

ABSTRACT

Title of Document: Art and Architecture: New Life for Haverhill's Wingate Street Arts District

Elizabeth Alexandra Vetne
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Directed By: Senior Lecturer Courtney Miller-Bellairs,
Department of Architecture

Art and architecture have always maintained an important role in the shaping of public life and culture. Their definitions overlap and their reciprocal relationships are indisputable; the dichotomy between the two provides a strong basis for architectural design and urban renewal.

This thesis explores the design of an art facility in downtown Haverhill, Massachusetts. The design is used as a catalyst for further development of the existing Arts District and the rest of the downtown area. Through the adaptive reuse of a factory building, Haverhill's current inadequate Arts District will be rehabilitated by providing a flexible vehicle by which artists can live, work, display, and teach. The cyclical relationships of art and architecture will be used as a generator of public purpose and cultural interest, giving Haverhill a public purpose to its surroundings. The city, which once thrived in the shoe production industry, will be given a new industry: art.

**ART AND ARCHITECTURE: NEW LIFE FOR HAVERHILL'S WINGATE
STREET ARTS DISTRICT**

By

Elizabeth Alexandra Vetne

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Advisory Committee:
Senior Lecturer Courtney Miller-Bellairs, Chair
Professor Steven Hurtt
Professor Karl F. G. DuPuy
Associate Professor Brian Kelly

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This is dedicated to:

My mother, Joni
my sister, Katherine
and my father, John

for their constant support throughout my education
and their love and encouragement throughout my entire life.

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First and foremost, I would like to thank my thesis chair, Courtney Miller-Bellairs. Not only has she provided me with phenomenal advice throughout this project, but throughout my architectural education. As a teacher, advisor, and mentor, Courtney has been a hugely motivating force for me.

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introduction

In a broad sense, the fields of art and architecture maintain relationships, parallels, and connections. Throughout time, the two have overlapped in physical and metaphorical, literal and abstract ways. The reciprocity of influence on architecture by art, and on art by architecture, provides a strong basis for architectural design with a related program. While it would be impossible to attempt to investigate every connection between the two fields, some parallels lend themselves well to physical translation in built form.

In particular, an architectural environment can influence the process by which art is produced. Qualities of light, flexibility of environments, and the tectonic and material natures of a building can be influential in the process.

This thesis investigates the adaptive reuse of a factory building in downtown Haverhill, Massachusetts, an industrial town north of Boston, in an attempt to catalyze the renewal of the city and, more specifically, its currently lacking Arts District. In particular, the needs of artists and the arts district itself provide an exploration for the way architecture

can respond not only to the physical manifestations of art, but its requirements as an industry and its ability to develop an area.

The rehabilitation of the dilapidated Arts District in Haverhill, Massachusetts, will provide a step toward the renewal of an area with great potential. Once a thriving industrial town specializing in shoe production, Haverhill's buildings are now in various states of disrepair and abandonment, while the city itself claims almost no public importance to its surrounding area. By providing the city with a public attraction and new "industry," Haverhill can begin to thrive once again.

The building itself will be a development of the existing Arts District. In its current state, the district maintains a modest amount of galleries and other retail stores. In order for a community based on art to thrive, however, all elements of the industry must be present. An arts district should contain the means by which artists can live, work, display, and teach. More importantly, the public must be able to experience these elements. The proposed building, as a catalyst to the development of Wingate Street Arts District in downtown Haverhill, will be a vehicle by which artists may experience and utilize the four aforementioned elements and encourage public interaction with the process of making art.

With a program consisting of artists' live-work environments, gallery and studio spaces, teaching facilities, and, most important, a strong public interaction, the design

will be used as a vehicle by which the production of art can be witnessed by visitors and with which the community can interact. The building itself will house these activities, as well as become a gateway to the current Arts District, anchoring the district as a place and destination central to downtown Haverhill, Massachusetts.

Using the relationships between art and architecture to inform a design and generate public purpose, cultural interest, and community development, it is the intent that this thesis will provide an opportunity for the revitalization of downtown Haverhill, Massachusetts. By providing Haverhill with a new “industry” (art), the city can thrive once again.

art and architecture

Art and architecture have coexisted since their origins. The relationships and connections between the two are indisputable, as will be examined in this chapter. However, the fields have maintained and continue to maintain separation on a very basic level. According to Merriam-Webster:¹

ar·chi·tec·ture

\är-kə-tek-chər\

noun

: the art or science of building ; specifically : the art or practice of designing and building structures and especially habitable ones

art

\ärt\

noun

: the conscious use of skill and creative imagination especially in the production of aesthetic objects

The evidence of the separation of the fields lies in the basic definitions from a common source. Here, it is clear that architecture's function is to build habitable spaces, and art's function is to produce aesthetic objects. Although the word "art" is used in the definition of architecture, at no point does

it refer to aestheticism; rather, it uses the term in a way that represents practice or process.

The topic of architecture as related to beauty and aestheticism has been a topic of debate for some time. For instance, at a conference on Campus Design and Academic Architecture at Yale in 2007, architects and art historians discussed that, unlike in the past, 20th century “beauty” was excluded from serious discussion about art and architecture, and noted that in recent years, the topic is open for discussion once again.² At the university level, art education and architectural education overlap in study yet result in different degrees, criteria for curriculum, and usually reside in different departments. The separation is often clear; yet, upon closer examination, the influence of the fields on each other is also very clear.

Throughout time, the relationships between art and architecture have been evident in the literal and abstract, physical and metaphorical: a seemingly endless list of ways the two fields compliment one another and coexist as one. In the ancient Greek Erechtheon, art becomes integral in the structural integrity of the building with the use of sculptural caryatids. In the dome of the Florence Cathedral, art is integral in the surface ornamentation. In Matisse’s chapel in Vence and Charles Rennie Mackintosh’s graphic design and built form, the role of artist/architect coexists. In artists’ studios, inspiration can be achieved by the quality of light, views, and materiality of the space. Figure 1 illustrates some

of the many basic relationships between the two fields as discovered by proximity to the fields of study throughout an architectural education.



Figure 1
Examples of some of the basic relationships of art and architecture (flickr.com)

The role of art and architecture as generators of purpose, cultural interest, and social standards has been a trend throughout time. In ancient Rome, the most prominent and intricate buildings were placed in the forum, the center of the city. In modern times, many of the most important public destinations in cities are art museums.

It is interesting to note that at different points in time the purposes of art and architecture tended to respond to the social trends of the time, and their “clients” meandered between civic duty, religious agenda, cultural presence, social distinction, etc. For instance, in the ancient Roman house, art became a distinction between social class and a tool by which power was maintained among the elite; it was arranged within the architecture of the Roman House to accommodate these needs. Expensive, intricate paintings usually depicting power and control were placed in the tablinum, where the patron-client interactions took place.³ In later times, the church became the main patron of the arts, designating religion as the most important aspect of the time. The church was the most important element of the city and of social life; great artists such as Michaelangelo were commissioned by the church to create masterpieces depicting a religious agenda often integral to the design of a religious building, such as the surface architecture of the Sistine Chapel. In modern times, many of the purposes of the coexistence between art and architecture revolve around the city and placemaking strategies within the urban fabric,

such as with public art.

The relationships between art and architecture are seemingly infinite; the theoretical ideas about the connections from both an artistic point of view and an architectural point of view are many and vast. According to Jane Rendell: "It is neither desirable nor possible to sketch out an inclusive picture of contemporary art and architecture. To do so one would have to operate without any selection criteria."⁴ One field cannot exist without the other. Psychoanalyst and psychiatrist Jacques Lacan traces the very origins of both architecture and painting to the response to a void, around which architecture is organized and of which a painting represents an image.⁵

The layers by which the fields overlap go far deeper than the limitations of aesthetics and functionality, as insinuated in the previous dictionary definitions, and have continued over the years to the present day. In order to understand how art and architecture can coexist and inform one another to generate purpose for this specific thesis, certain theories will be explored in this chapter and further analyzed to accommodate for a site-specific architectural design.

While not all themes discussed in this chapter are used in the final design, an exploration of very different and specific instances of the overlap between art and architecture is necessary to narrow down the focus of the thesis. Here, the ways in which installation art, public art,

representational media by architects, and how certain elements of artistic and architectural designs influence each other are examined.

Movement and Space: Installation and Film

Three-dimensional space can be inhabited, set in motion, and experienced by the human body. In Giuliana Bruno's book, *Public Intimacy: Architecture and the Visual Arts*, a connection between the explorations of three-dimensional space, which is inherent in architecture, is made with two types of modern art: film and installation. While film is essentially a two-dimensional depiction of three-dimensional spaces, the added dimension of time makes the experience of the three-dimensional space possible by the viewer. In much the same way a film spectator views three-dimensional space, a person experiencing an art installation moves along an "architecturally produced narrative" in an art form that, like film, engages the viewer in a kinesthetic process (Bruno, pg. 28).

Through this commonality of three-dimensional and kinesthetic experience, it is not surprising that many of today's contemporary art installations utilize film directly in their compositions. Jane and Louise Wilson's *A Free*

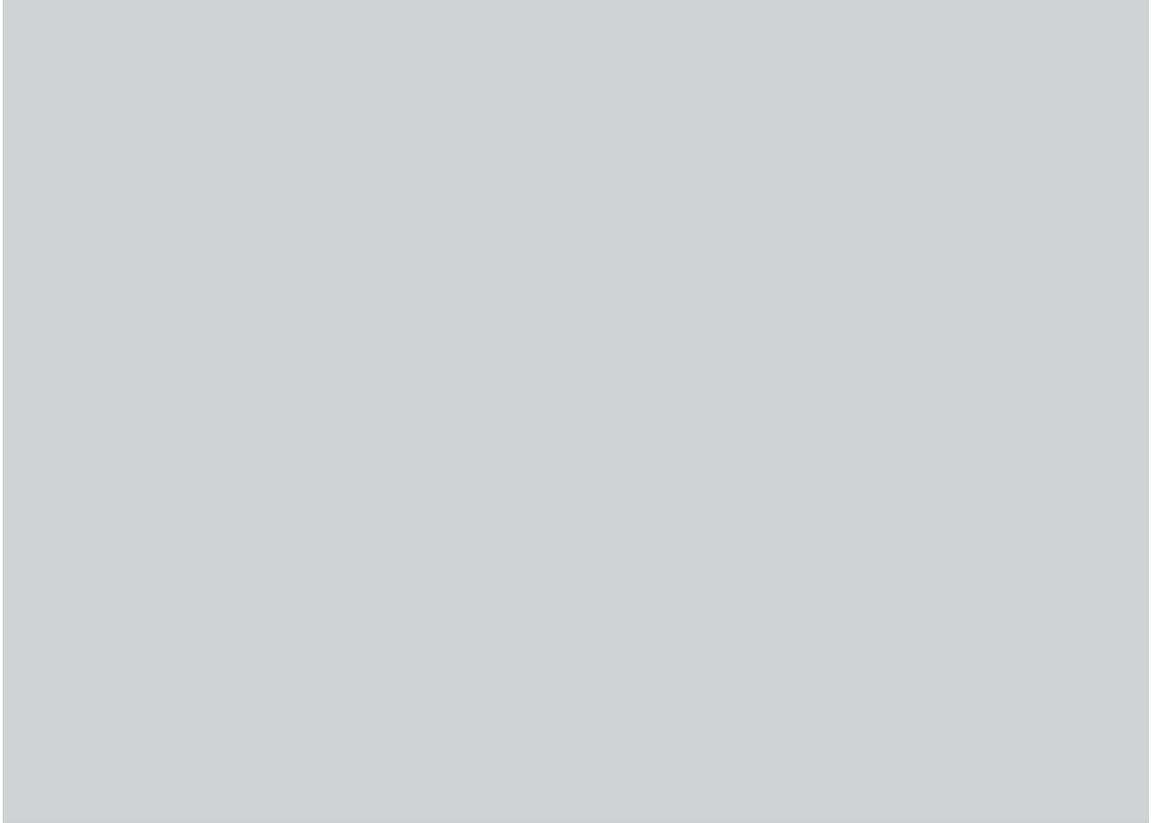


Figure 2

A Free and Anonymous Monument: axonometric drawing (Bruno, pg.61)

and Anonymous Monument, (Figures 2-5) an installation consisting of multiple screens depicting moving images, contains layers of spatial information within its own architectural form and its depictions of architecture in the media of film on its screens. The monument is dedicated to the memory of Victor Pasmore, an artist who has made a large contribution to modern art, and the process by which humans interact with and become the art through presence relates to Pasmore's artistic ideal of the viewer as activator



Figure 3
A Free and Anonymous Monument (Bruno, pg.51)

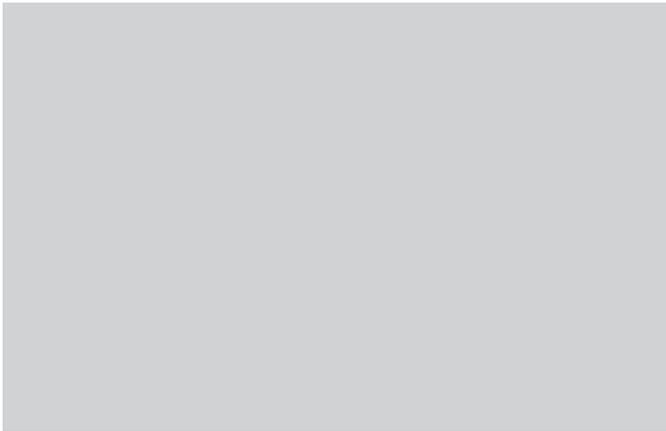


Figure 4
A Free and Anonymous Monument: human activation 1 (Bruno, pg.52)

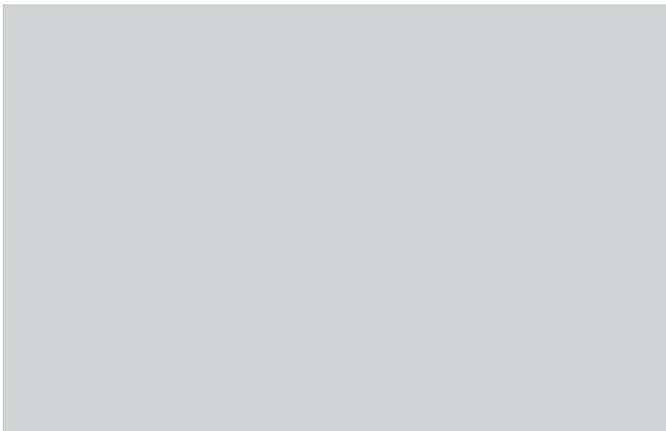


Figure 5
A Free and Anonymous Monument: human activation 2 (Bruno, pg.50)

of the artwork. (Bruno, page 47).

A Free and Anonymous Monument is a prime example of art as related to movement through space, which architecture, in all instances, achieves. The incorporation of layers of spatial information through physical planes defining entry, promenade, and egress, as well as through the media of film, bridges the three disciplines- architecture, film, and installation- to create a layered kinesthetic experience in three-dimensional space.

In relation to this thesis, the concepts of circulation through and display of art within *A Free and Anonymous Monument* are relevant. Public interaction within the programmatic categories of the project (live, work, display, and teach) occurs when visitors and residents activate the spaces and experience a variety of programmatic spaces as they circulate through the building.

Public Art

One of the core developments in any real architectural design is the concept of response to site. In all cases, a building is constructed within a specific area, and existing formal, climatic, and contextual issues are analyzed and utilized within the building design. Such is one approach to the practice of art: in Jane Rendell's book, *Art and*

Architecture: A Place Between, the notion of “critical spatial practice” in terms of art and architecture is examined.

Site-specific art, or public art, relates on an architectural level to conceptual design and urban intervention. Rendell emphasizes a very tangible notion that there is a place between art and architecture that resides in the spatial, temporal, and social aspects of both, and can be defined by public, site-specific art. Furthermore, her studies titled “between now and then” investigate the specific interventions into existing contexts which relate to past and present.

Rachel Whiteread is an artist who deals largely with public art and the exploration of the negative space in architectural compositions. She specializes in making casts of what is not there rather than what is there; in other words, making something new and tangible from the nothingness of something else. In her first public work, “House,” (Figure 6) Whiteread cast the spaces created by a Victorian house in east London with concrete, and in a work for the Public Art Fund of New York, she created “Water Tower,” a transparent resin cast of the interior of a wooden water tower. (Rendell, page 129) While many of her projects are not about site specificity, her endeavors are beyond a doubt architectural, and the situations in which they are placed inevitably create a dialogue with their surroundings.

