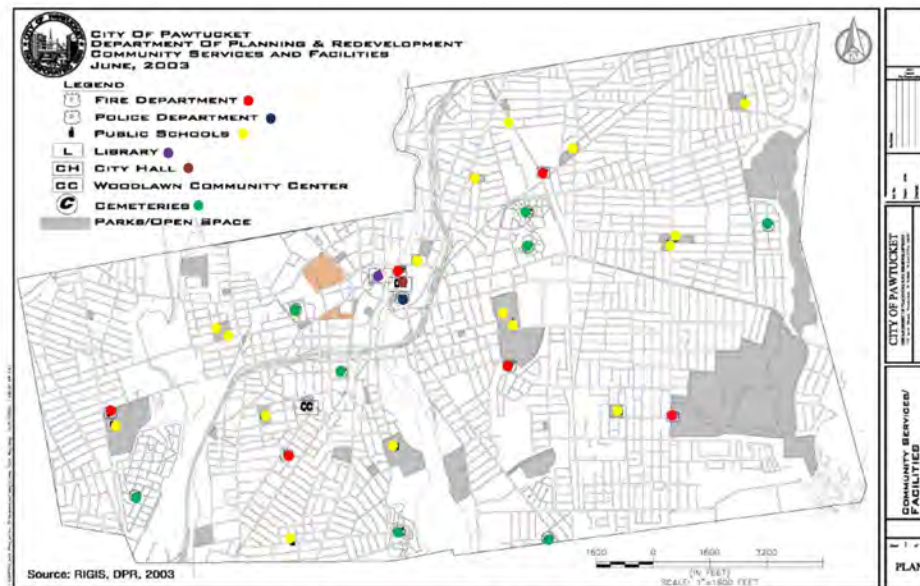
*City of Pawtucket Comprehensive Plan 2003 pg.141

Sites: Open Space/Recreation

Arts and Entertainment District

● Recreation

● Parks



*City of Pawtucket Comprehensive Plan 2003 pg.173

Arts and Entertainment District

Sites are in close proximity to...

Library

City hall

Police Department

Fire Department

Three Parks

Two High Schools

One Elementary School

Sites: Open Space/Recreation



*City of Pawtucket Comprehensive Plan 2003 pg.225

Arts and Entertainment District

Each site is bordered on three sides by principle arteries

Majors arteries directly connect both sites to Interstate 95

Sites: Transportation



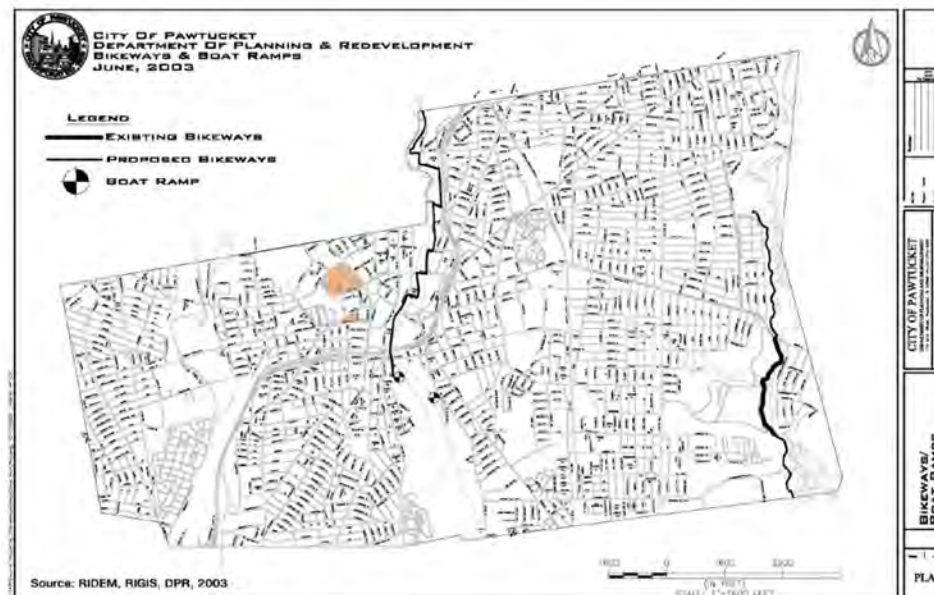
*City of Pawtucket Comprehensive Plan 2003 pg.229

Arts and Entertainment District

Each site is located within a short walking distance to a public parking lot

RIPTA lines run past each site for convenient public transportation

Sites: Transportation



*City of Pawtucket Comprehensive Plan 2003 pg.235

Arts and Entertainment District

An existing bike route exist in the eastern portion of Pawtucket but proposed bike routes are currently being discussed.

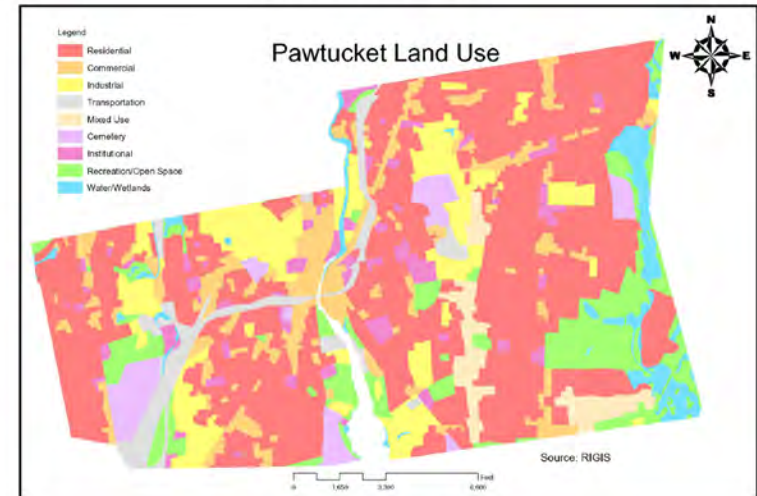
One of the proposed bike routes would be developed slightly east of both sites.

Sites: Transportation

Artist Community

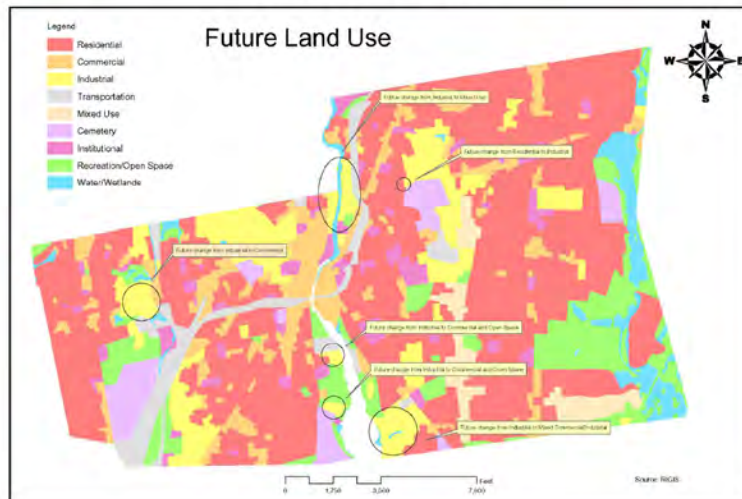
Pawtucket, Rhode Island

Land Use



* City of Pawtucket Comprehensive Plan pg. 23

Land Use



* City of Pawtucket Comprehensive Plan pg. 31

Land Use: Goals

1. Protect existing residential neighborhoods from undue encroachment of conflicting non-residential uses
2. Protect existing neighborhoods from increasing housing densities that lead to overcrowding, shortage of available off-street parking and traffic congestion
3. Protect viable vacant industrial sites for industrial uses. *Where industrial lands are no longer viable, consider rezoning to more appropriate uses*
4. Encourage infill development on vacant parcels that reflect the built character of the neighborhood
5. *Control strip commercial development by promoting neighborhood and regional shopping districts*
6. *Revitalize downtown with a variety of mixed uses including live-work space, offices, studios, galleries, restaurants and theaters*
7. Protect existing publicly owned open space and recreational areas.
8. Promote and encourage appropriate development along Pawtucket's riverfront including well-designed commercial uses, the reuse of existing, vacant industrial buildings, the creation of public gathering places, and the provision of river access