One project in particular, however, maintains a strong sense of site-specificity in the same architectural style for which she is famous, and has a strong dialogue between old

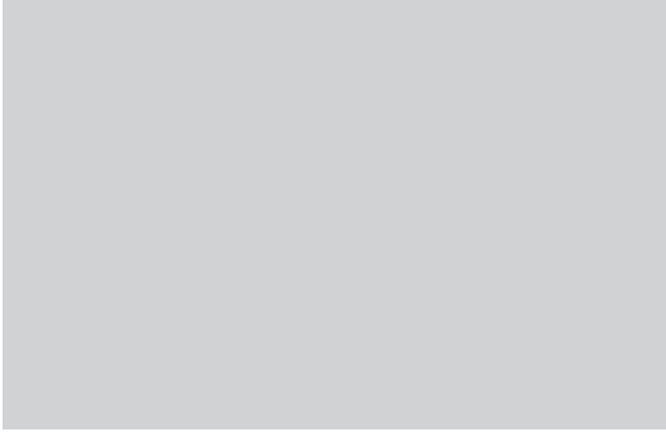


Figure 6
Rachel Whiteread, "House" (Flickr.com)

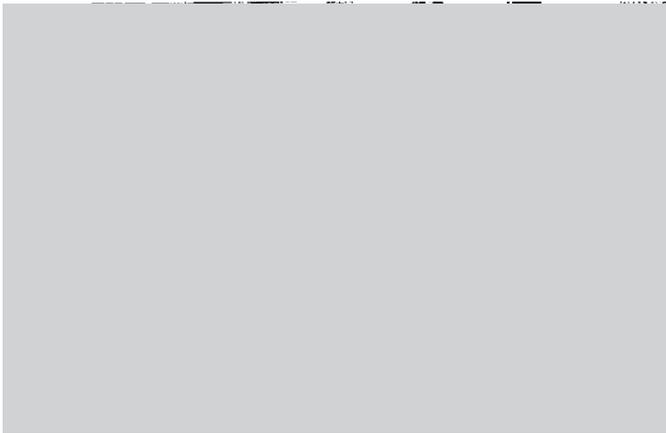


Figure 7
Rachel Whiteread, Holocaust Memorial (Rendell, pg. 131)

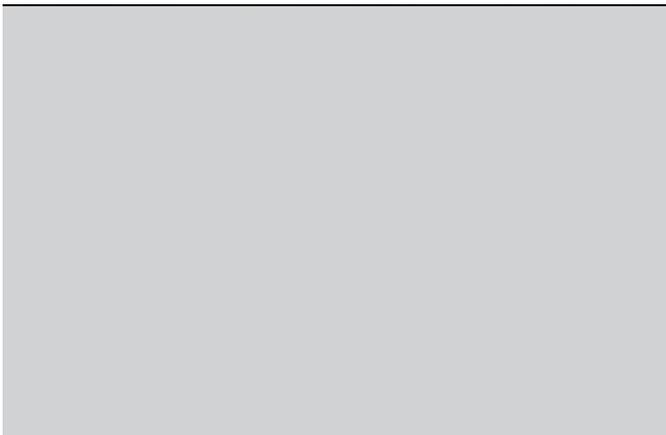


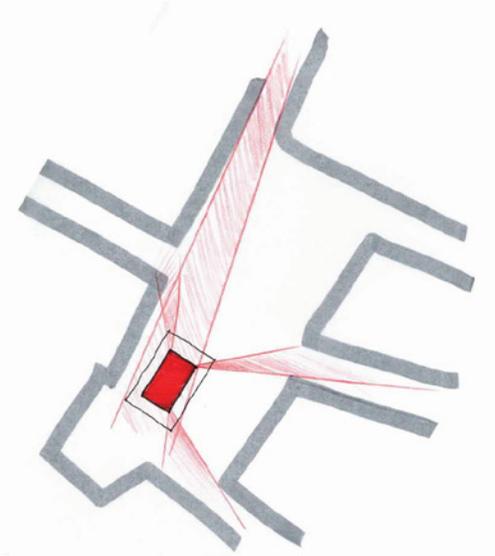
Figure 8
Richard Serra, "Fulcrum" (Flickr.com)

and new in terms of place. Her winning competition entry for the Holocaust Memorial (Figure 7) in the Jüdenplatz, Vienna, pays tribute to the ways in which “Jewish people have been made absent” throughout history, whether through persecution, mass suicide (as is what happened at the Jüdenplatz in the fifteenth century), or by acts of “historical amnesia.” (Rendell, page 129)

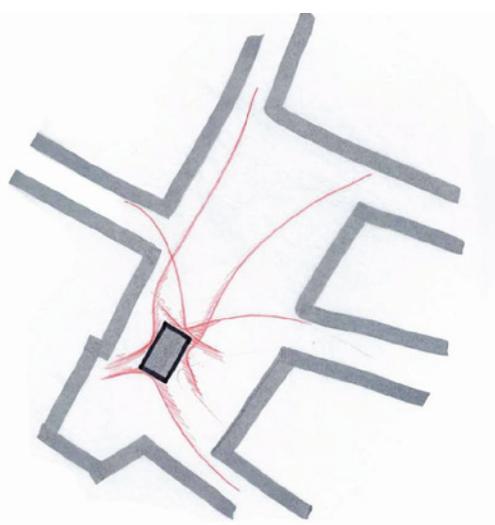
The solidity of Whiteread’s cast library at the Holocaust Memorial is not only a metaphor to the persecution of Jews throughout history but also an architectural response to the situation. The memorial, with its solid doors that won’t open and bookshelves of reverse bindings, invite onlookers but don’t provide entry inside, information about the “books,” or any sort of closure to the movement. It inhibits circulation rather than facilitates it and contrasts harshly with its baroque surroundings. Said one on-looking Jewish woman in a London magazine article, “It offers no consolation, and rightly so.”⁶ The diagrams in Illustration 1 represent the ways in which the memorial constricts circulation, is visible from most corridors surrounding it, and, whether the artist meant to or not, becomes a representation of a space directly adjacent to the Jüdenplatz. It is not the intention of this exploration to compare the realm of the history of the holocaust to any history Haverhill might have to offer; instead, it is a means to explore a way by which public art can relate to the history of an area in general terms. This thesis will inherently utilize



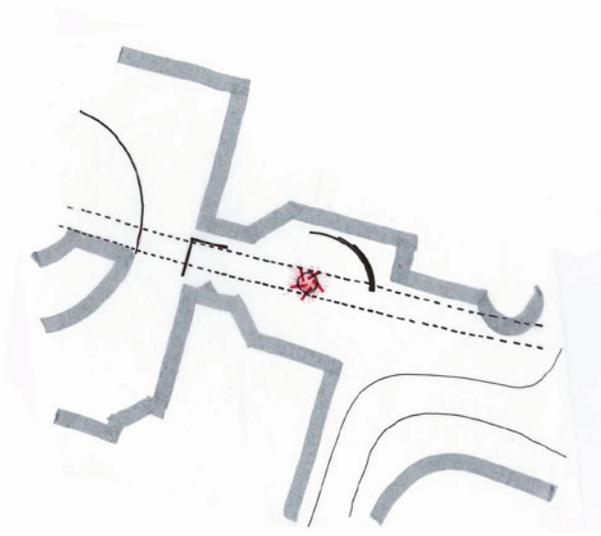
placement and void



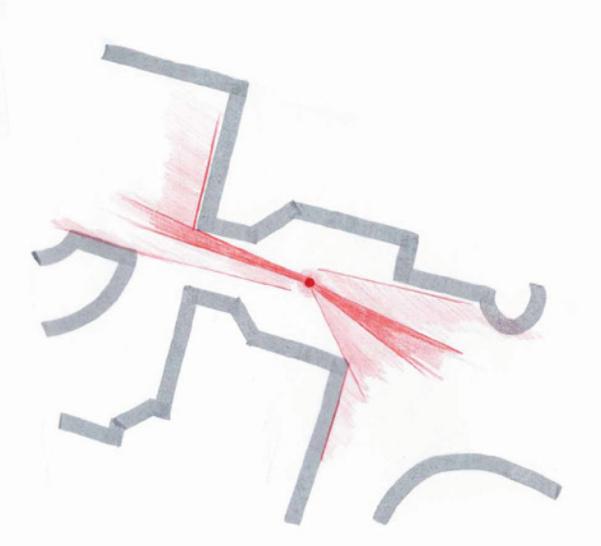
views from streets



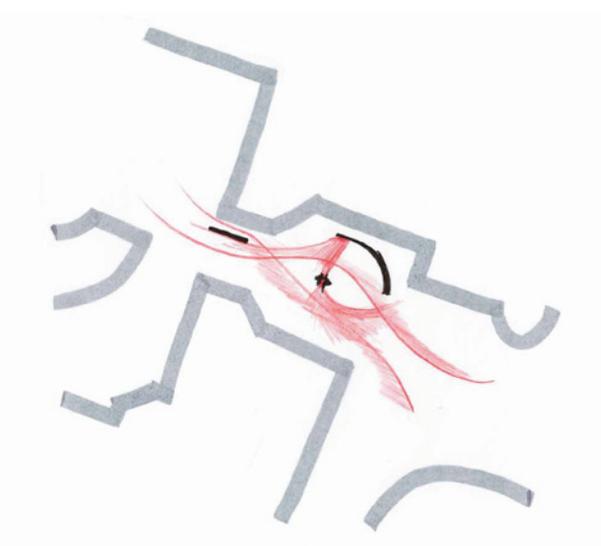
circulation around



alignment and axis



circulation through



circulation around

historical settings, both on the urban scale and building scale, because it is an adaptive reuse project within a historic city.

In contrast, Richard Serra's "Fulcrum" in London facilitates circulation between two urban spaces rather than constricts it. Rather than make literal representations of built environments, Serra is famous for responding to a site in a conspicuous, often controversial manner. The sculpture "Fulcrum" is functional and penetrable, and literally acts as a node between a main street space and a place of public transit. The diagrams in illustration 2 show, conversely to those of the Holocaust memorial, how his site specificity facilitates to human movement, filtration, and path.

Site-specificity is one way in which art and architecture begin to overlap. Embedded in this notion are many other categories of interaction, which are described by Rendell as "spatial, temporal, and social."

In the interest of this thesis, public art will be studied in a way that relates to human interaction and the dichotomy between old and new. While some urban renewal projects use the placement of art within public spaces (sculptures, etc.) as a means by which to add interest to a public space, this thesis takes the ideas of public art and relates them to the program of the building. The ideas explored in Whiteread's Holocaust Memorial and Serra's "Fulcrum"- public circulation, prominence within a site, and integration of a historical setting- all play a role in the development of

the building as a public entity within the fabric of downtown, Haverhill.

Drawings by Architects

For as long as architecture has been a trade and craft, architects have used visual imagery to aid in the design process. Whether these images are technical construction documents, sketches, or analyses, architects have long been able to visualize and conceptualize in two dimensions. Buildings are complex entities, and require ways in which an idea can be tested without experimenting with full-scale constructions, which would be economically unfeasible and is reserved only for the finished product. Without the use of two-dimensional visual aids, the complexity of most three-dimensional built forms would be unimaginable by the average human mind. Thus, two-dimensional representation of architectural ideas has played a vital role in the design process by architects.

Visual representation becomes so important in architectural design that it is easy to assume that the final design is explored, manipulated, and more easily understood by the architect through the use of two-dimensional exploration. All architects know that the design at conception is, more often than not, completely different

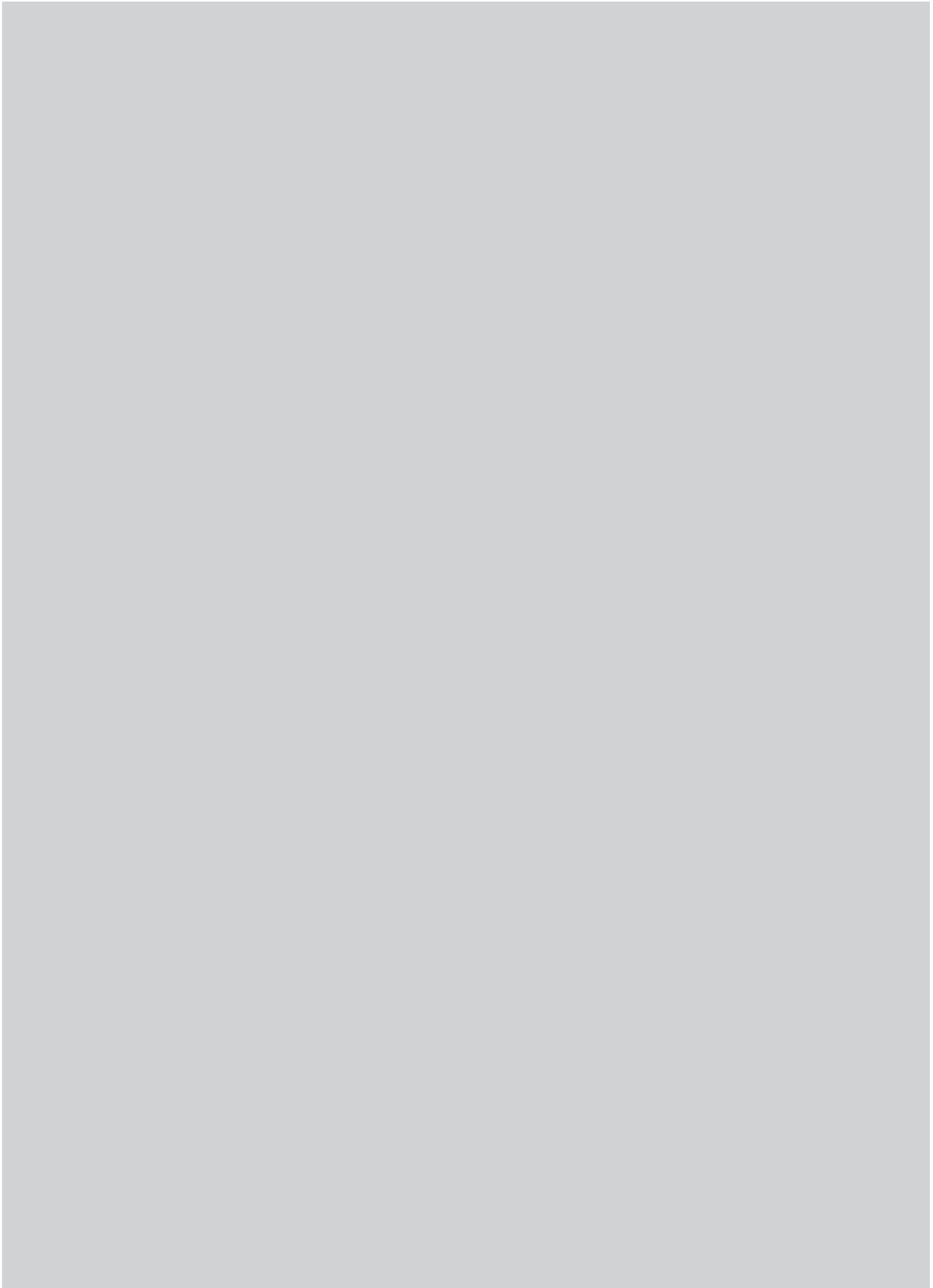


Figure 9
Drawings by architects over time (Smith)

than design at completion. Most of the decisions by which the design shifts are explored in schematic development by drawing, sketching, or otherwise visually representing ideas. According to Wolfgang Meisenheimer, as quoted in Kendra Shank Smith's *Architects' Drawings*, "...the question arises of whether a new, different understanding of architectural drawing, alludes to a new and different understanding of architecture." (Smith, pg. 1) It is the contention that architectural design is achieved through a process, and this process is achieved significantly through two-dimensional representation.

It is evident that most of the architectural drawings that exist to be studied are from the Renaissance onward, partly due to mass production of paper at this time. In Smith's book, the author examines well-known architects' drawings from the Renaissance until contemporary times, relating trends of the time and stylistic devices to each representation. Using drawing as a method of process in architectural design will be integral in the process of this thesis. Within the field of representational media as an architectural study lies the potential to surpass communication and create a deeper understanding of architecture. While it may be safe to say that all this is true for all theses, this project will use different types of media as a method of exploration throughout the design process.

Aesthetic Commonalities between Art and Architecture

The previous section of this chapter looked at examples of two-dimensional art by architects. While the process by which architects design is not by any means limited to two-dimensions (the use of physical and digital models, for one thing, are just as important to the design process as drawings), it is reasonable to narrow down the category of focus to mainly two-dimensional representation for the purpose of this examination.

Within two-dimensional art, mainly painting, there are four main components. Almost all paintings utilize the following elements: light, color, and texture, and composition. While on one hand art can be used as a design process tool to directly inform an architectural design, it is interesting to compare the physical manifestations in these four categories as related to both art and architecture. It becomes clear that, while these four categories are very broad, the two subjects of art and architecture are bridged together through basic aesthetic principles.

This section examines some commonalities between artists and architects who use extensively one or more of the four aforementioned categories. It is usually not difficult to ascertain the ways in which light, color, texture, and composition relate to a painting, for they are confined to a plane and do not add the extra third dimension as architecture does. However, there remain similarities

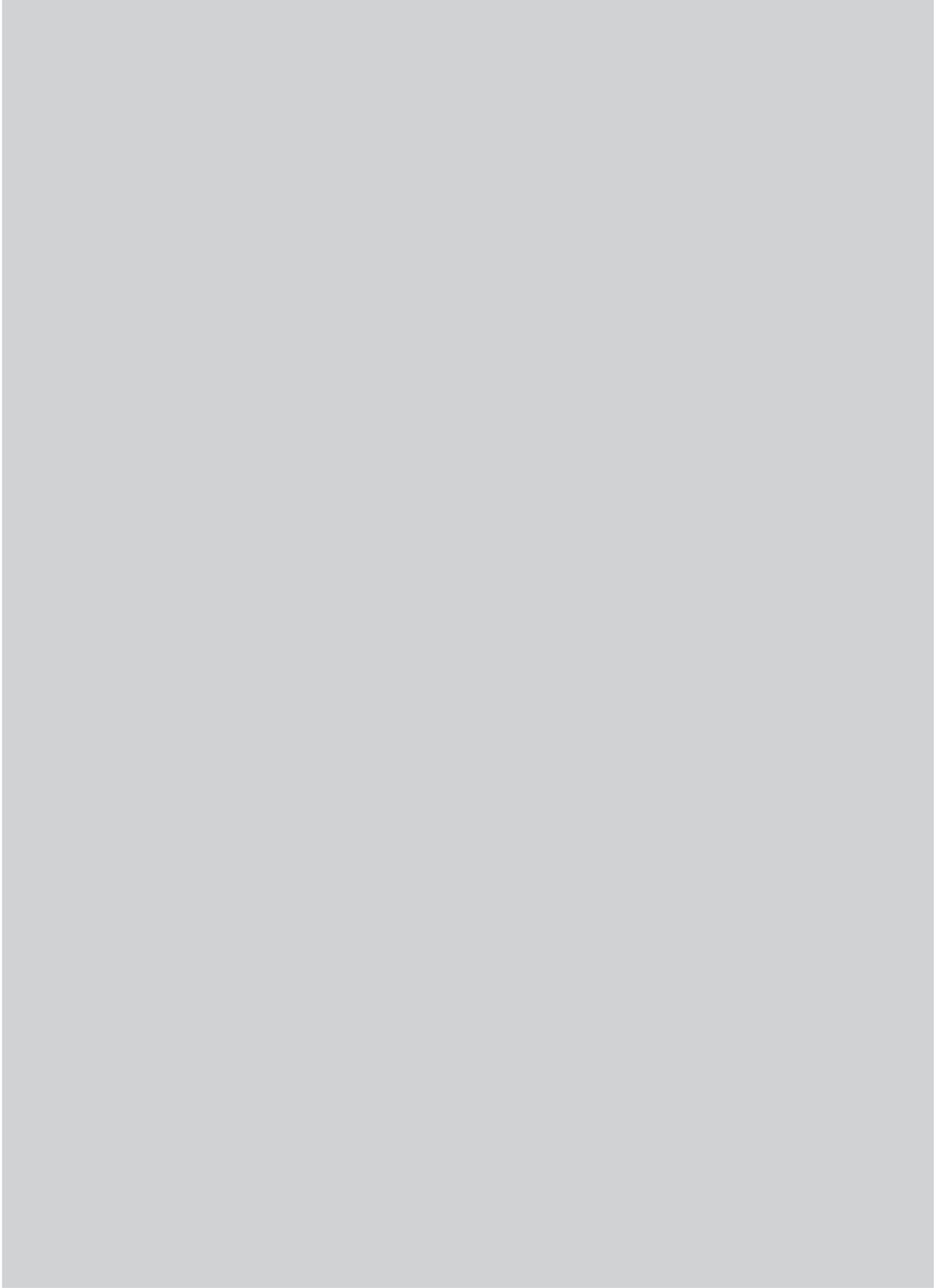


Figure 10
Comparisons of art and architectural qualities as related to light, color, texture, and composition
(flickr.com)

between the categories in art and architecture. In particular, the first three- light, color, and texture- are evident in materiality and surface treatment of architectural designs. Figure 10 displays examples of light, color, texture, and composition used in both art and architecture.