* City of Pawtucket Comprehensive Plan pg. 15

Pawtucket, Rhode Island



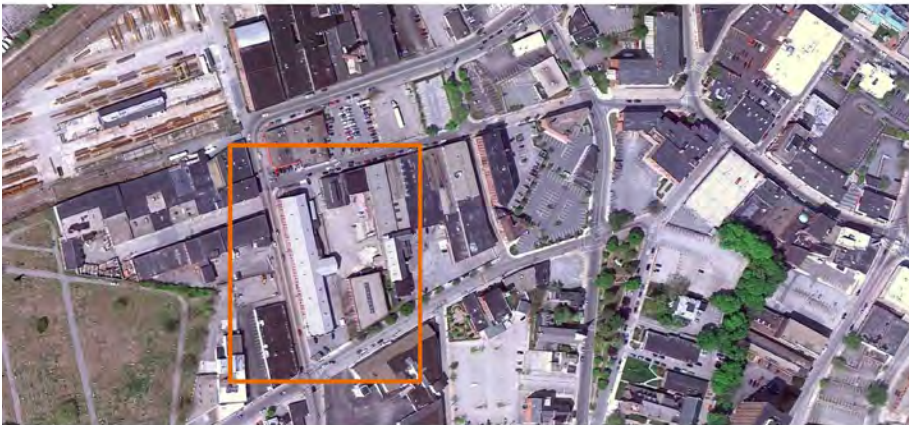
**taken from Google Maps*

Site 1



**taken from Google Maps*

Site 2



**taken from Google Maps*

Site 3



**taken from Google Maps*

Site 4



**taken from Google Maps*

Site 5



**taken from Google Maps*



**image taken from Google Maps*

Site 1



**image taken from Google Maps*



Site 1



**image taken from Google Maps*



Site 1



**image taken from Google Maps*



Site 1



*Image taken from Google Maps



Site 1



Very few residential structures are found in the area. Only two high rise buildings appear to provide strictly housing.

- RIPTA Stop
- RIPTA Line
- Railway tracks
- Robert Chemicals
- Meat Market
- Fruit Distribution
- Dry Cleaners
- Insurance Company
- Food Stamps
- Industrial Building Retrofit
- Residential

*Image taken from Google Maps

Site 1



- RT-95 directly south of the site
- RIPTA lines surround the site

**image taken from Google Maps*

Site 2



**image taken from Google Maps*



Site 2



**image taken from Google Maps*



Site 2



**image taken from Google Maps*



Site 2



*image taken from Google Maps



Site 2



- RIPTA Stop
- RIPTA Line
- Cemetery
- Real Estate
- Adult Day Care
- Comfort Inn
- Burger King
- Shell Station
- Dunkin' Donuts
- Bridal Shop
- Car Dealership/Body Shop
- Atlantic Furniture
- St. Paul's Church
- Supreme Court
- Residential

Site 2



Appendix II *Existing Building Photos*















Images personally photographed







AIR APR 2007







Images obtained from Rhode Island: Art in Ruins

<http://artinruins.com/arch/?id=decay&pr=unionwadding>

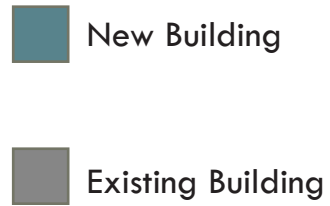


Appendix III

Preliminary Design Schemes

Scheme 1

Sections 3 and 5 are removed to allow for circulation from the eastern side of the building to the western side.