Light is used in Carravaggio's *The Calling of Saint Matthew* to highlight important figures in the image. Likewise, Steven Holl uses light to highlight many of his buildings in the daytime and nighttime. In Renior's *Two Sisters* painting, the color red is used to define observational movement of the image; the eye automatically moves first to the large hat, down to the small hat, and finally to the fruit basket. In Luis Barragan's architecture, light and color often come into play in denoting a certain path of circulation. Here, the color red is used to symbolize a destination along a promenade.

The category of texture provides great interest in the unique quality of paintings and buildings. In an oil painting, texture is used to create a one-of-a-kind piece; while a print of an oil painting can be fabricated, it will be flat, and thus not provide for the dynamic situations created by shadows. The opportunity for uniqueness in, for instance, an adaptive reuse project, (seen here, the Mill City Museum by MS&R) arises in the preservation of history and the juxtaposition of old and new or rough and shiny textures. The "history" part of the building remains in the area partially destroyed by fire, and the new addition is placed next to it, enhancing the quality of adaptive reuse through attention to texture and juxtaposition of past

and present.

The notions of light, color, and texture will play a large role in determining the materiality of the design and in incorporating a sense of signage and public prominence. Furthermore, because the structure of the existing building is a grid, lessons can be learned from two-dimensional and three-dimensional grid composed art, such as Sol Lewitt's sculptures and Joseph Alber's *Homage to Squares* series.

Art and Architecture: Thesis Design Intentions

This thesis seeks to create a public building as an extension to the current arts district, which will house the elements that make up an art industry. While there are countless ways in which art and architecture overlap, a few of which are investigated in this chapter, this project will focus mainly on the process of art production, and the ways in which architecture can accommodate for it and generate public purpose to an underutilized area.

In the *Movement and Space* section of this chapter, the notions of display and human activation of spaces were explored. In this thesis, several formal approaches to adaptive reuse will be explored; that is, leaving the building as pure and untouched as possible, intervening aggressively to largely manipulate the existing conditions, and any level in-between these categories. However, it is not predicted

that the building will remain unmanipulated; rather, it will be added onto past its current boundaries or subtracted from in some manner. Through the examination of architectural concepts as installation art, one can begin to imagine an extension of the building as an application to an existing shell of architecture as an art installation in itself, particularly if the process by which a person experiences this movement is critically evaluated. In this sense, an architectural promenade may be achieved through the use of extension to the building. In Jane and Louise Wilson's *A Free and Anonymous Movement*, the architectural concepts of display and circulation are examined. As their installation art displays and pays homage to Victor Pasmore, and as the light and transparency of the design helps human movement through the space to activate it, so can this thesis incorporate extension to the building as an opportunity of display and promenade. The use of these properties as seen in this example of installation art will be integral in the design of additions to the existing structure of the building, as well as defining a promenade that will aid in the kinesthetic process of experiencing the process of art design.

Public art refers to art that has been placed permanently in the public domain, usually outdoors, for the specific purposes of accessibility to all and response to site.⁷ It seems that, in the way a piece of art can inspire public interaction and urban renewal, a building with the purpose of exposing the art industry can also encourage the same

interaction and renewal. This thesis takes the idea of public art and applies it to the program of a building, allowing the process by which art is made to be experienced by visitors and creating a public destination as a catalyst for urban renewal. As explored in this chapter, site specificity, as related to architecture, also relates to public art. Within this lies the notion of spacial, temporal, and social aspects of art and architecture, and site-specificity can relate not only to human movement and physical context but historical context as well. In both cases examined, Serra's "Fulcrum" and Whiteread's Holocaust memorial, circulation of human movement is incorporated and, in the latter, historical context is taken into consideration. Such will be the case in this thesis, with the definition of a clear public promenade and the inherent historic implications of adaptively reusing an old warehouse building. The history of the building will be evident throughout this promenade, and the industrious role of Haverhill will be reflected in the creation of a new industry-art in place of shoe-making.

In the *Drawings by Architects* section, it became clear that learning from making is a theme in all architectural design. It can be stated that using media as a process within the education of an architect is perhaps more important than an architect in the profession, because the goal in the former is to learn rather than to have a cohesive, tangible answer to a problem, as is the case in the latter. It is important, therefore, for a student of architecture to

explore a design process through experimentation in making and, within this thesis, it is conducive to learn about art by making it as a process of the design. A variety of media will be explored, and lessons will be learned from different textures, materiality, and properties of such media. While Kendra Shank Smith focuses only on two-dimensional representation as a design process, this project will utilize experimentation in both two- and three- dimensions.

Finally, the ideas about light, color, texture, and composition will play a role in developing the nature of the design. The materiality of new appendages to the building, the placement of new material against old material, the importance of the signage of the building during the day and night, and the contrast between old and new will be important in denoting the building as important within the context and critical in providing a public destination for Haverhill, Massachusetts.

existing conditions

This thesis explores the existing conditions of Haverhill, Massachusetts on three levels: the Washington Street Shoe District (the immediate downtown area) the Wingate Street Arts District, and the building itself at 24 Essex Street.

Haverhill is located approximately 30 miles north of Boston and at the end of one of the Boston commuter rail lines, as seen in illustration 3. Once a thriving city in the production of shoe fabrication, Haverhill's buildings are now in various states of disrepair and abandonment, while the area itself claims almost no public purpose to its surroundings. The potential is vast, with its close proximity to Boston and a waterfront, yet development is slow.

This thesis aims to provide a catalyst for renewal of the area by adaptively reusing a building in the center of the city. The building will be programmed as an extension to the adjacent Arts District, and by further developing the Arts District, the renewal of Haverhill as a whole will ensue. By providing Haverhill with a public purpose through the creation of a new industry, Haverhill's development will

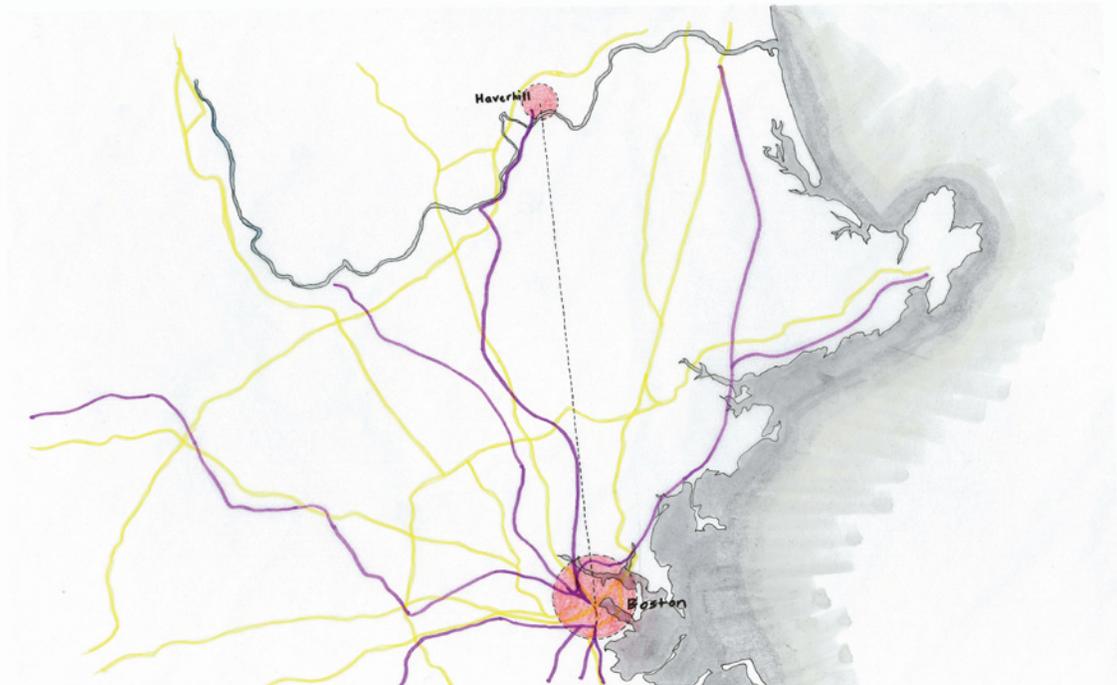


Illustration 3
Proximity of Haverhill to Boston

unfold in phases on three levels: that of the building, that of the arts district, and that of the city as a whole.

The Washington Street Shoe District

Haverhill as a whole is quite large, however, this thesis focuses only on the relatively small downtown area, (illustrations 4 and 5) called the Washington Street Shoe District (thus named for the historical fabrication of shoes

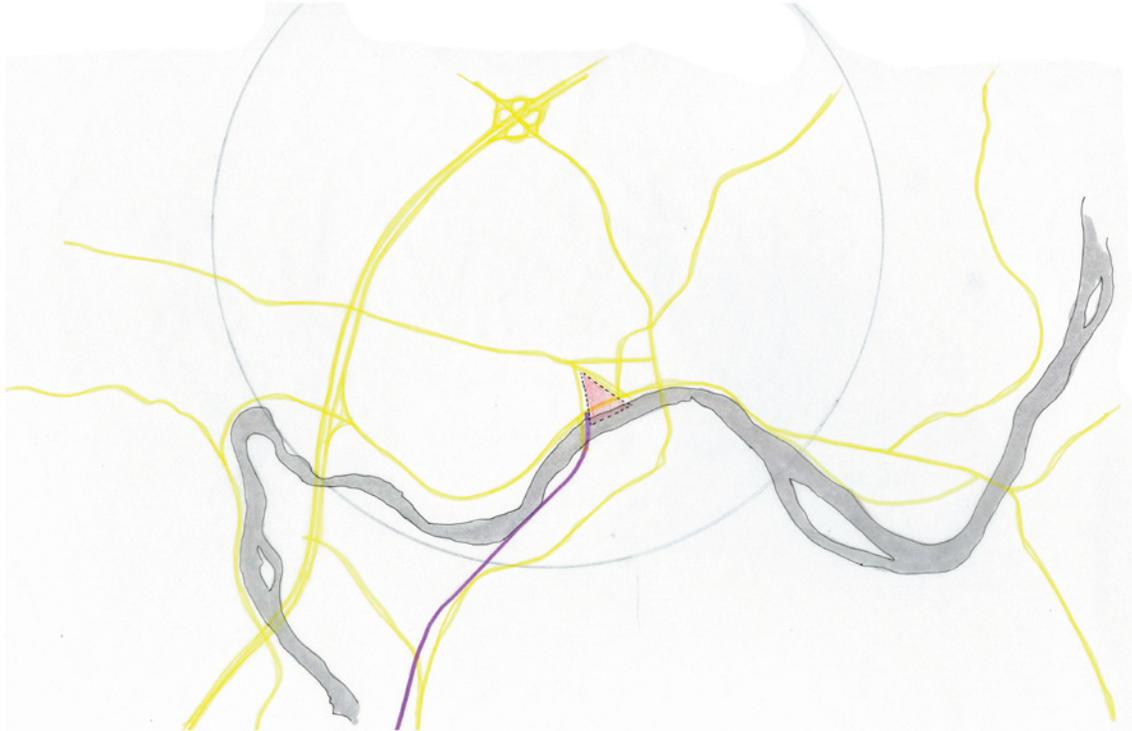


Illustration 4
Location of the Washington Street Shoe District

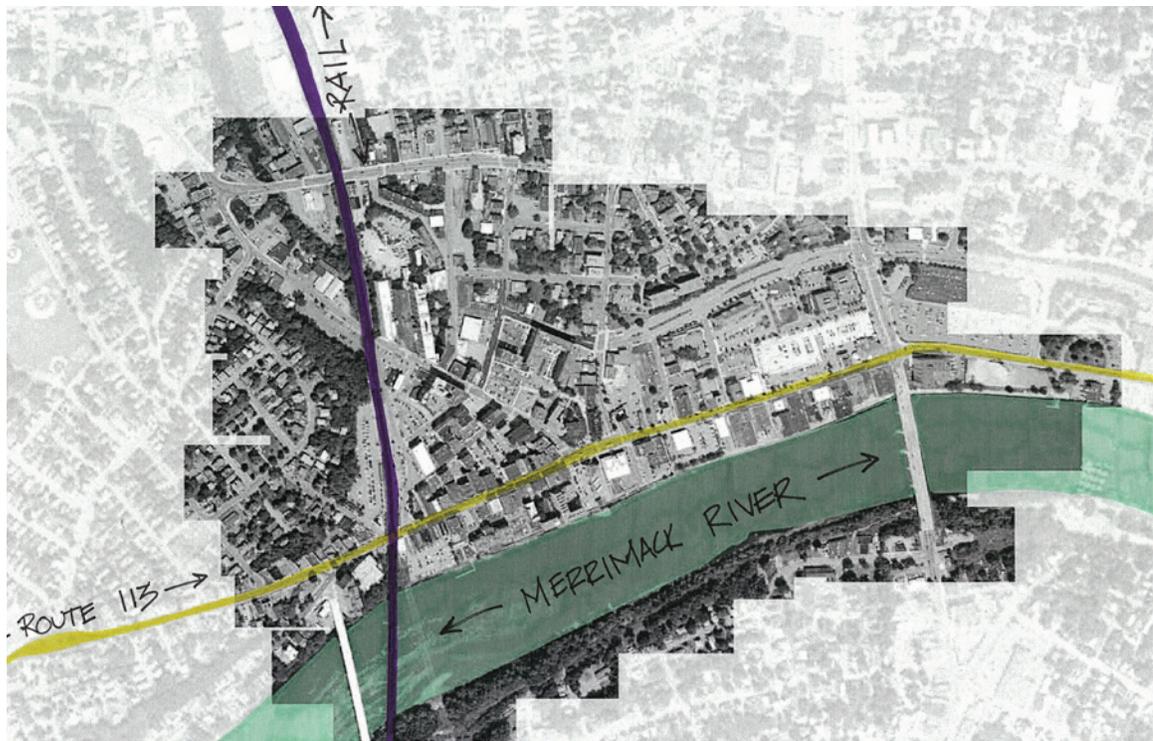


Illustration 5
Boundaries of the Washington Street Shoe District

and for the transection of Washington Street, which runs parallel to the waterfront). The area is bounded on the south by the Merrimack River, the west by the commuter rail line, and transected by route 113 (Washington Street), which runs parallel to the Merrimack River and connects some major cities in the North Shore of the Boston area.

The physical opportunities and constraints of the downtown area provide excellent criteria for development and re-use. The fabric of the city is already in place; its well-developed streets lined with industrial-style buildings lay the groundwork for Haverhill's character, circulation, and density. As shown in the aerial photograph in Figure 12, the urban character of Haverhill is clearly defined within the immediate downtown area, however, the surrounding areas leave much to be desired in the realms of street definition, character, and density.

The building uses existing currently in downtown, Haverhill (illustration 6) show a general pattern of sporadic mixed-use along the main street, mostly lined by retail at street level (represented with red) and some with residential above (represented with yellow). However, many of the buildings maintain only retail on the ground floor, while the rest of the building is unused, boarded up, or otherwise uninhabitable. Furthermore, upon visitation to the site, one encounters unreliable exposure to the retail in the area; many of the stores and restaurants remain closed to the public on certain days of the week seemingly due to the lack

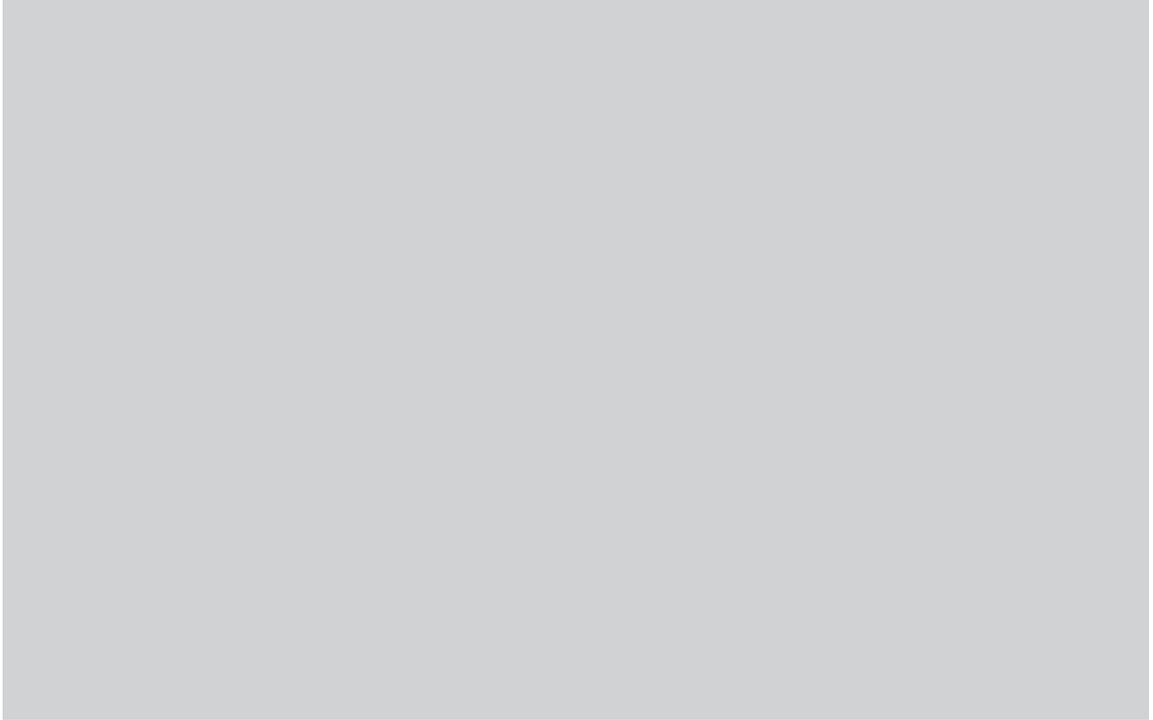


Figure 11
Historic Map circa 1914, Washington Street Shoe District (Library of Congress)



Figure 12
Aerial Photograph, Washington Street Shoe District (local.live.com)



Illustration 6
Existing building uses diagram

of human activity at such times.

Although Haverhill's street edges are generally well defined by its historic buildings, there are gaps in the fabric that allow for exposed surfaces at ground level. This is mainly due to the fact that there was a large fire in the city in the early 1900s, during which many of the historic buildings were destroyed and never replaced. (figure 11) These are mostly used for surface parking (illustration 7), and many lie in inopportune areas such as street edges and along the waterfront. In general, the waterfront is misused and is home

to the backs of buildings, parking lots, and an underutilized boardwalk area. Figure 13 illustrates the industrial character, underutilized buildings, and lacking development along the waterfront within the Washington Street Shoe District.

There exists in Haverhill a chance to revive the city through seeds already planted. The building uses along the main streets seem appropriate, however sporadic, and it can be assumed that more human activity in Haverhill will ensure more stable retail involvement, more reason for being, and help revitalize what is a location with great potential. It is the contention of this thesis that by creating a public



Illustration 7
Existing surface parking diagram



underutilized buildings



waterfront and rail



well-defined streets and urban character

Figure 13
Photographic existing conditions of the Washington Street Shoe District

destination- an extension to the current arts district that lies along Wingate Street in the immediate downtown area- revitalization will ensue.

Wingate Street Arts District

The Wingate Street Arts District lies in the central part of the Washington Street Shoe District, and is an example of a chance for revival of the area through a seed already planted. The Arts District seemingly comprises all of Wingate Street, however, its attractions are located only at the west end, buried within the city with no visibility from Washington Street or any other main area of the downtown. It runs parallel to Washington Street, connecting the rail stop to Essex Street, another major street of the downtown area.

In its existing conditions (illustration 8), the Wingate

"...there isn't much happening here. Go during the day if you're exploring. More will be open and the neighborhood doesn't inspire confidence after dark. I hope they can make something of this area. It would be really cool if there were 4 or 5 times as many galleries and shops, but neighborhoods like this don't generally get better during tough economic times." -Don W., [yelp.com](#)



"I LIVE in the "arts district" in Haverhill. Please don't be fooled by the hype. Please don't waste your time. And if you go out there at night please be careful as there is no parking and you will have to walk in the dark back to your car. Not a great neighborhood at night." -Lynne M., [yelp.com](#)

Illustration 8
Existing building use of Wingate Street Arts District

Street Arts District is home to only four or five galleries (represented in purple), with some other retail (represented in red) and residential (represented in yellow) along the street. Many gaps remain along the street edge which, like the rest of the downtown area, have resulted in surface parking lots. (figure 14) The galleries themselves are more like gift shops; while legitimate retail stores with an artsy flair to them, they remain cluttered and do not provide the flexibility needed to display different types of art by many serious artists. (figure 15)



Figure 14
Wingate Street Arts District: view from Essex Street



Figure 15
Wingate Street Arts District: galleries

According to an online review of the area, “there isn’t much happening here. Go during the day if you’re exploring. More will be open and the neighborhood doesn’t inspire confidence after dark. I hope they make something of this area. It would be really cool if there were 4 or 5 times as many galleries and shops...”⁸

It seems that in its current state, the Wingate Street Arts District is little more than a quaint shopping area given the title of “Arts District.” An arts district should be an urban area designated to house artists studios, galleries, and other retail venues. More importantly, it should be an area which becomes important to the public domain of the city and encourages public interaction with art.

C. G. Ellis Building / 24 Essex Street

This thesis will further develop the Wingate Street Arts District by adaptively reusing one of its prominent buildings to create an environment in which artists can live, produce, display, and teach art, and through which there is a strong public interaction with these categories. The building will serve as a catalyst for the further development of Wingate Street by providing the district with the means for developing art as Haverhill’s new industry by providing its artists and

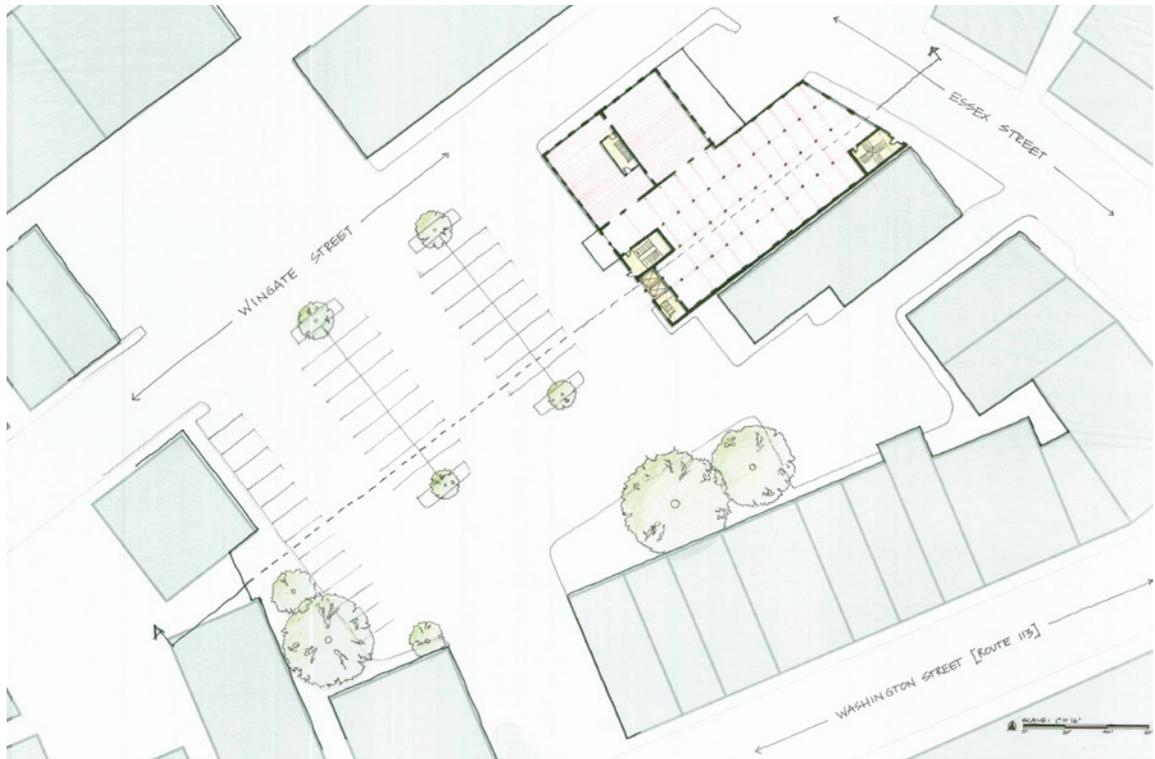


Illustration 9
Existing plan of C. G. Ellis Building at corners of Wingate and Essex Streets

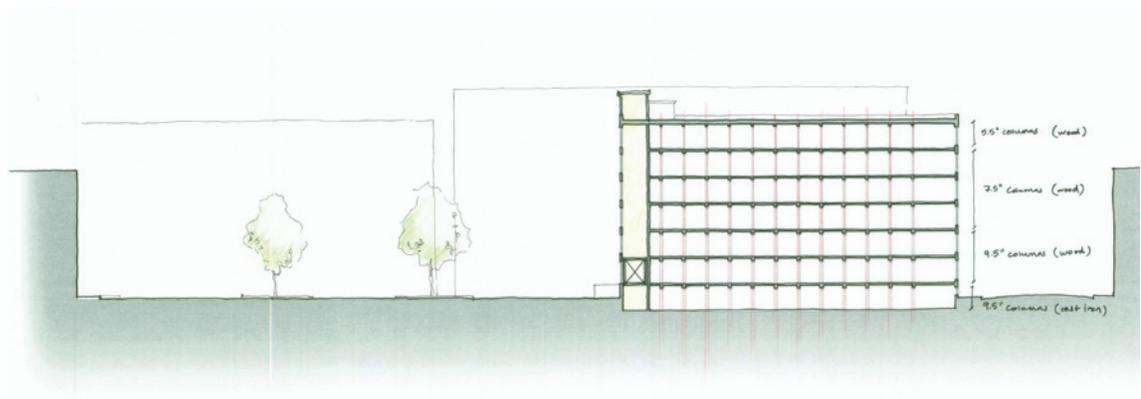


Illustration 10
Existing longitudinal section of the C. G. Ellis Building

community with a vehicle by which every main aspect of the production of art can be experienced.

The chosen building for adaptive reuse as extension to the current arts district is located at 24 Essex Street (outlined in red in illustration 8), and the site of study extends, but is not limited, to the adjacent parking lot behind the building. While the adaptive reuse of the structure itself will undoubtedly be utilized in the design, any provisions for an outdoor designed urban space will be explored according to site specificity and dialogue between the surrounding context. The site will predictably play a vital role in creating an anchor to the arts district and maintaining a strong public purpose within the downtown area.

The entire structure comprises two buildings; the main one being original and built in the late 1800s, the smaller addition to the north added later in the early 1900s, after the fire. The main building consists of, in typical industrial period factory-building form, a column grid within a masonry shell capable of supporting large floor loads and rich with historical details. The details of floor loads, structural material, square footage, and structural dimensions can be found in the table in figure 16.

The exterior, interior, and details of the structure (figure 17) will provide ample influence in the eventual design of the intervention. Cast iron capitals to wooden columns, a masonry shell structure separate from the floor load column grid structure, existing freight elevators and

other vertical shafts, and the difference in uninterrupted floor space between the newer addition and the main building are elements which will help inform the design in relation to adaptive reuse and programmatic placement.

The proposed building has strong potential for growth outside of its current condition (illustration 11), made possible not only by the surrounding open spaces (particularly the one to the north) but also by its simplistic, porous exterior

| main structure | <i>basement</i> | <i>ground</i> | <i>level 2</i> | <i>level 3</i> | <i>level 4</i> | <i>level 5</i> | <i>level 6</i> |
|--|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| floor loads | --- | 100 lb/ft ² | 80 lb/ft ² |
| structural material (main bldg) | cast iron | wood | wood | wood | wood | wood | wood |
| column width (main bldg) | 8" | 9.5" | 9.5" | 7.5" | 7.5" | 7.5" | 7.5" |
| gross square footage | 7,040 ft ² | 7,040 ft ² | 7,040 ft ² | 7,040 ft ² | 7,040 ft ² | 7,040 ft ² | 7,040 ft ² |
| new structure | <i>basement</i> | <i>ground</i> | <i>level 2</i> | <i>level 3</i> | <i>level 4</i> | <i>level 5</i> | <i>level 6</i> |
| floor loads (new structure) | --- | 60 lb/ft ² | 80 lb/ft ² | 80 lb/ft ² | 80 lb/ft ² | --- | --- |
| gross square footage | 2,050 ft ² | 2,050 ft ² | 2,050 ft ² | 2,050 ft ² | 2,050 ft ² | --- | --- |

TOTAL SQUARE FOOTAGE OF STRUCTURE: 50,440 ft²

Figure 16
Table of structural information for both buildings



exterior



interior



detail

Figure 17
Existing conditions of the C. G. Ellis Building at 24 Essex Street

and open structural grid. Many buildings in Haverhill are ornate and highly stylized; these lend themselves well to conversion and rehabilitation, but perhaps not adaptation and growth. Furthermore, the existing vertical shafts of space (illustration 12), which include freight elevators, three

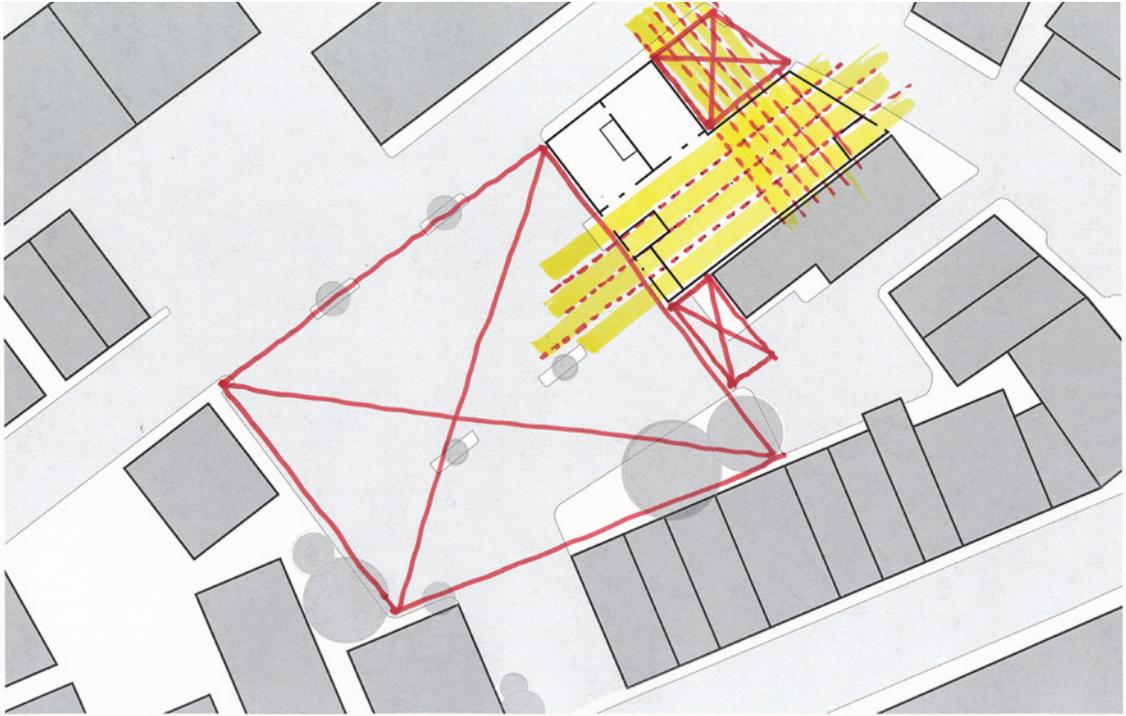


Illustration 11
Potential for the extension of the building to adjacent lots

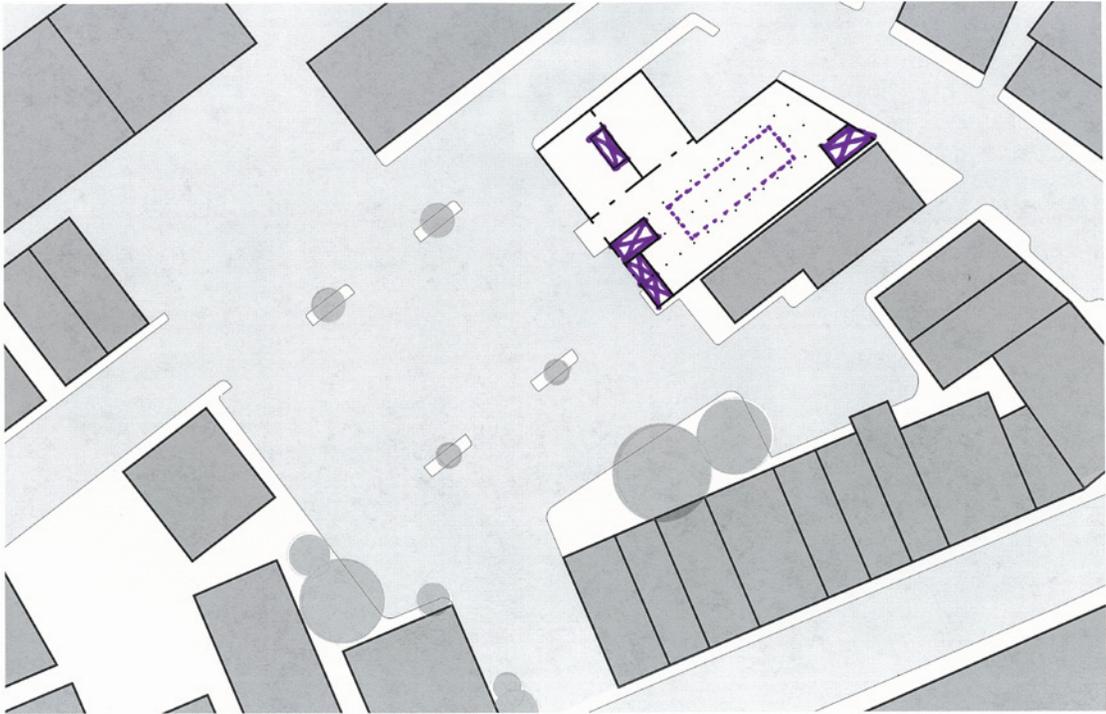


Illustration 12
Existing vertical shafts in the structure

sets of stairs, and one in the center of the structure through which factory workers would send bundled items through the floors for shipments, create potential for study and re-use. These vertical shafts protrude onto the rooftop, as shown in figure 18.

The building, once an old shoe-sole factory, provides a flexible environment in which to insert the proposed program as an extension to the arts district. As it once provided the city's industry with the very basic soles of the shoes, it will provide a vehicle by which the basic principles of the process of making art can be explored and experienced by the public, thus contributing to the further development of the Arts District and the rest of the city.