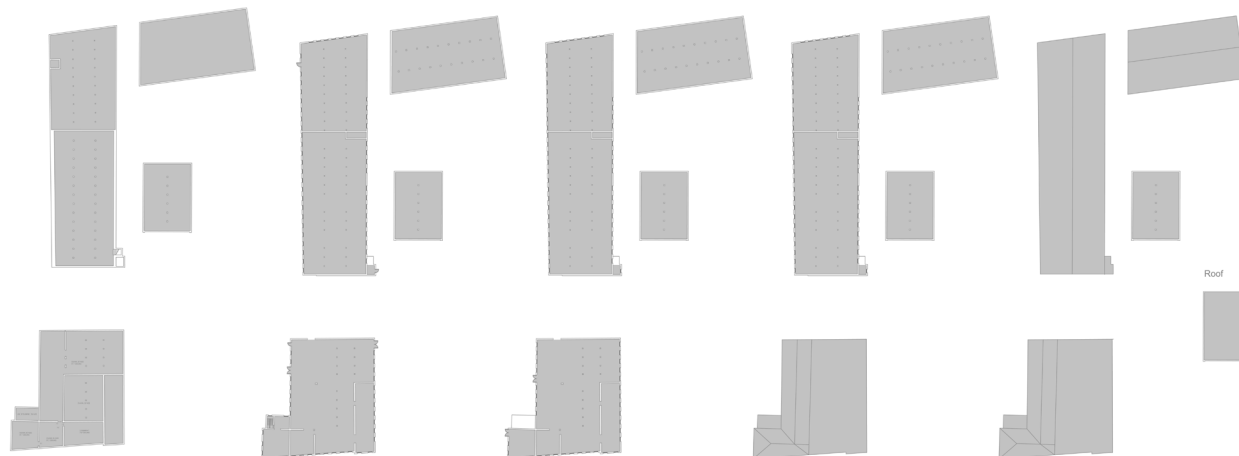
Basement

First Floor

Second Floor

Third Floor

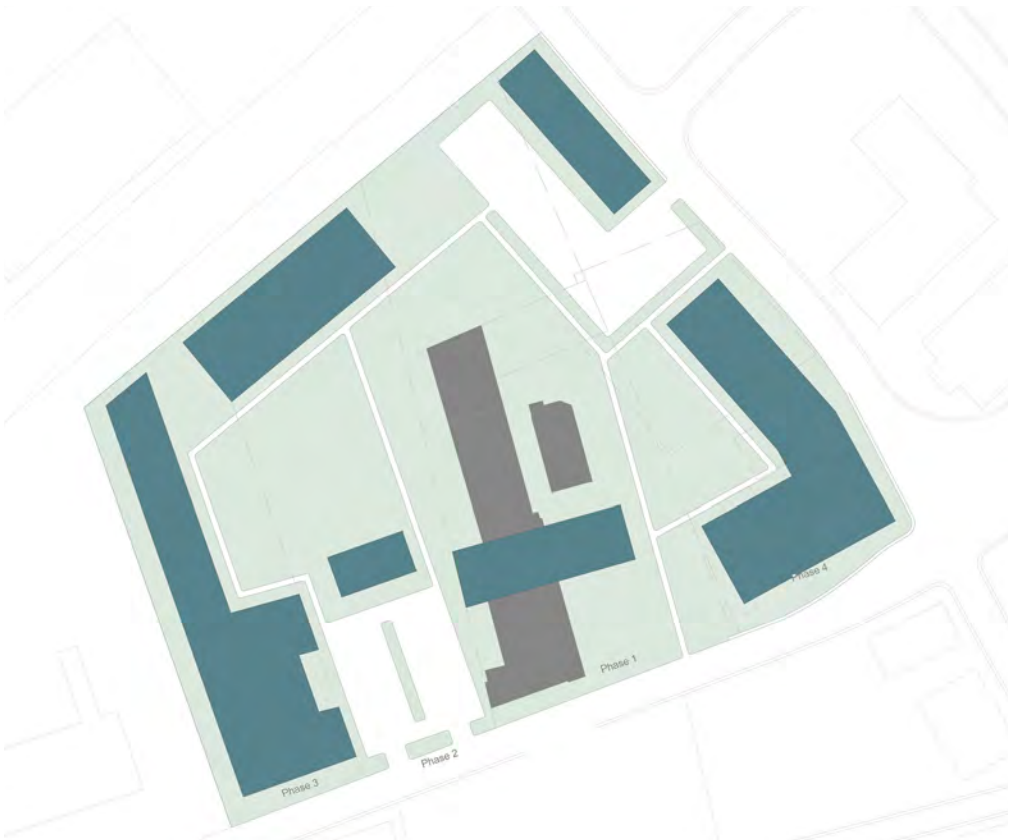
Fourth Floor



Scheme 2

Sections 1 and 5 are removed. Section 5 is replaced with new construction.

- New Building
- Existing Building



Basement

First Floor

Second Floor

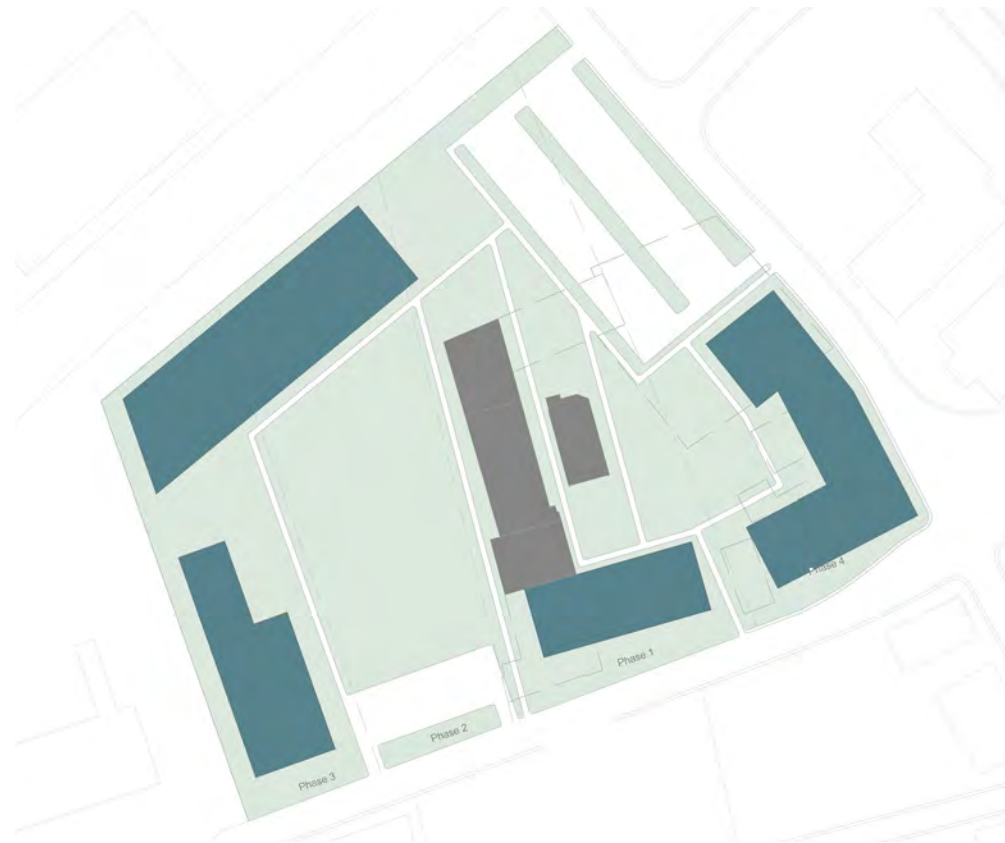
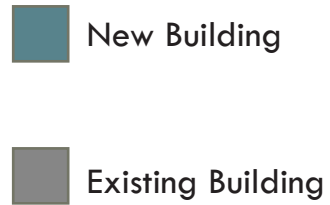
Third Floor

Fourth Floor



Scheme 3

Sections 1 and 6 are removed. Section 1 is replaced by new construction directly abuts the street creating a large courtyard at the interior of the site.





Appendix IV

Mid-Semester Review

Mid-Semester Presentation Panels

Pawtucket Artist Community

Roger Williams University
School of Architecture, Art and Historic Preservation

Fall Semester 2011
ARCH 613: Graduate Thesis Design Studio

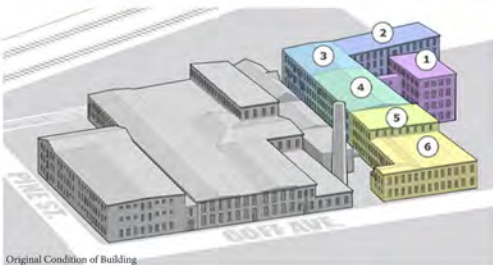
Jennifer Turcotte



Original Condition of Site



Surrounding Building Heights



Original Condition of Building



Proximity of Site to Arts District



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School of Architecture, Art and Historic Preservation

Fall Semester 2011
ARCH 613: Graduate Thesis Design Studio

Jennifer Turcotte



South Elevation 1/16" = 1'



East Elevation 1/16" = 1'



West-East Section 1/16" = 1'



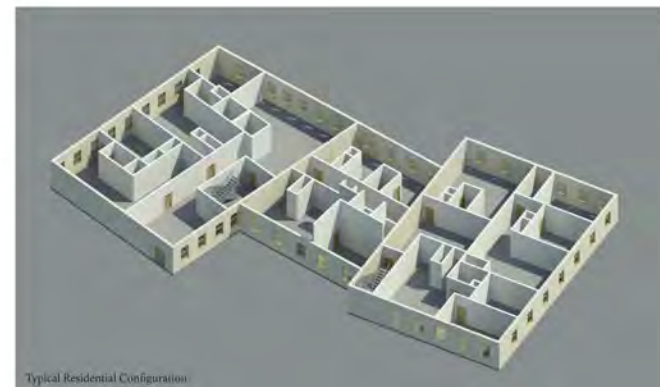
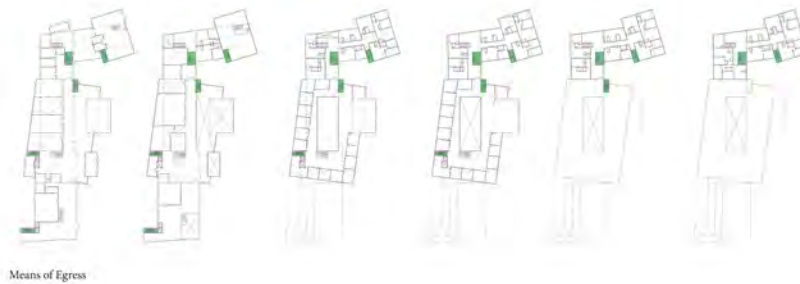
North-South Section 1/16" = 1'