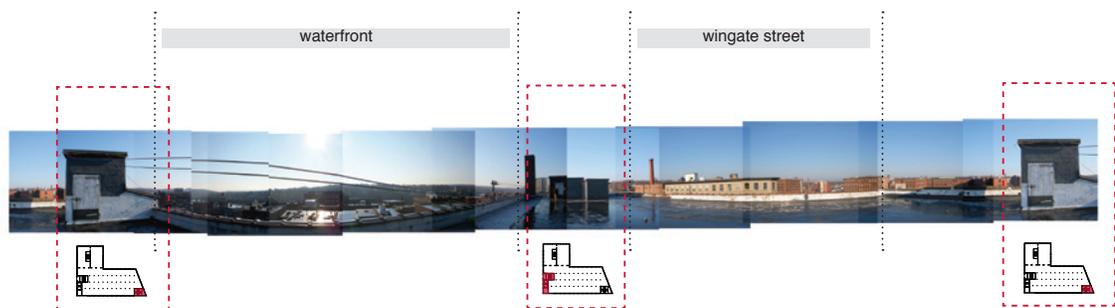


Figure 18
Rooftop of existing structure and related vertical cores protruding through

urban renewal

Opportunity for renewal

While the main body of this thesis lies in the adaptation of one building as a catalyst to further urban development, it is important to investigate the possibilities of design on an urban scale in order to better understand the implications of a building design. The first step in the design process of this thesis is an investigation into some of the different ways in which Wingate Street can be developed and extend into the rest of the fabric of the Washington Street Shoe District.

As mentioned in chapter one, this thesis will investigate the possibilities of adaptive reuse as related to addition, subtraction, and the least manipulation possible of the building. The urban environment can be similarly investigated in terms of its ability to reprogram spaces that are already existing, add new structures, and subtract old structures. Lessons from the existing conditions of the Washington Street Shoe District, the Wingate Street Arts District, and the C. G. Ellis Building can be incorporated into

urban renewal investigations.

With Haverhill's connection to the Boston commuter rail, its placement along a beautiful river, and its well-lined streets of historic, underutilized buildings, Haverhill's potential for successful development is clear. At first, it is easy to imagine the ways in which the Washington Street Shoe District can develop with the seeds already planted, by programming underutilized buildings, filling in gaps in the urban fabric and designating designed public outdoor spaces in place of the surface parking areas. (illustration 13) Furthermore, there is potential for the existing open spaces (currently surface parking), to begin to connect to each other and to key points in the city, such as the



Illustration 13
Potential for redevelopment of the Washington Street Shoe District diagram

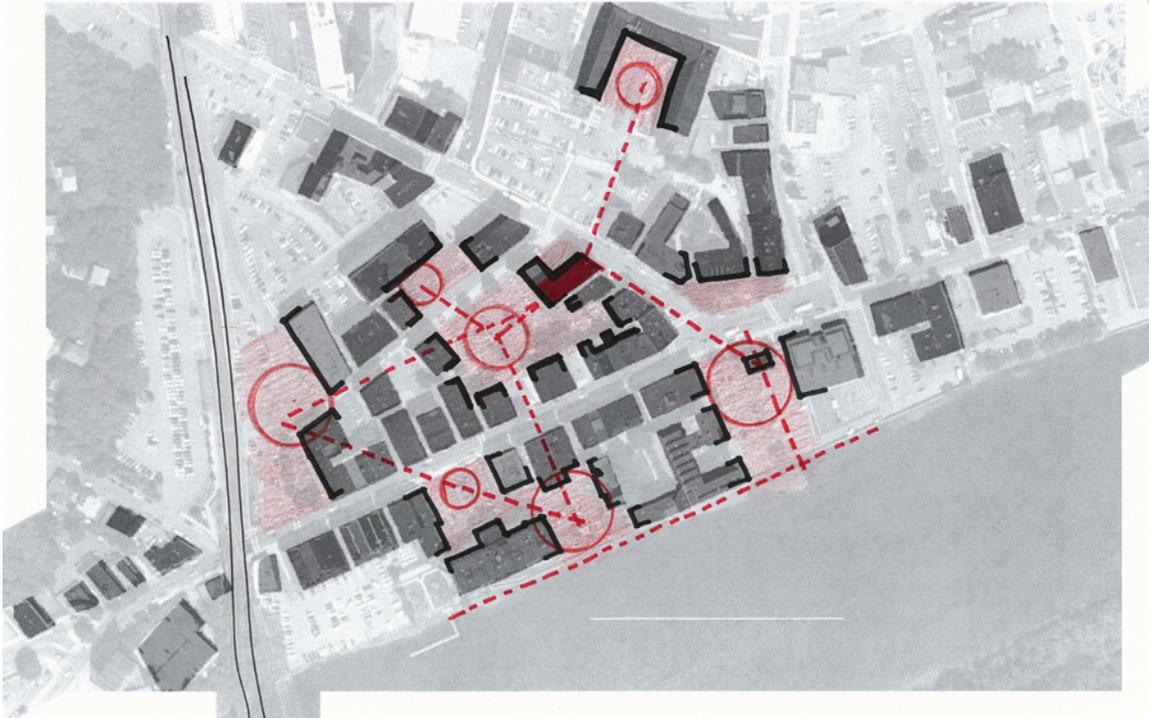


Illustration 14
Potential for existing open spaces to connect diagram

waterfront and the rail stop. (illustration 14) Connection to the waterfront through existing spaces and from the site has potential, and is shown in illustrations 15 and 16, and are further investigated in the following section. These very initial investigations begin to evaluate the existing conditions and locate potential for development and connections throughout the site.

Embedded within the following development strategies is the notion of incorporating art programming within the fabric of the city. There already exists evidence of art within the city (figure 19), and spaces and circulation designated for the public display of art are incorporated into each of the following investigations.

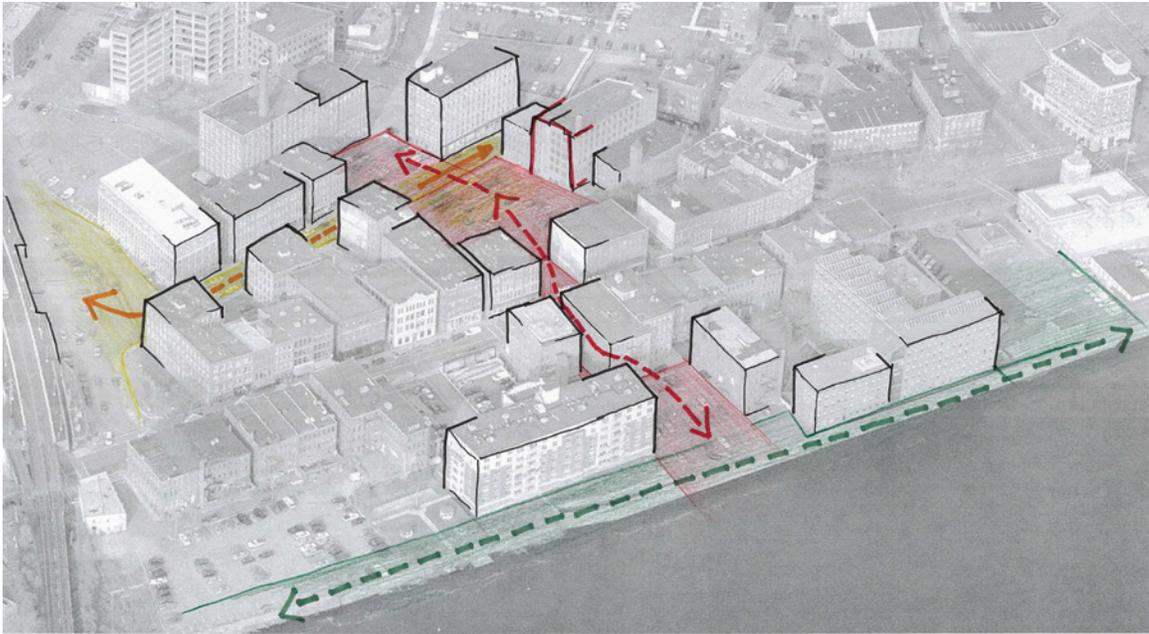


Illustration 15
Potential connection to waterfront and rail through Wingate Street

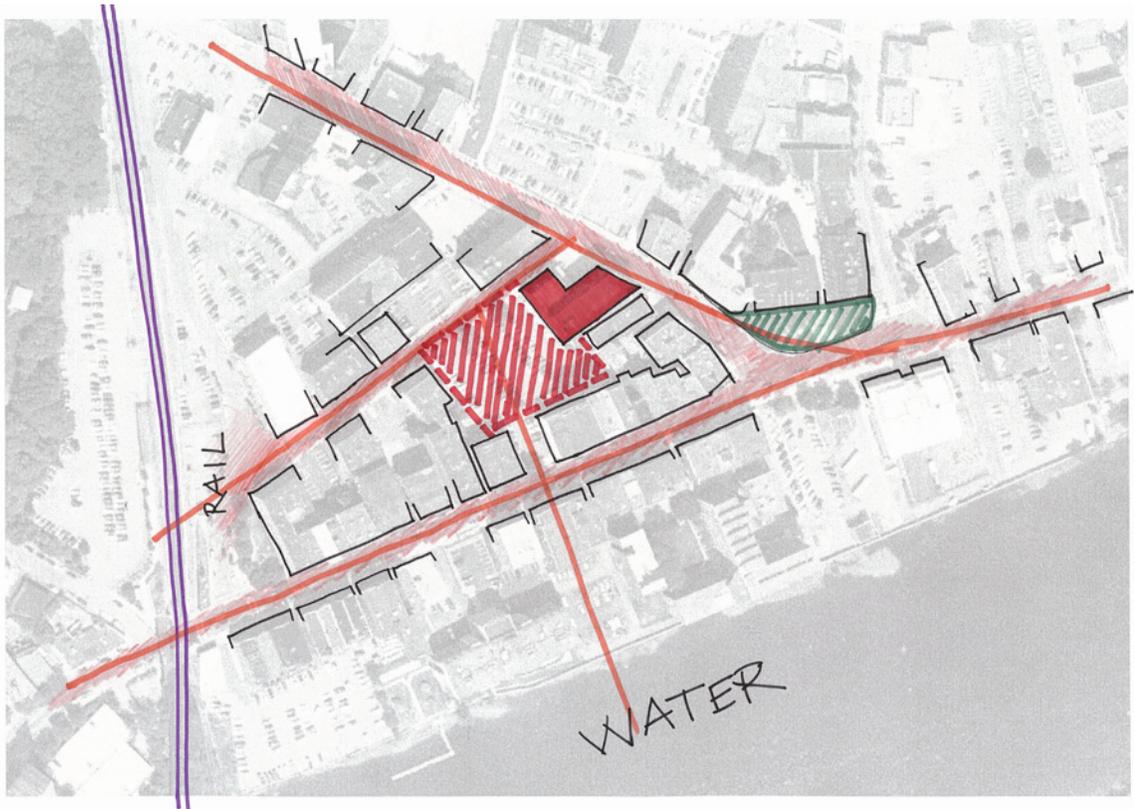
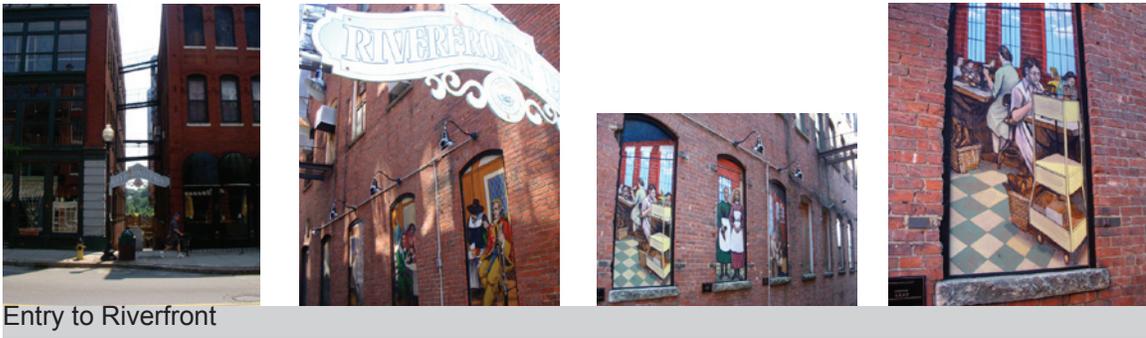


Illustration 16
Connection to water from site and street boundaries diagram



Wingate Street Arts District



Entry to Riverfront



Jan V. Roy, Studio

Figure 19
Existing conditions of “art” within the fabric of the Washington Street Shoe District

Urban Design Strategies for Wingate Street

Based on the information observed in the existing conditions, design strategies for the development of Wingate Street Arts District were explored using three-dimensional models and diagrams. Each scheme represents methods by which the built urban context is added to, subtracted from, or

reprogrammed to suit its current arrangement.

Development strategy one (figure 20) uses a system by which the existing gaps in the fabric of Wingate Street are reprogrammed to be public spaces dedicated to the display of art. Two new structures are added on Wingate Street to repeat the pattern alternating from building to open space extending from the rail stop to the C. G. Ellis Building. The gaps along the main streets are infilled with buildings,

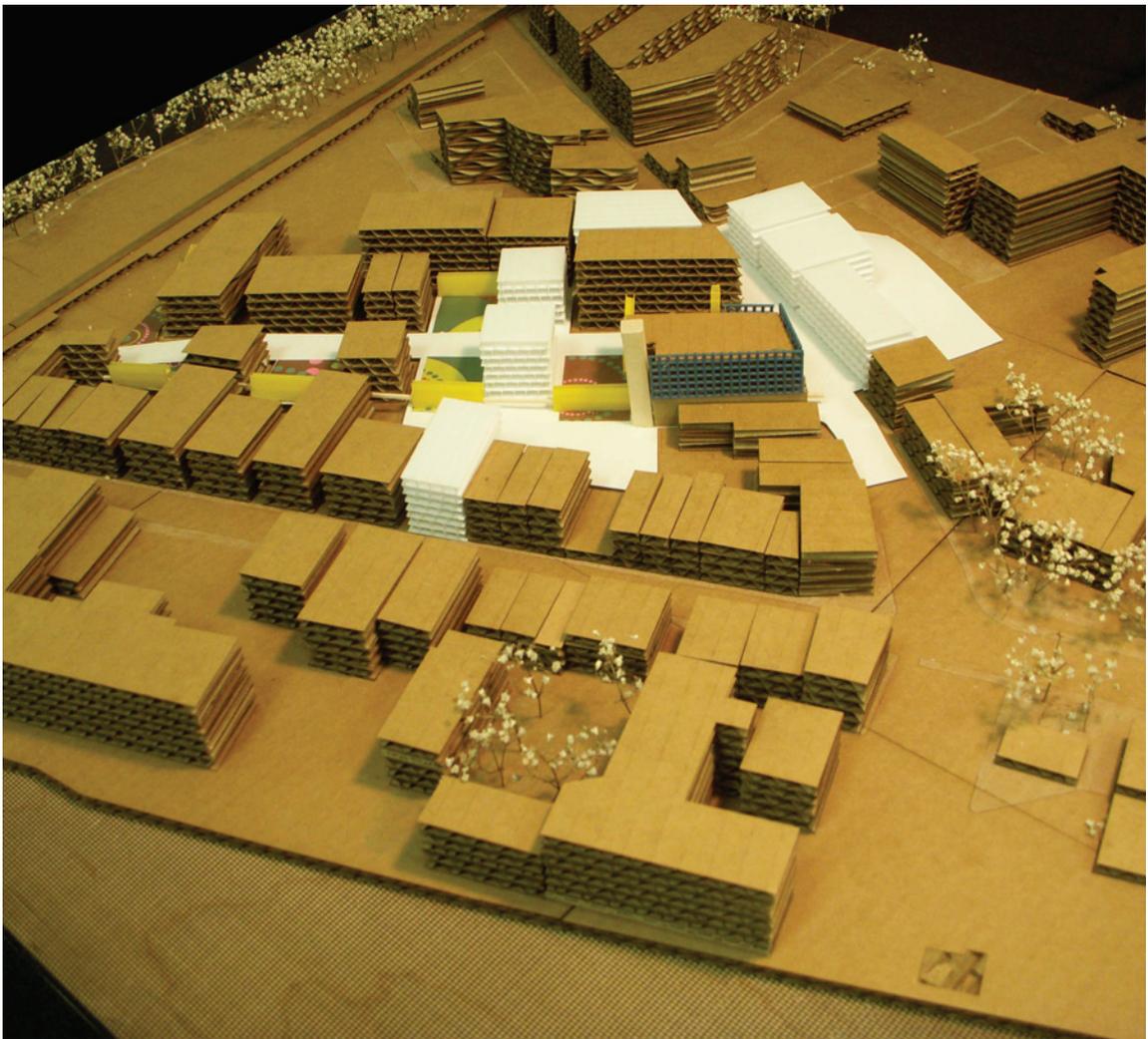


Figure 20
Development strategy one: model



Illustration 17
Development strategy one: parti diagram



Illustration 18
Development strategy one: edge diagram



Illustration 19
Development strategy one: new buildings and circulation diagram

creating a “superblock” parti (illustration 17) that encloses Wingate Street (illustration 18) and creates a pedestrian street along which visitors can move around and through the open spaces. (illustration 19)

Development strategy two (figure 21) designates a connection to the waterfront from Wingate Street by demolishing an existing building and creating a pedestrian street with a defined edge. (illustrations 20 and 21) It

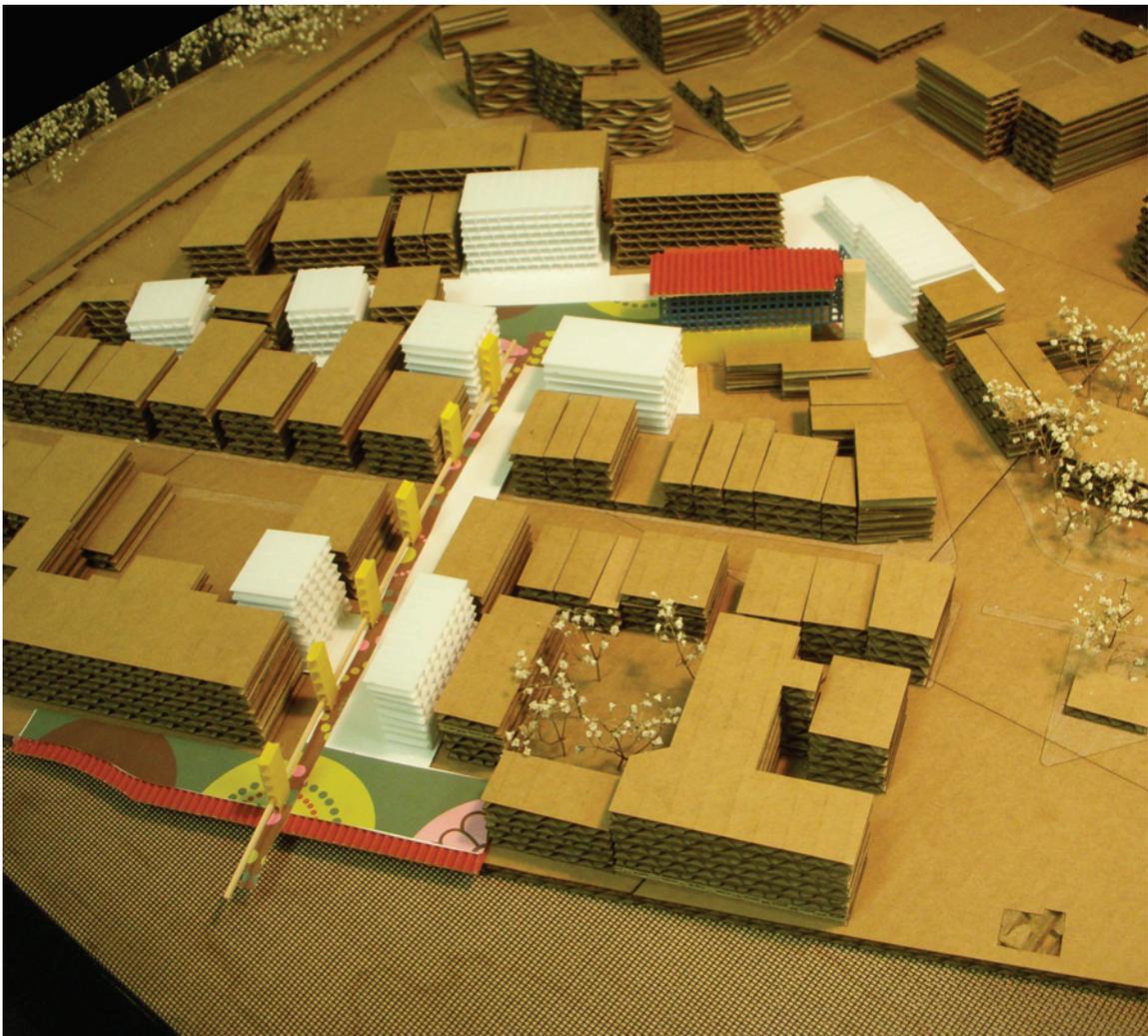


Figure 21
Development strategy two: model

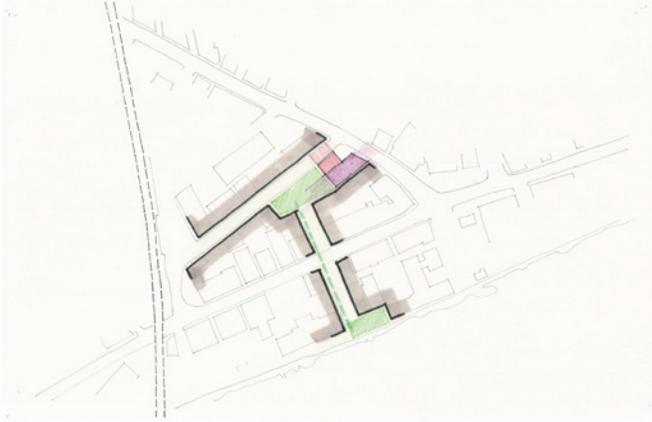


Illustration 20
Development strategy two: parti diagram



Illustration 21
Development strategy two: edge diagram



Illustration 22
Development strategy two: new buildings and circulation diagram

connects two large open spaces (illustration 20) and infills the rest of the gaps in the fabric. Along the path from Wingate Street to the waterfront, art can be displayed.

Development strategy three (figure 22) investigates another method by which Wingate Street can connect to the waterfront, using the building site as a pivot point rather than the open lot behind it. The scheme extends Essex Street and defines it toward the waterfront, extending one of the

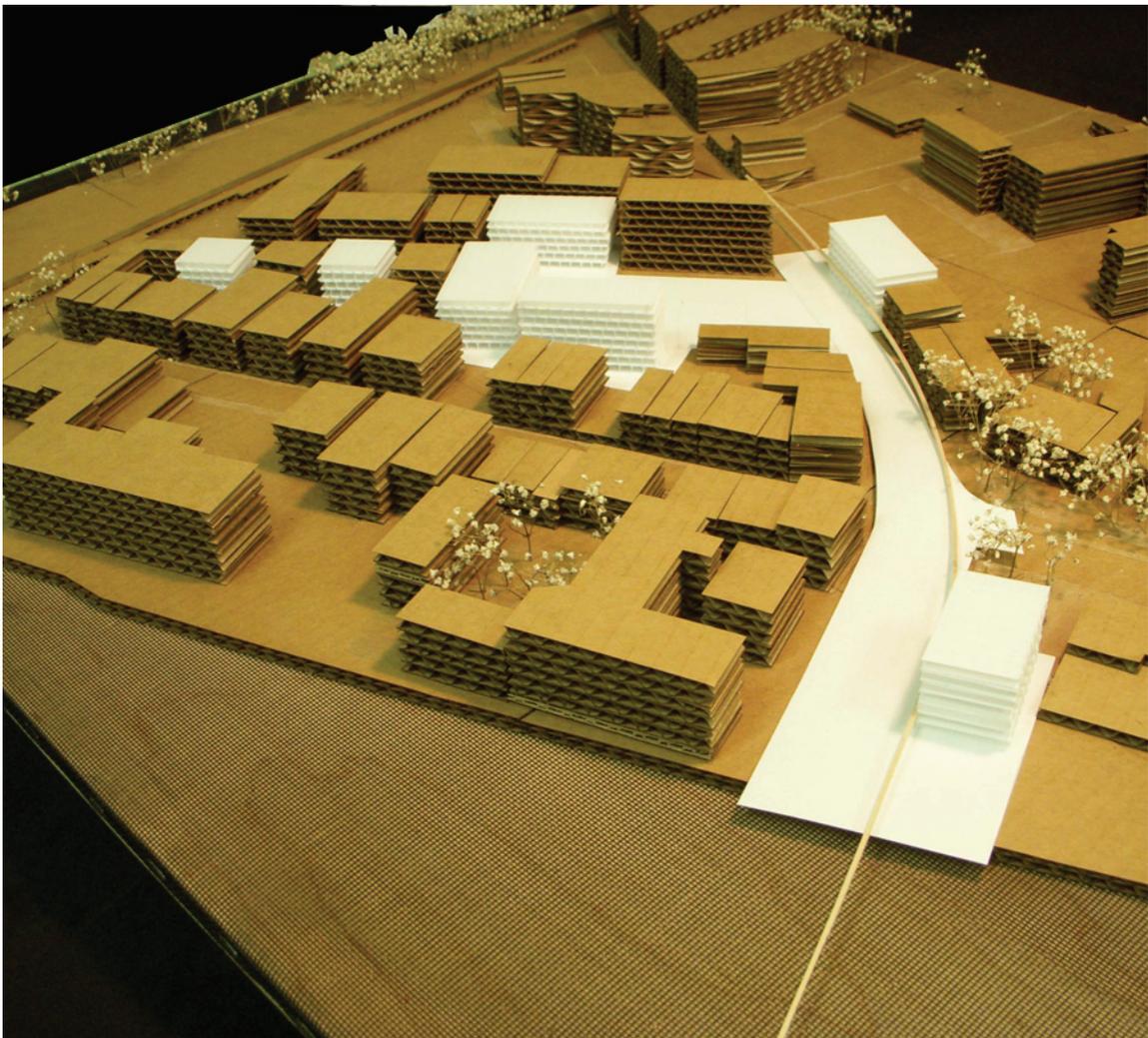


Figure 22
Development strategy three: model

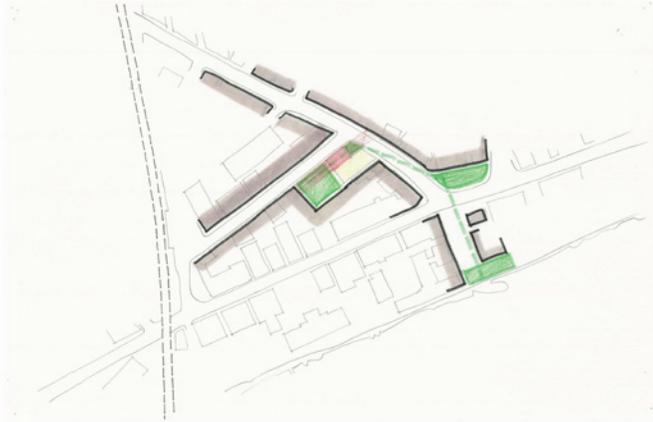


Illustration 23
Development strategy three: parti diagram

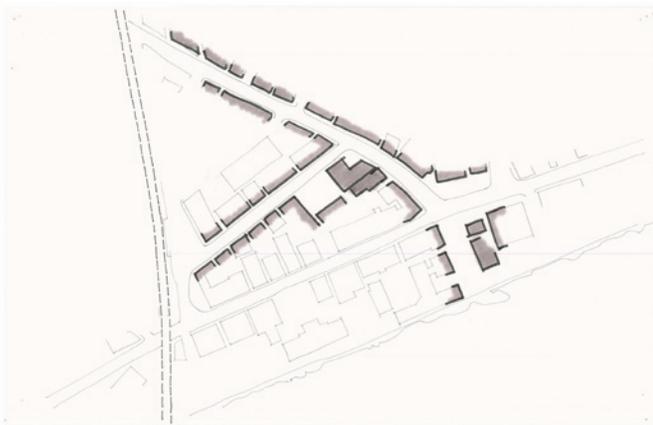


Illustration 24
Development strategy three: edge diagram



Illustration 25
Development strategy three: new buildings and circulation diagram

major streets of the downtown area to connect directly to the waterfront.

Finally, development strategy four (figure 23) is more internally focused on Wingate Street, infilling the gaps and defining the edges so the street is lined with galleries, shops, etc., and is anchored to the rest of the city by the C. G. Ellis Building. The street is terminated by a public art display, which also terminates the view from the rail stop.



Figure 23
Development strategy four: model

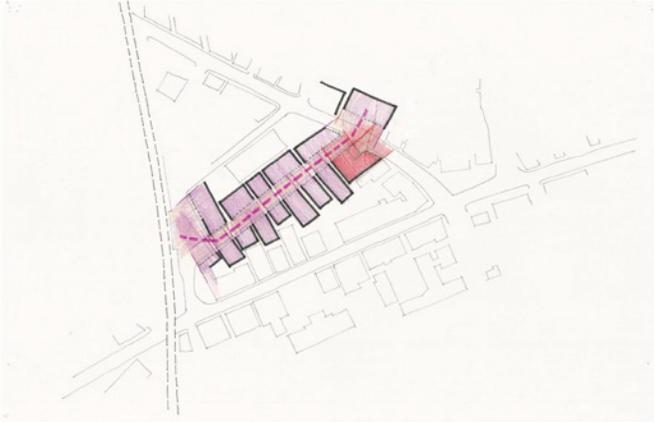


Illustration 26
Development strategy four: parti diagram



Illustration 27
Development strategy four: edge diagram



Illustration 28
Development strategy four: new buildings and circulation diagram

Phasing

After investigating the four development strategies outlined above, it became clear that the different schemes were appropriate for a phasing strategy for the development of Wingate Street. In the initial phases, the C. G. Ellis building can be developed, while the existing outdoor areas can be used for farmers' markets (which already occur frequently in the summer on Wingate Street), art display, and other activities related to the Arts District. Over time,

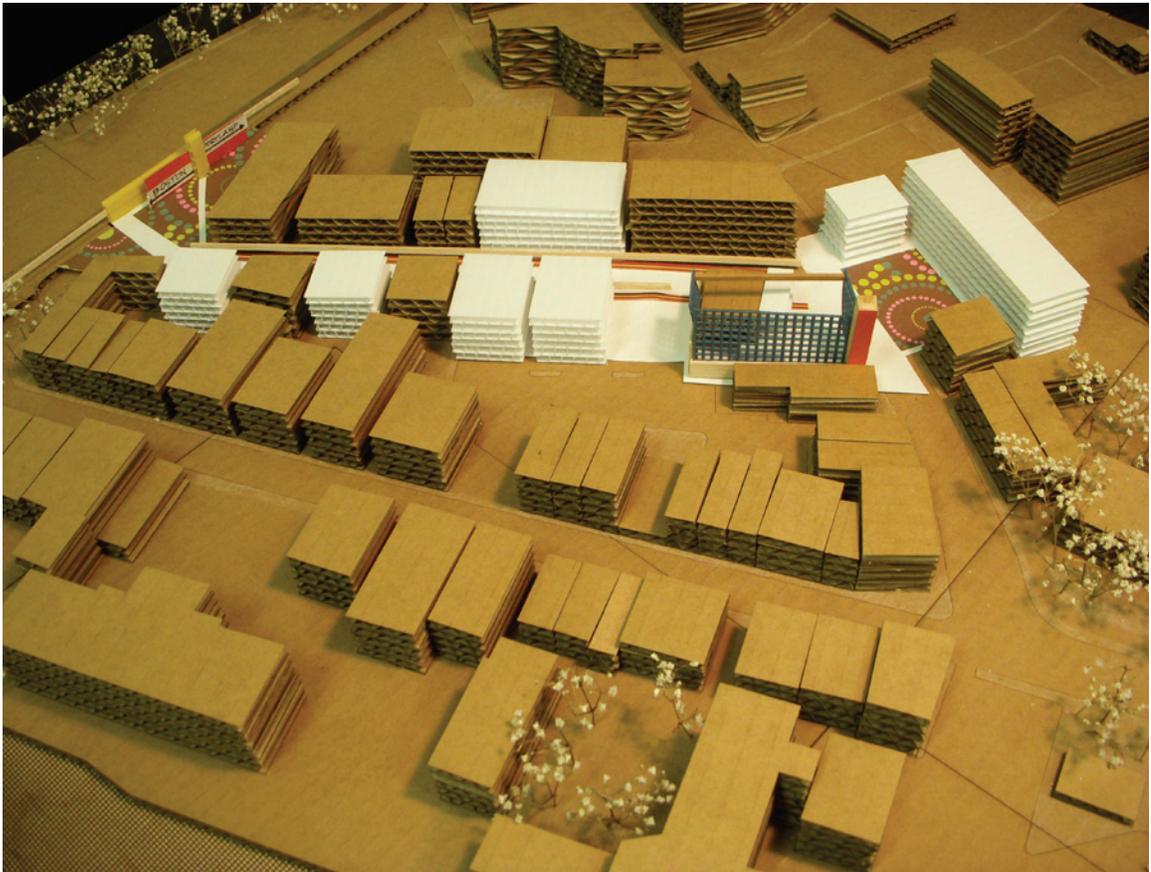


Figure 24
Final development strategy: model

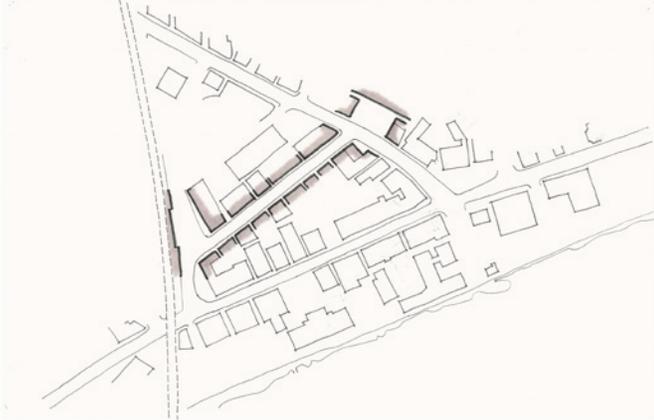


Illustration 29
Final development strategy: edge diagram

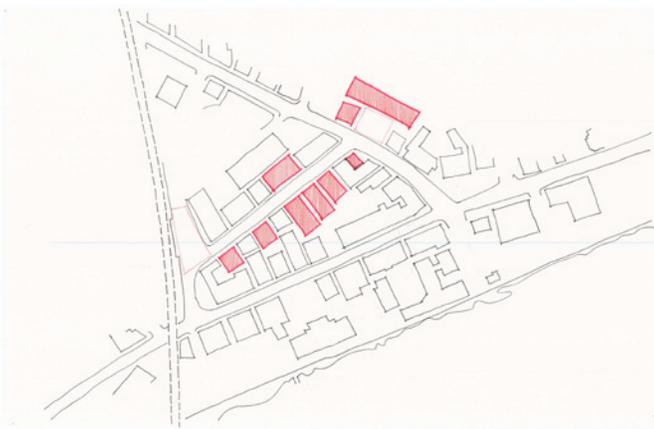


Illustration 30
Final development strategy: new buildings and circulation diagram

buildings can fill in the gaps along the street. (figure 25)

A final development strategy was achieved, (figure 24) very similar to the fourth, which infills Wingate Street and terminates its axis at both ends by the rail stop and by an open public space. Open space adjacent to the C. G. Ellis Building is preserved for incorporation of the art program to extend beyond the building's boundaries.