Pawtucket Artist Community

Roger Williams University
School of Architecture, Art and Historic Preservation

Fall Semester 2011
ARCH 613: Graduate Thesis Design Studio

Jennifer Turcotte





Appendix V

GATE

Union Wadding Artist Complex

Roger Williams University
School of Architecture, Art and Historic Preservation

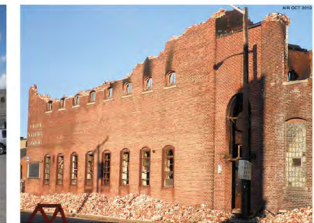
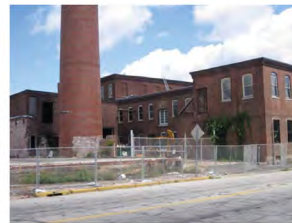
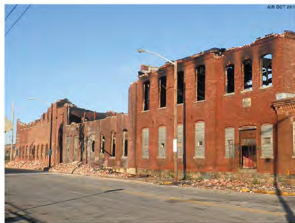
Fall Semester 2011
ARCH 613: Graduate Thesis Design Studio

Jennifer Turcotte

The economic crisis being experienced worldwide has forced society to re-evaluate the way in which we handle resources and generally live our lives. One such facet being easily pushed to the side of everyday life is involvement in the arts. Art stands as the basis for creating culture, tradition, and personal expression. While artist communities are feeling the effect of this growing neglect of the arts, numerous institutions are removing arts programs as a result of budget cuts. Ultimately, art enables individuals to access a deep-seated level of personal expression.

The Union Wadding Artist Complex will provide an outlet for Rhode Island artists to live, work and educate the surrounding community. Once home to the Union Wadding Company, the building will provide apartments and workspaces for artists as well as classrooms for students. Rehabilitating this brownfield site will give back to the surrounding community by providing much needed green space and establish an atmosphere for creative expression.

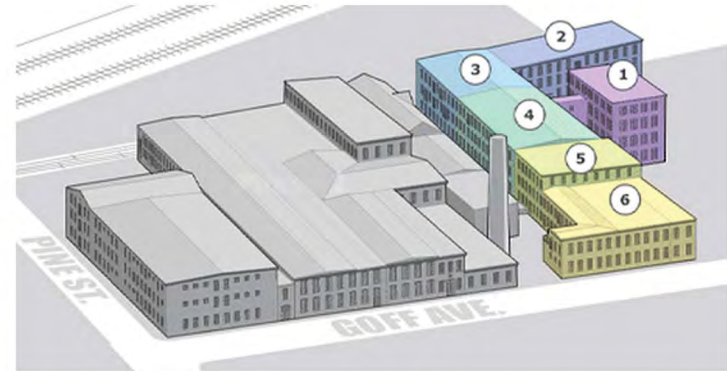
The overall aim of the thesis is to explore the importance of art within the general framework of human existence, in addition to redeveloping and exploiting an untapped and valuable resource, the preexisting and unused infrastructure lying idle throughout Pawtucket. Not only am I referring to art at an individual level, but in a community setting as well. By exercising the idea of the cooperative spirit and communal living in conjunction with art education, the Union Wadding Artist Complex will demonstrate the importance of self-expression.



PUBLIC TRANSPORTATION



Axometric of Original Building

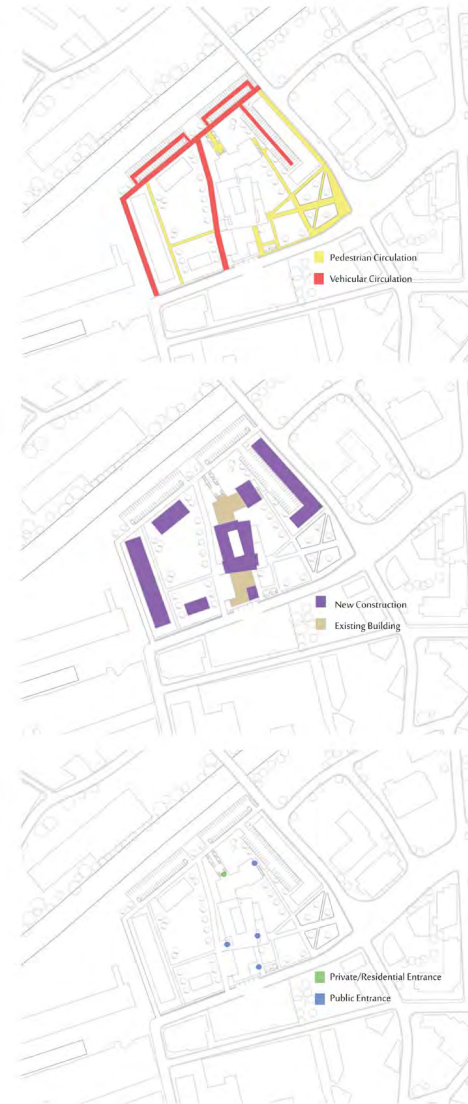


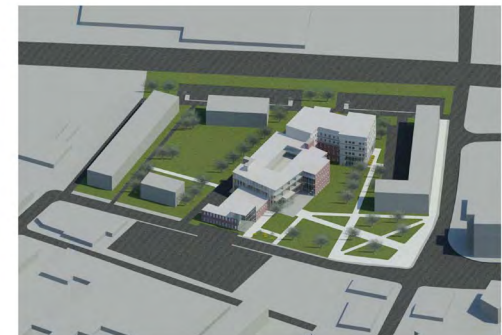
The Union Wadding Company originally set roots in 1808 in Rehoboth, Massachusetts under the name the Union Cotton Manufacturing Company. In 1844 the company relocated to the Pawtucket location and was renamed the Pawtucket Steam Wadding Mills. It was not until 1870, did the company finally come to be called the Union Wadding Company. The building throughout the years has experienced numerous hardships and setbacks including a fire in 1851, which required the building to be rebuilt. After the reconstruction numerous changes on-site began to take place including the addition of new buildings and the introduction of smaller businesses setting roots in certain portions of the building.

The mid-twentieth century, beginning in the 1940s, marked a decline in the textile market. To counteract the decline in the need for textiles, the Union Wadding Company branched out from its traditional products and expanded its produced goods. Recent years has shown renewed interest in rehabilitating Pawtucket's industrial buildings, including the Union Wadding Company building. While plans for future renovations were in development the building suffered a blow in October 2010 with a fire that destroyed a large portion of the building (shown in gray in the image above). Ten buildings in the western portion of the site were completely destroyed leaving only the eastern buildings standing.

What remains of the building after the 2010 fire has been added to the National Register of Historic Places by Rhode Island's Historical Preservation and Heritage Commission.







Site Section 1/32" = 1'



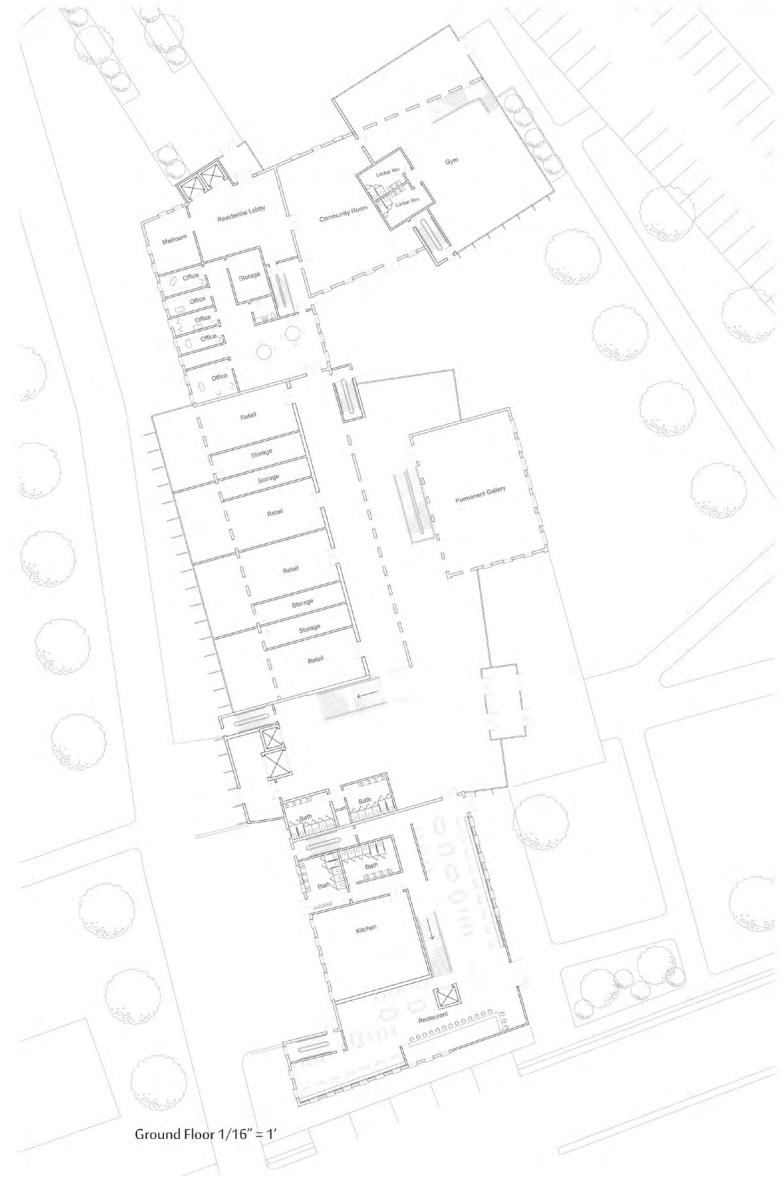
Site Section 1/32" = 1'



Means of Egress



Program Components

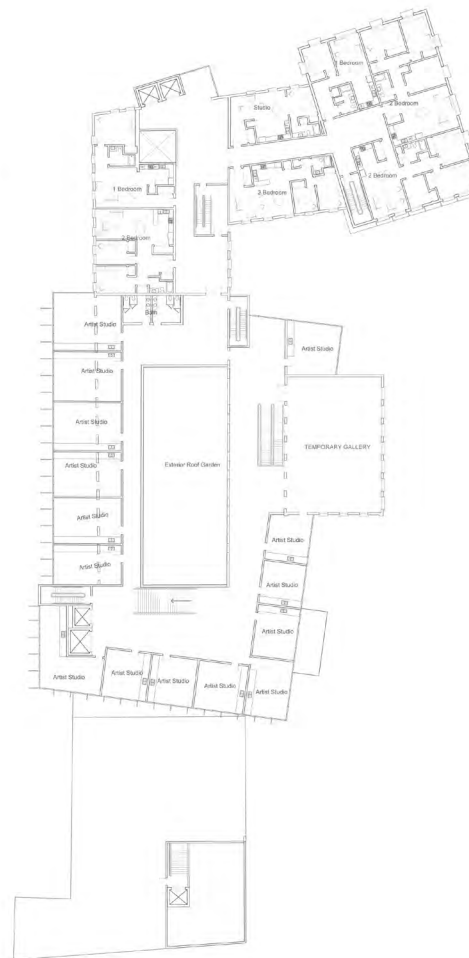


Ground Floor 1/16" = 1'

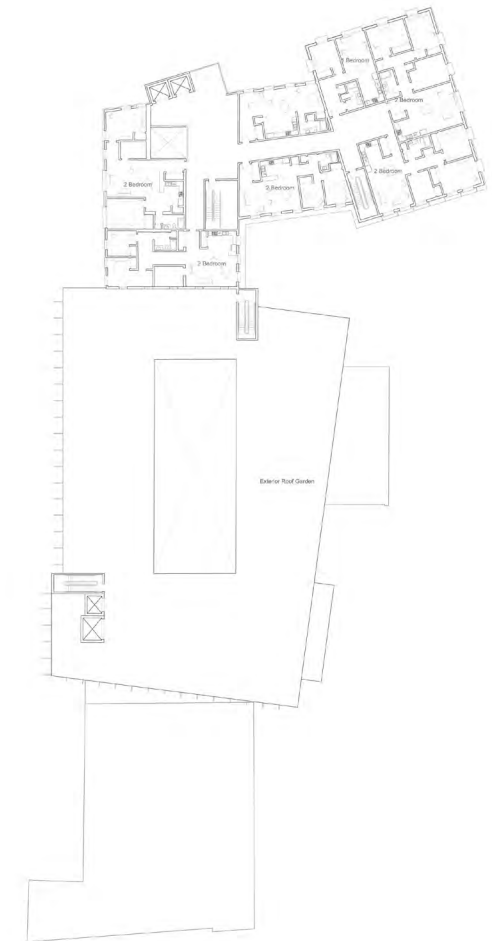


Basement Level 1/32" = 1'

Second Floor 1/16" = 1'



Third/Fourth Floor Plans 1/16" = 1'



Fifth/Sixth Floor Plans 1/16" = 1'



West Elevation 1/16" = 1'



East Elevation 1/16" = 1'



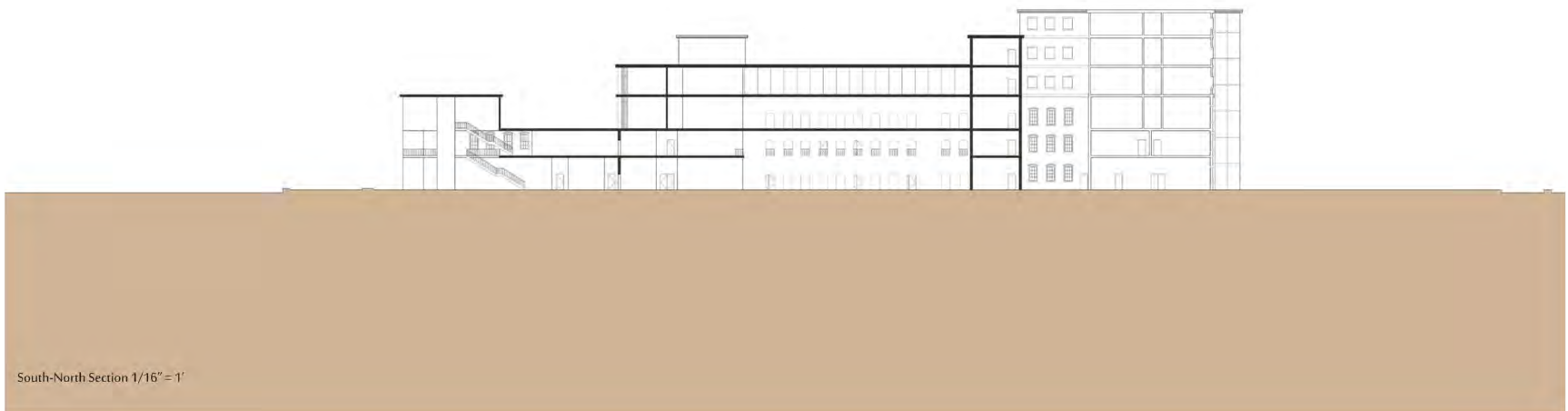
South Elevation 1/16" = 1'