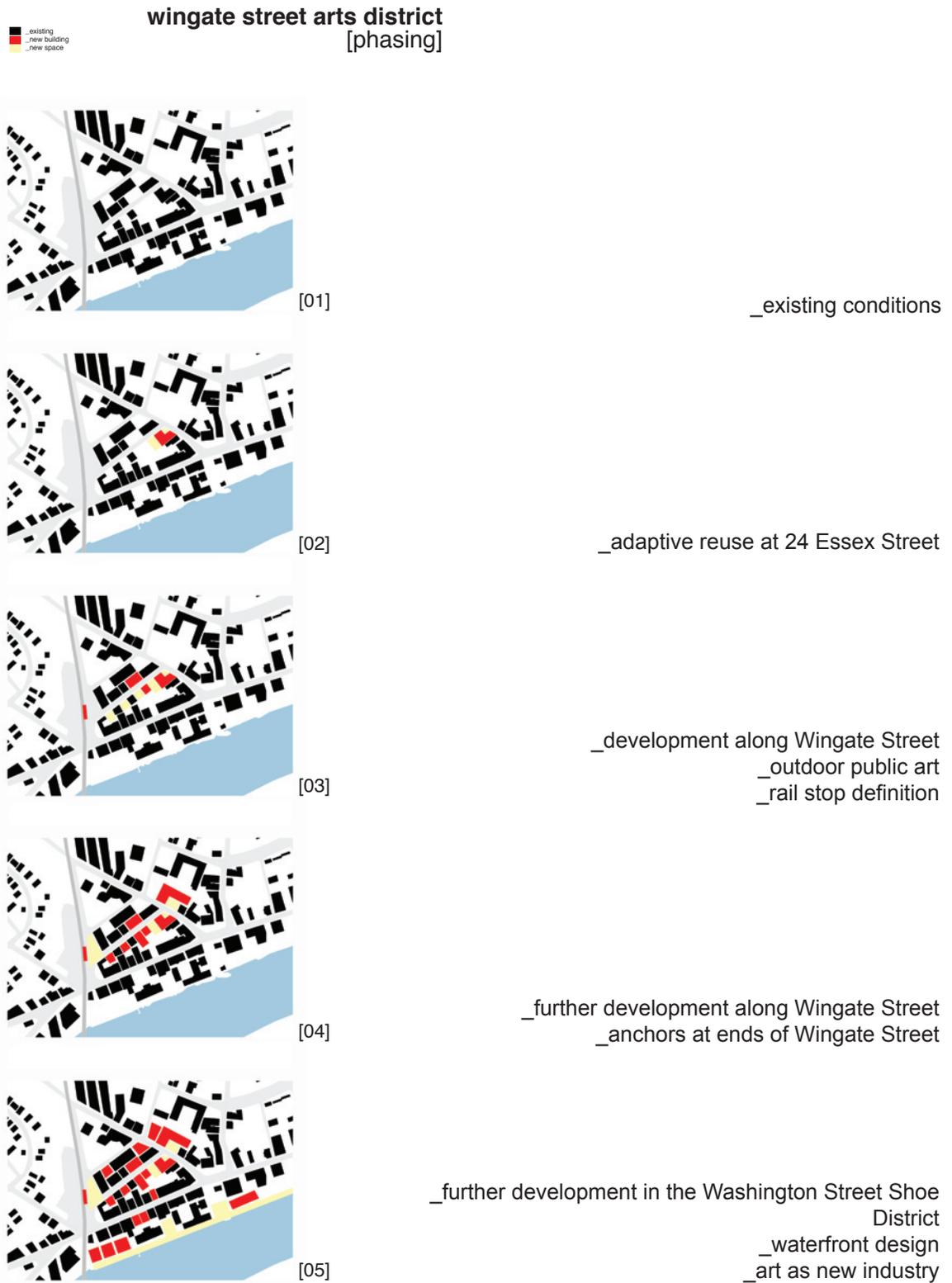


Figure 25
Phasing diagrams of the development of Wingate Street Arts District

initial design studies

Program Analysis

This thesis intends to create an artists' community building as an extension to the existing Arts District with all the programmatic elements necessary for the production of art. This includes places for artists to live, work, display, and teach art, and ways by which visitors can experience them.

These basic programmatic elements are specified more clearly in a program analysis (figures 26 and 27), in which the parts of the program are broken into more specific categories. For instances, places for the artists to produce work are designated as small, private production spaces and a large, communal space as well. In addition, a retail component is added to the program as a means by which the artists-in-residence may form a co-op business, such as a cafe, in order to raise funds for communal activities and events.

The first chart (figure 26) examines the implications of each piece of the program in terms of location within the building and importance to the public realm. The second



Figure 26
Program analysis: placement implications and important elements

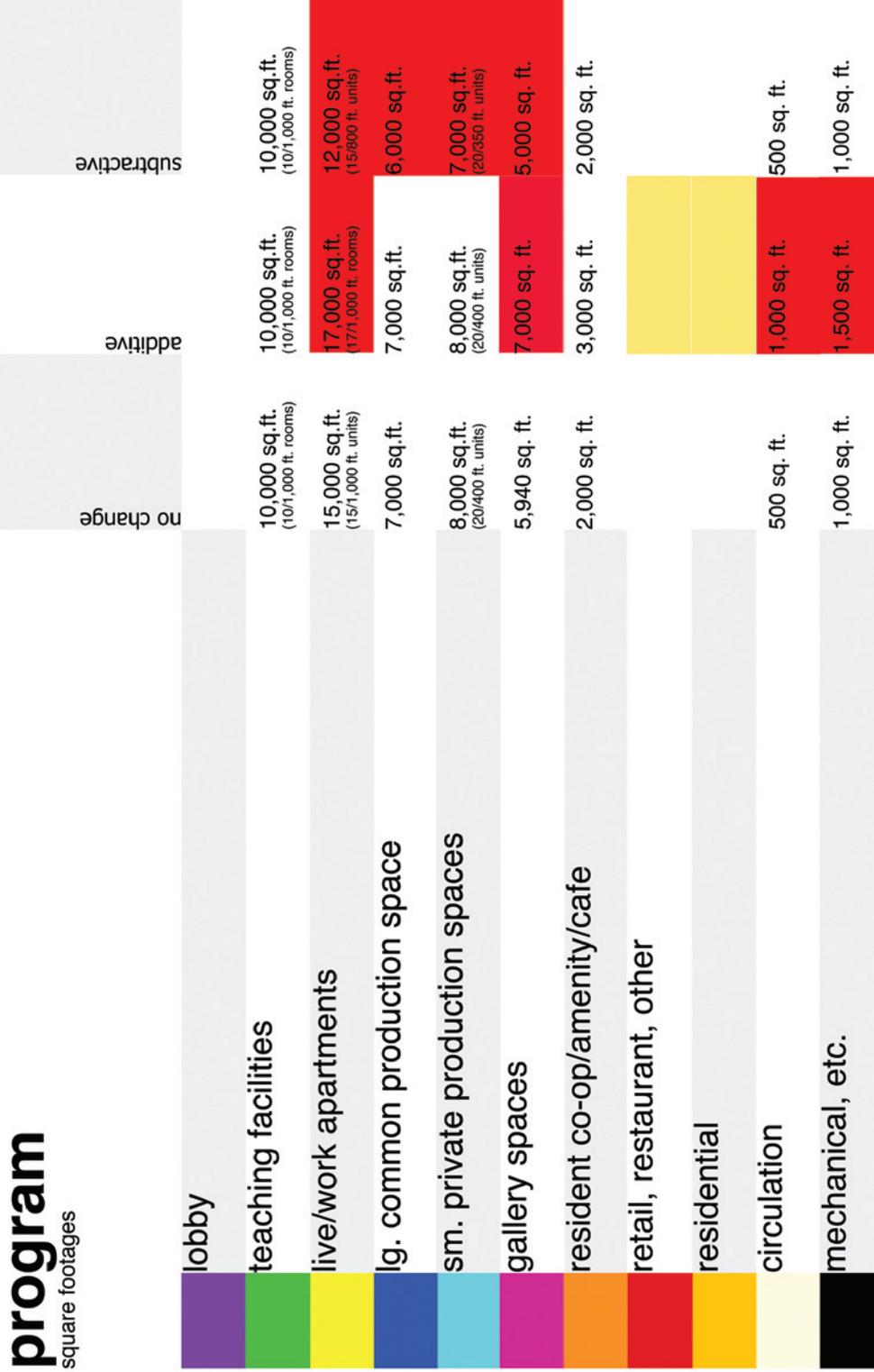


Figure 27
Program analysis: square footages in different circumstances

(figure 27) estimates the amount of square footage needed within the existing structure and provides circumstances by which certain pieces of the program could serve as an extension or subtraction to the building, with the resulting approximate square footage.

Certain elements, especially those observed from



Illustration 31

Diagram: important elements of program placement and public experience

the urban development explorations, were influential in the initial design strategies of adaptively reusing the C. G. Ellis Building. In addition to the program analysis, illustration 31 illustrates the importance of some of the elements involved with design, including the importance of incorporating Wingate Street and its Arts District in the parti, the notion that light and air play a major part in production spaces for art, the appropriate placement of public entry to the building and the signage that will advertise it as a destination, and the notion that not all resident artists will have the same exact needs.

Manipulation of Building

Initial manipulation with the building dealt with adding and subtracting to its existing conditions in a way that reflected some of the programmatic conditions outlined above. After making a model of the existing structure, another model was made in which spaces were carved away and elements were added to the building. (figures 28 and 29)

There is an interesting condition with the basement and ground floor levels of the building, in which the first story is actually one-half level up from ground level. One of the aspects I experimented with was the ways in which visitors could move up from the ground level to the first level



Figure 28
Model of original structure of C. G. Ellis Building at 24 Essex Street



Figure 29
Model of initial explorations into manipulation of the existing structure

of the existing structure. In the model, this is represented by a white plane which could be a ramp, which connects on the interior to a catwalk along the public realm of the first floor. Sectional drawings were explored as well that show movement from the entry (designated as the open corner area between the older structure and the new addition) through the interior to the gallery space (illustration 32), and also the movement from the back of the building through a cafe as a secondary entrance. (illustration 33)

The addition of contrasting materials and colors to denote signage and new construction were also incorporated into the model. The red on the corner of Essex and Wingate Streets signifies the importance of this corner as a gateway from the rest of the city to the Wingate Street Arts District. The vertical, semi-transparent materials represent likely places for circulation cores, and how these might read on the exterior of the building. Illustration 34 explores the idea of addition to the exterior shell of the building. It places the prominent public staircase as an appendage to the existing structure along Essex Street, using glass to provide visual connection with the activities inside the building and to contrast with the existing brick.

The existing structure of a 9ft. by 13ft. grid of columns in the older structure provides an interesting situation. If floors are taken away from the building, but the post and beam structure remains, it results in a dense, lattice-work of structure within the double or triple height space. Illustration



Illustration 32
Section: circulation from entry to gallery along ramp



Illustration 33
Section: entry to cafe and circulation up to existing first floor

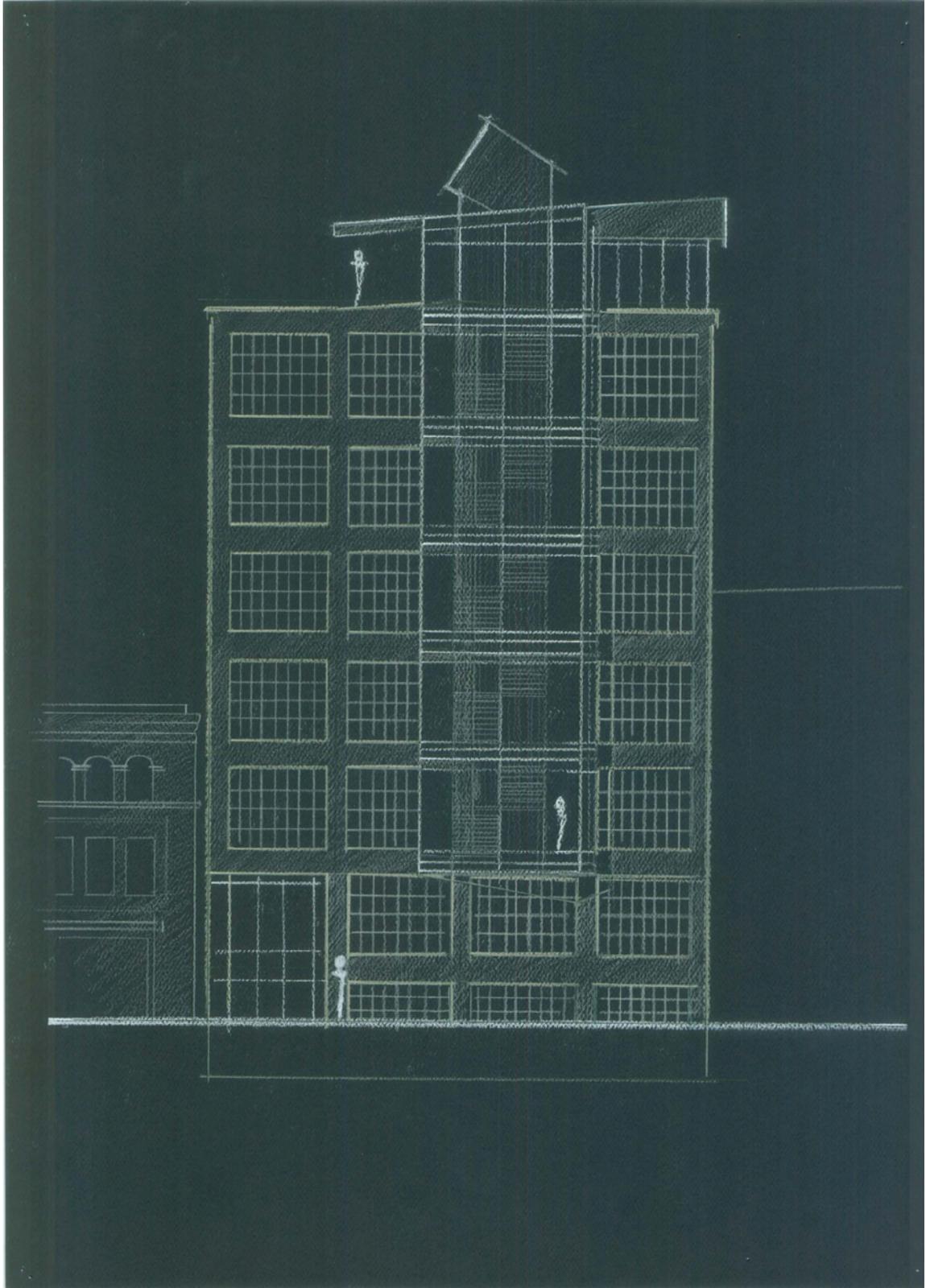


Illustration 34
Essex Street elevation study of protruding vertical circulation



Illustration 35

Watercolor study: lattice of structure in existing conditions and quality of light

35 is an abstraction of what this space might look like, and also explores diffused north light, as this area is meant to be next to the entrance along Wingate Street within the northern part of the older portion of the building.

Light becomes an important part of the design of the building and the placement of program within, as explained in the program analysis. Illustrations 36 and 37 explore a situation in which an artist's studio is placed next to a window, but pulled back from the wall. Underneath this



Illustration 36
Watercolor study: studio with window and direct light



Illustration 37
Watercolor study: studio without window and indirect light from above

studio is another, along a portion of the building where there are no windows (along the south side where an adjacent building is present). The light from the window next to the studio above indirectly lights this second studio, washing light down the brick wall under the window.

The initial investigations above begin to further understand the form of the building, the appropriate placements for certain elements of the program, and certain elements involving light penetration and quality, public signage and materiality, and additions to the existing structure. The following chapter will investigate these issues in a more methodical way.

flexible environments

The notion of flexibility has been discussed in the previous chapters and is very important to this thesis. As explored, the urban environment provides a level of flexibility which allows for phasing of the area and different possibilities of the treatment of Wingate Street Arts District within the existing fabric. The warehouse building parti is inherently flexible, with its open floor plans, large grid of windows, basic post and beam structure, and ability for large floor loads on each level. The exterior of the building also provides a certain level of flexibility in terms of addition and manipulation; while many of the Victorian style buildings in the Washington Street Shoe District are ornate on their facades, the C. G. Ellis Building maintains a simple grid of windows inlaid into a brick masonry wall in the main, older structure.

The need for flexibility in terms of program is also important. As previously explored, there are countless ways in which art and architecture overlap, partly because they are such broad fields. There are many different types of art- installation art, painting, sculpture, jewelry making,

photography, to name a few- that all maintain different production requirements. Some require small spaces, such as jewelry making, some require tall spaces, such as sculpture, and some require less light than others, such as a dark room for photography. The need of flexibility in terms of program and the ways in which the building can accommodate for different situations within its own flexibility will be explored in this chapter.