North Elevation 1/16" = 1'



Render - Restaurant

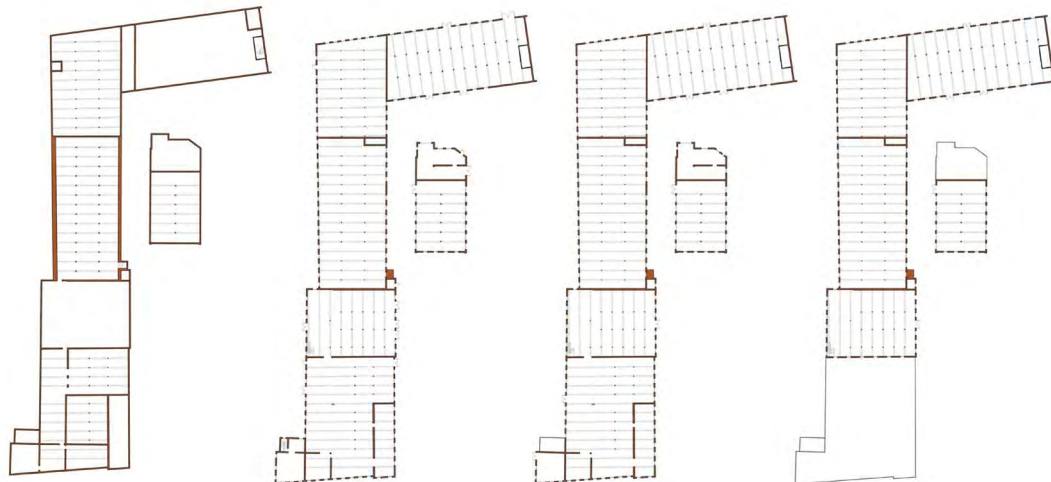




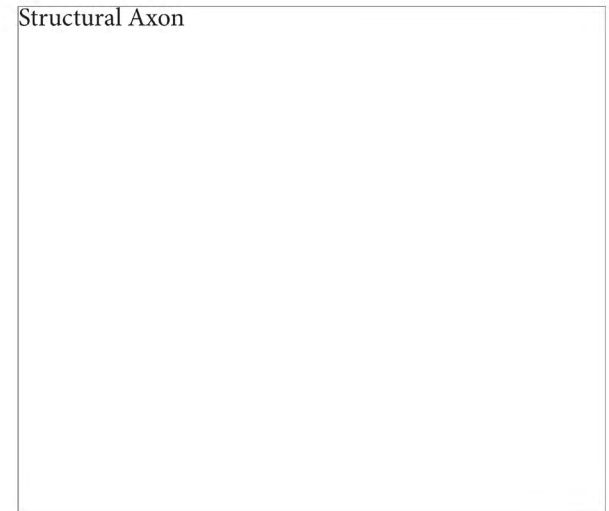
Structural Intervention 1/32" = 1'

■ Maintained/Existing Structure

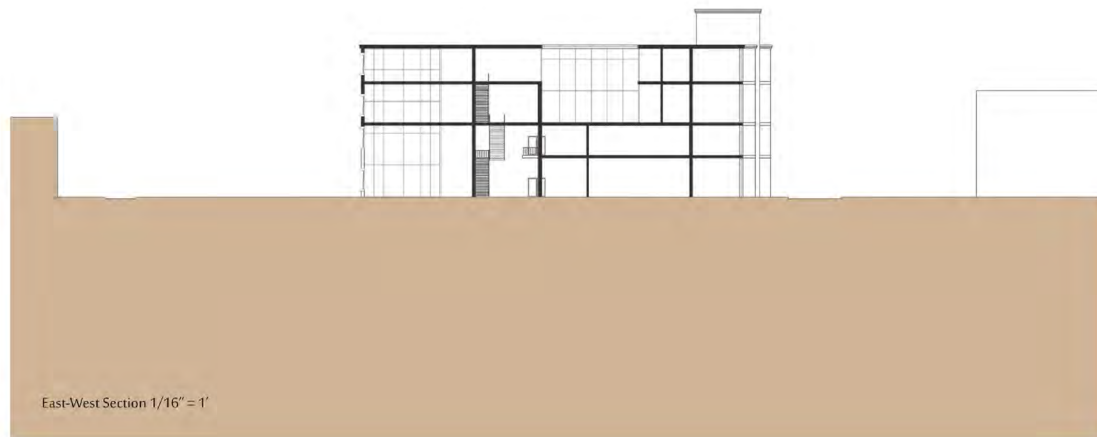
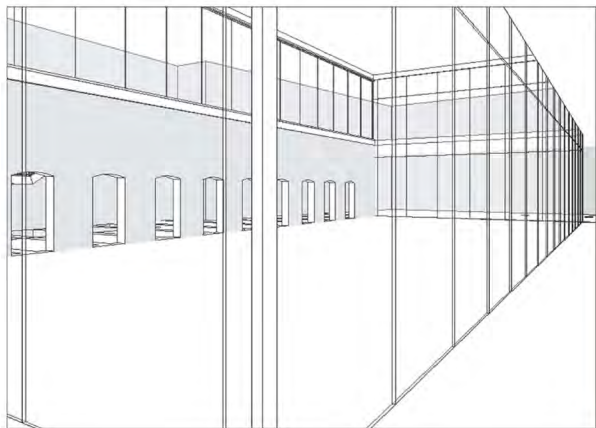
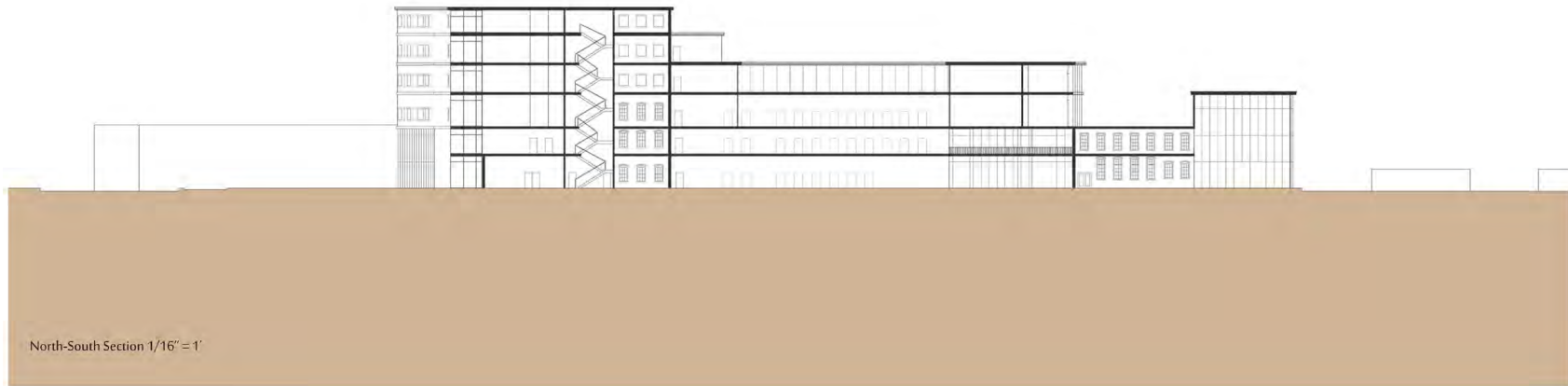
■ Removed Structure



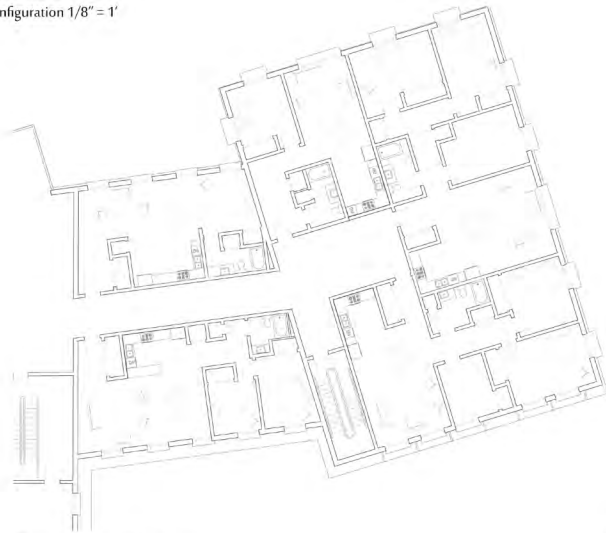
Structural Axon



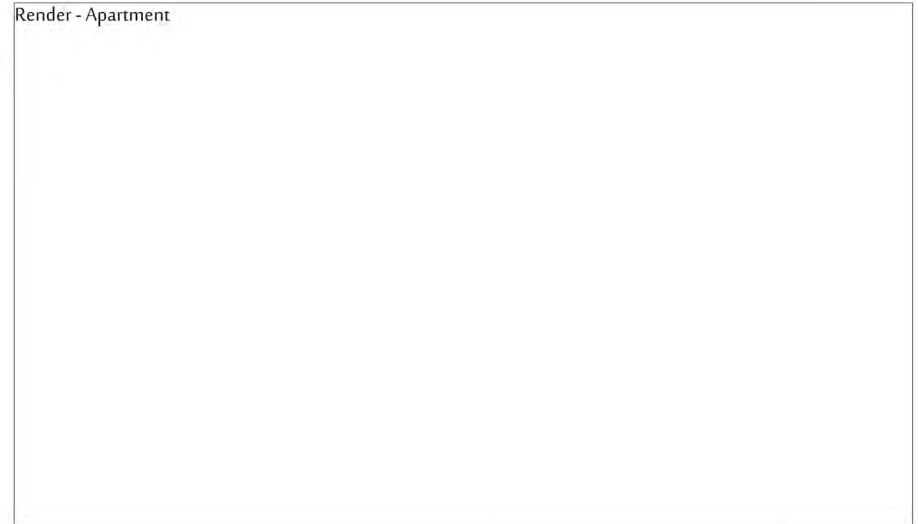
PRODUCED BY AN AUTHORISED EDUCATIONAL PRODUCT



Typical Residential Configuration 1/8" = 1'



Render - Apartment





Appendix VI *Final Presentation*

Final Presentation Panels

Union Wadding Artist Complex

The overall aim of the thesis is to explore the importance of art within the general framework of human existence, in addition to redeveloping and exploiting an untapped and valuable resource, the pre-existing and unused infrastructure lying idle throughout Pawtucket. Not only am I referring to art at an individual level, but in a community setting as well. By exercising the idea of the cooperative spirit and communal living in conjunction with art education, the Union Wadding Action Complex will demonstrate the importance of self-expression.



North Elevation 1/4" = 1'

1.

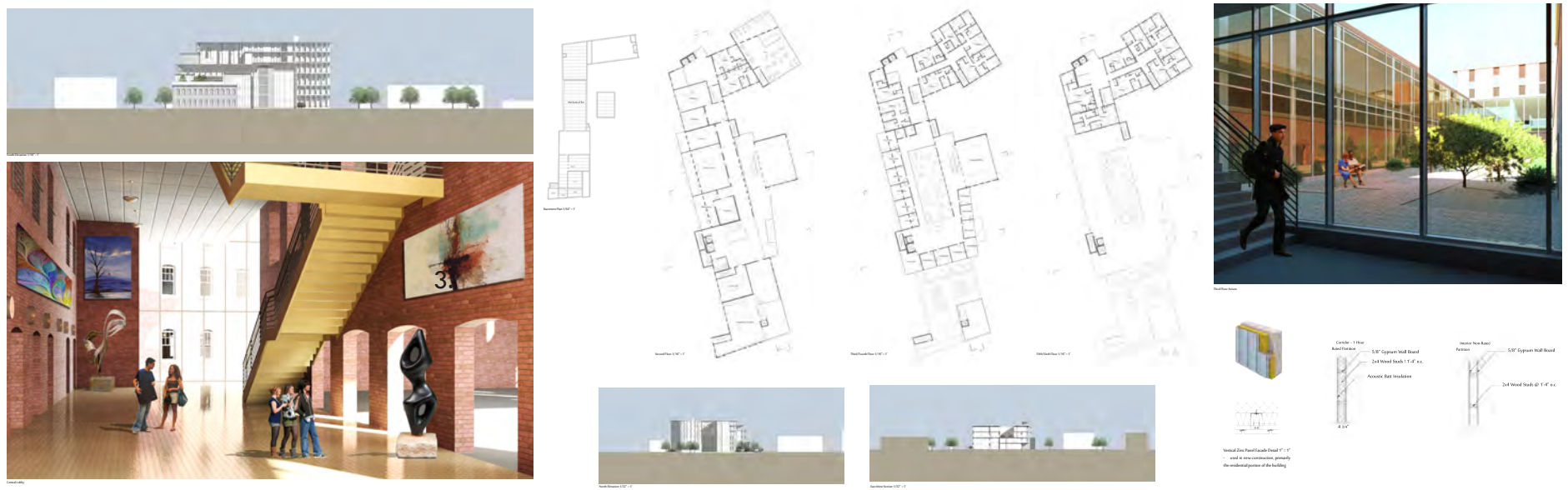
2.



3.



4.

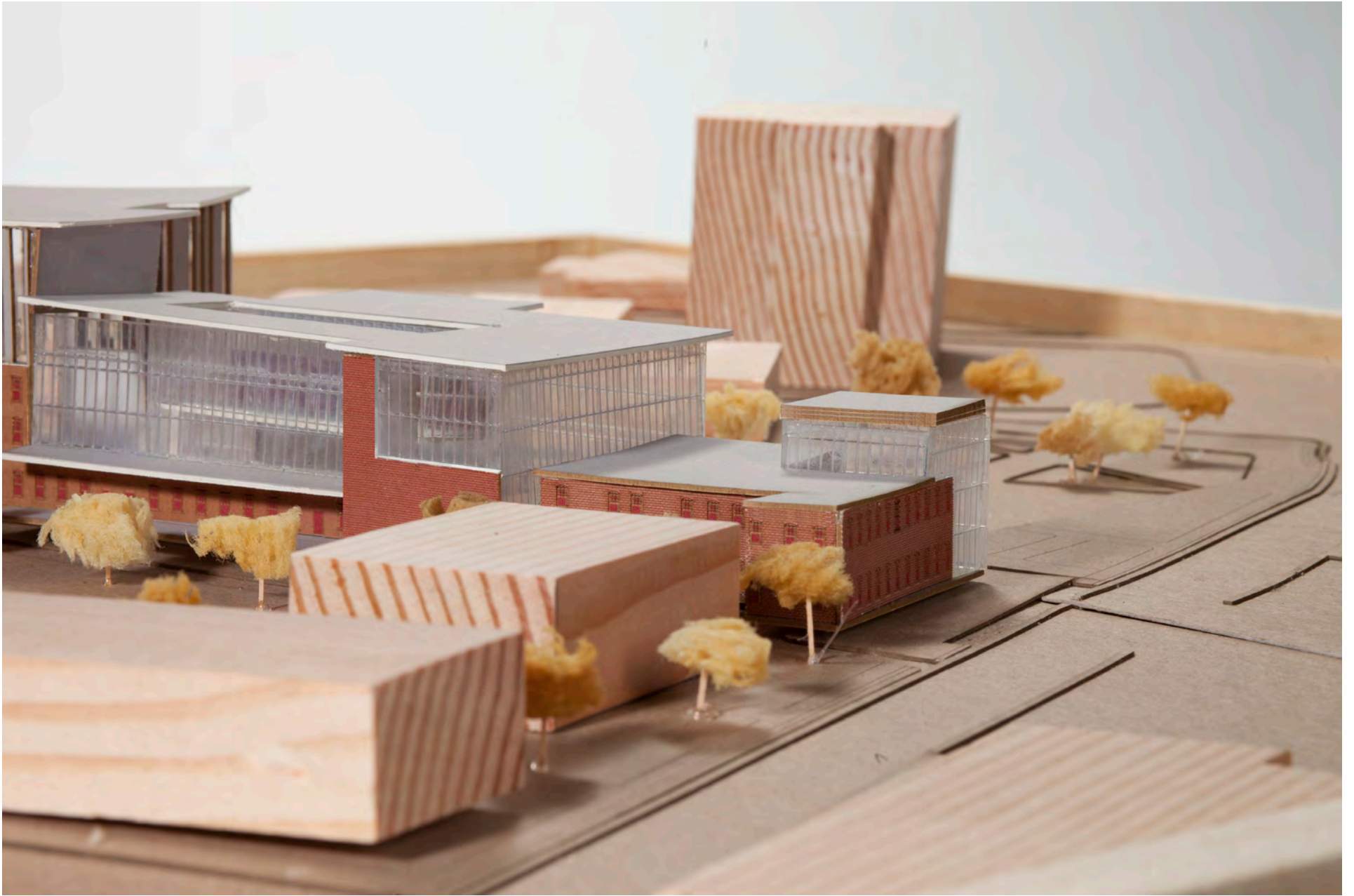




Appendix VII

Final Model Photos





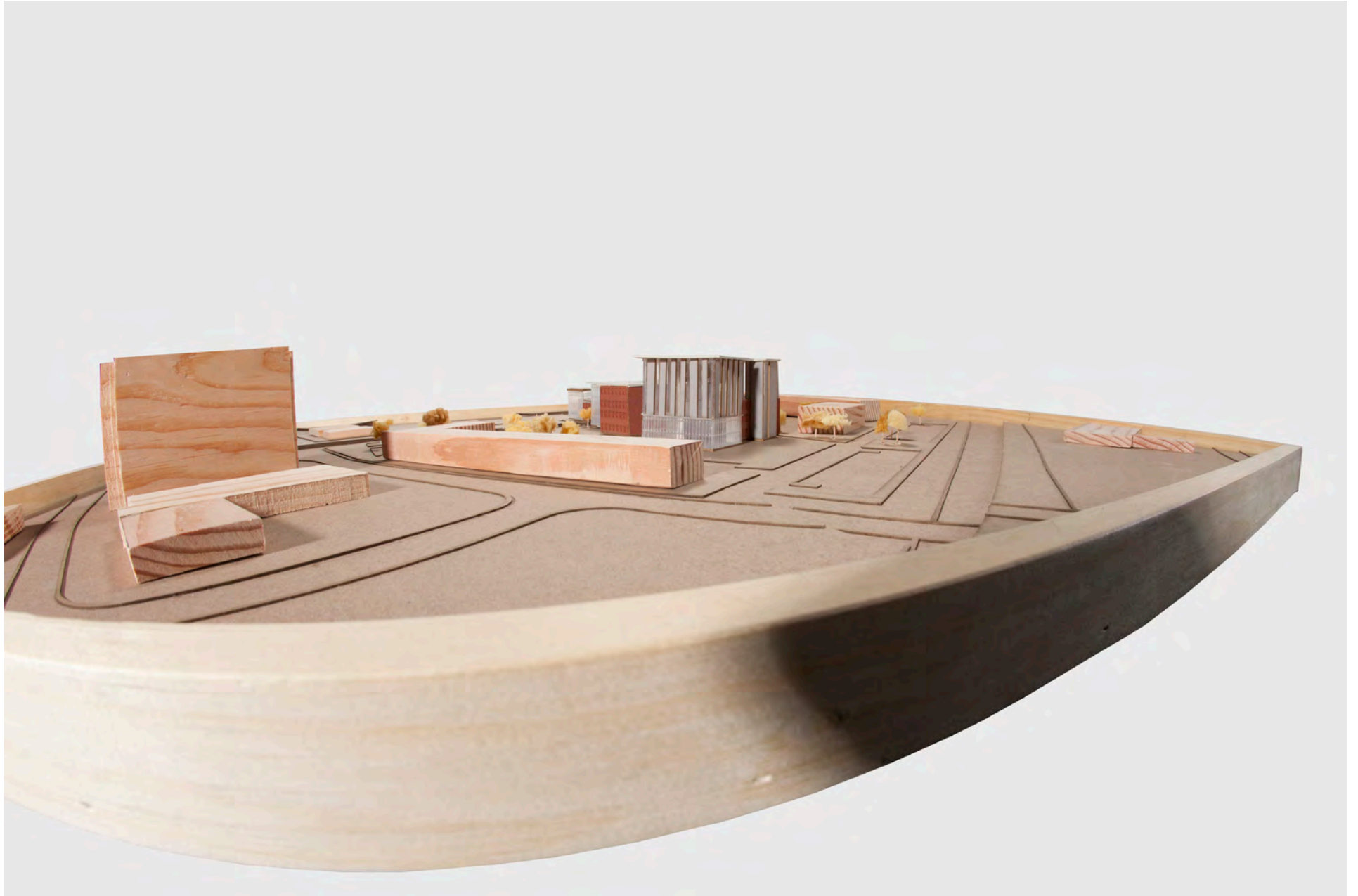












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