Warehouse reuse studies

The flexibility of the warehouse building is investigated in terms of different levels of adaptive reuse, including leaving the building's structure as it presently is, adding to the building, and subtracting from the building. Schemes A-F (illustrations 38-43), show options for programmatic placement, in which yellow represents residential (live), blue represents studios (work), red represents gallery (display), and green represents classrooms (teach), incorporating all aspects of the desired program. In order from A-F, the schemes utilize a very minimal manipulation to the building, in which the structure, floors, and existing areas of vertical circulation remain intact, to more extreme manipulations, in which large sectional areas are created by subtracting from

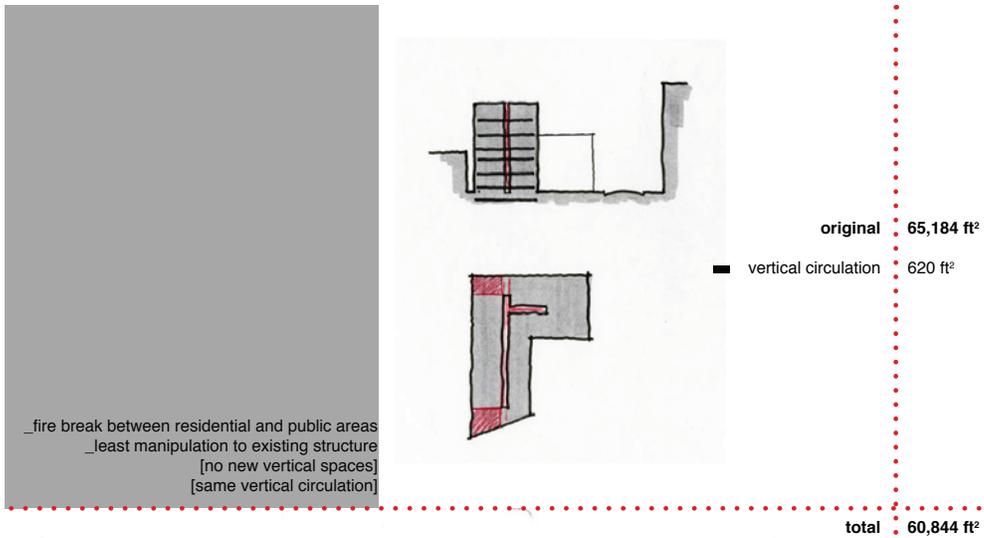


Illustration 38
Warehouse reuse study: A

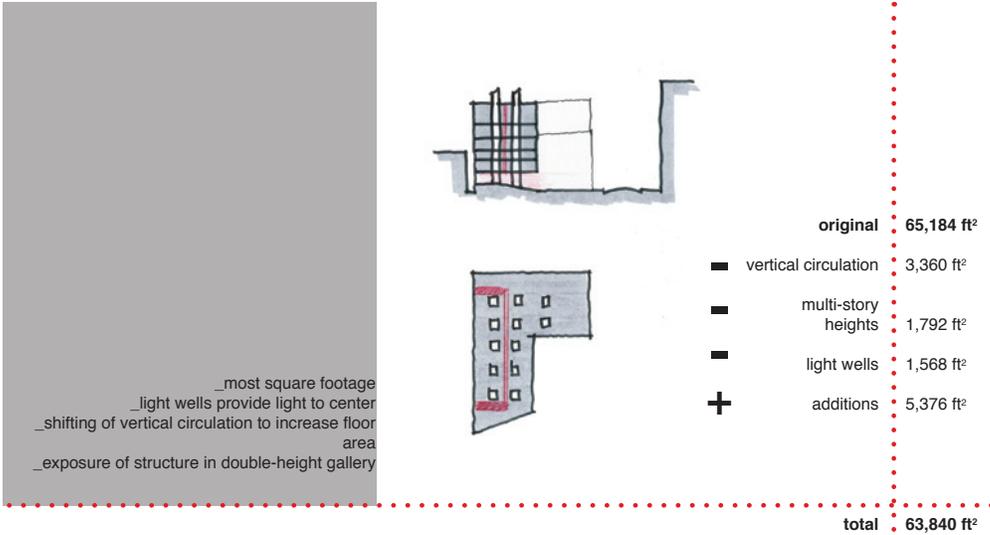


Illustration 39
Warehouse reuse study: B

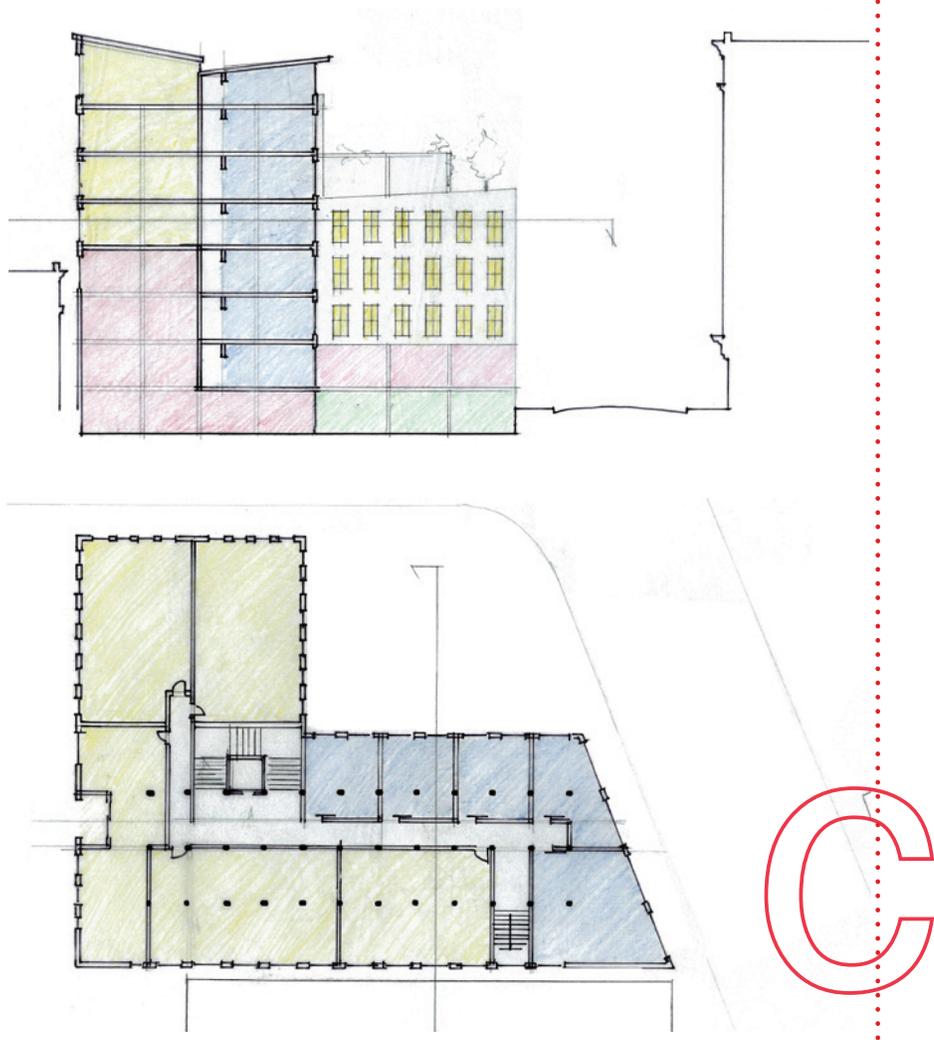
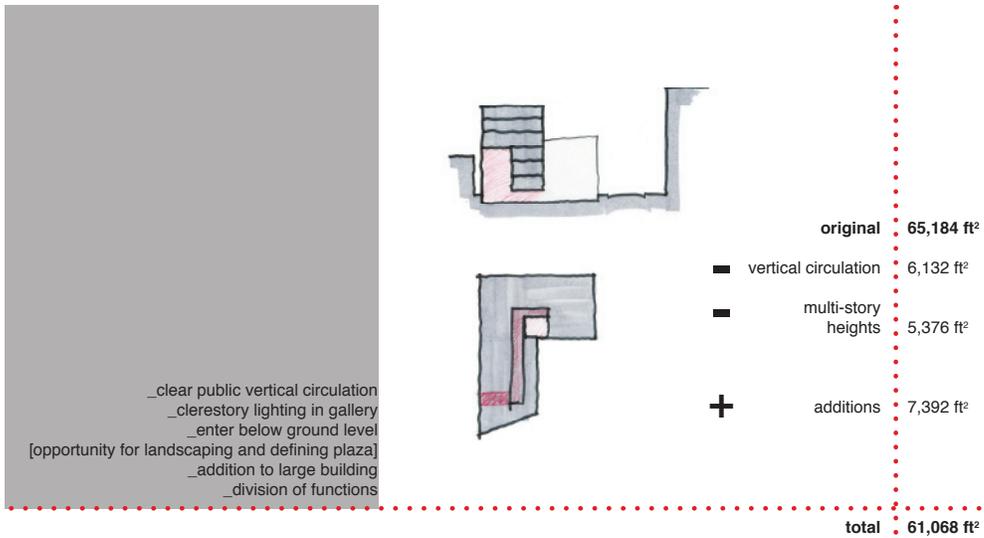


Illustration 40
Warehouse reuse study: C

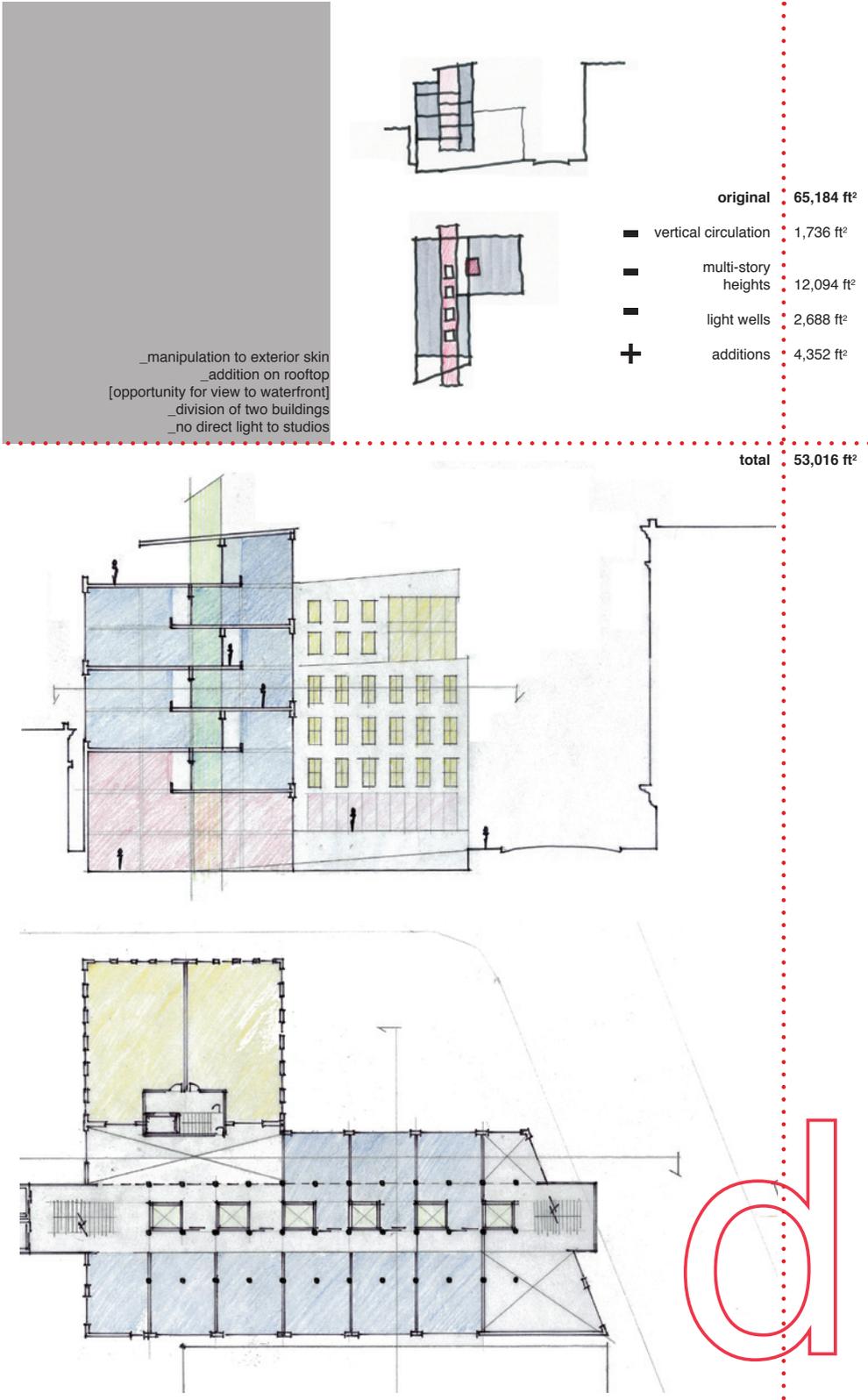


Illustration 41
Warehouse reuse study: D

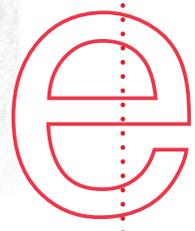
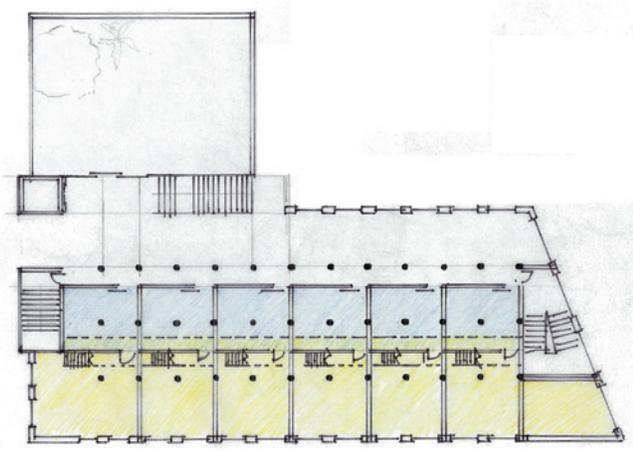
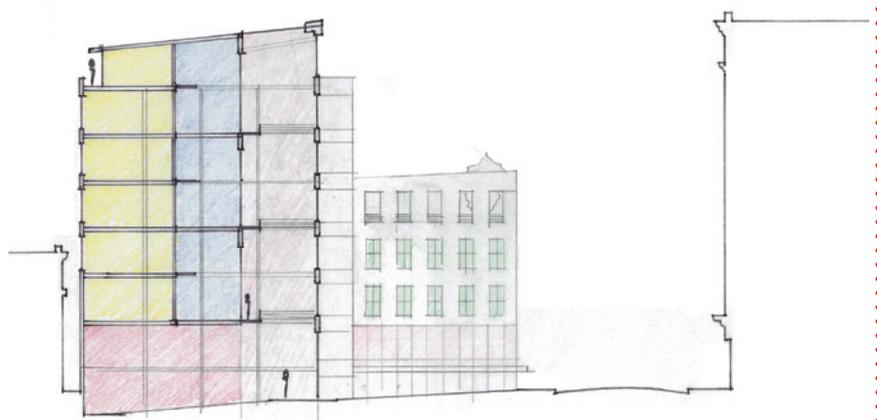
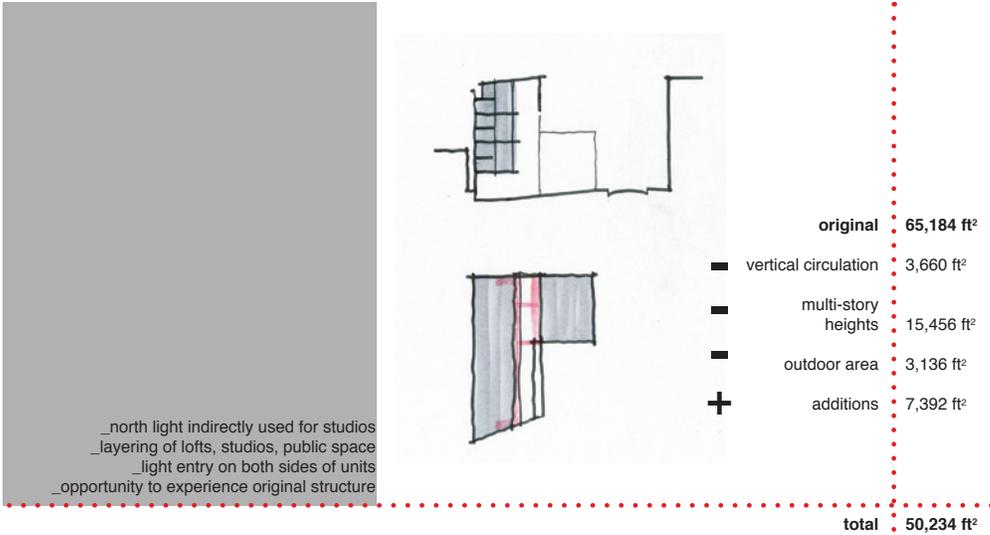


Illustration 42
Warehouse reuse study: E

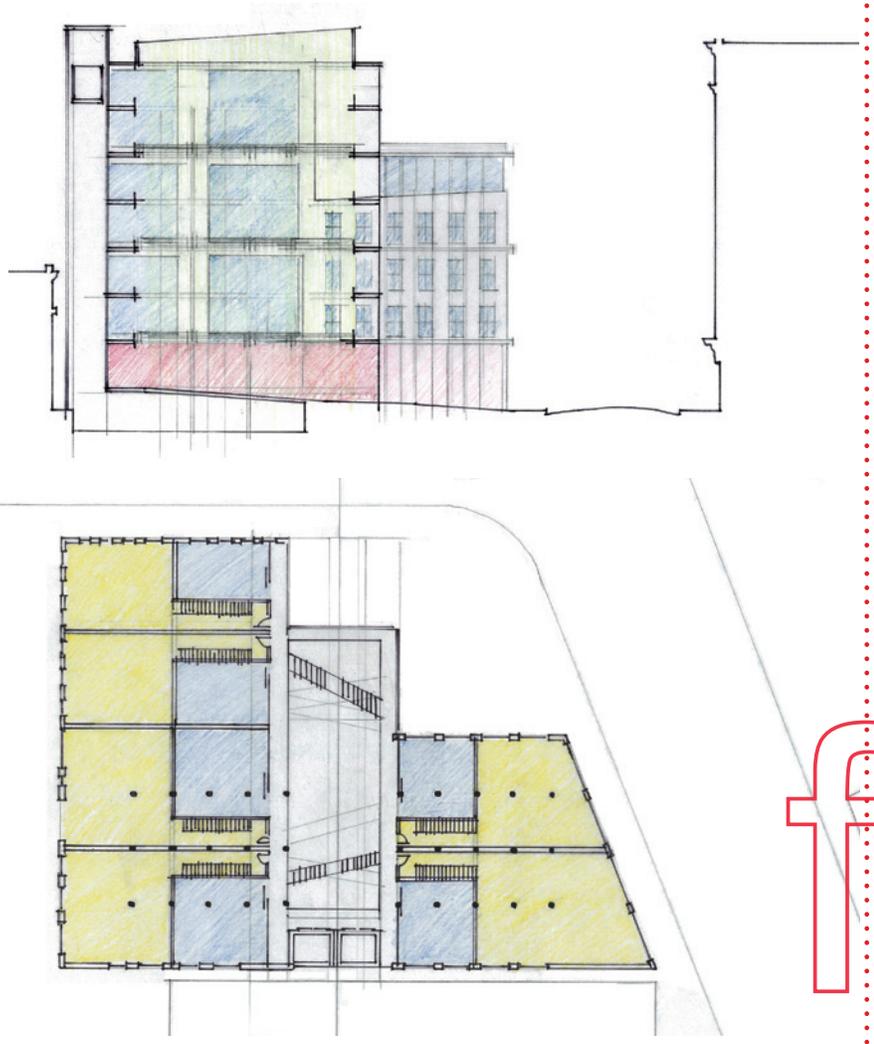
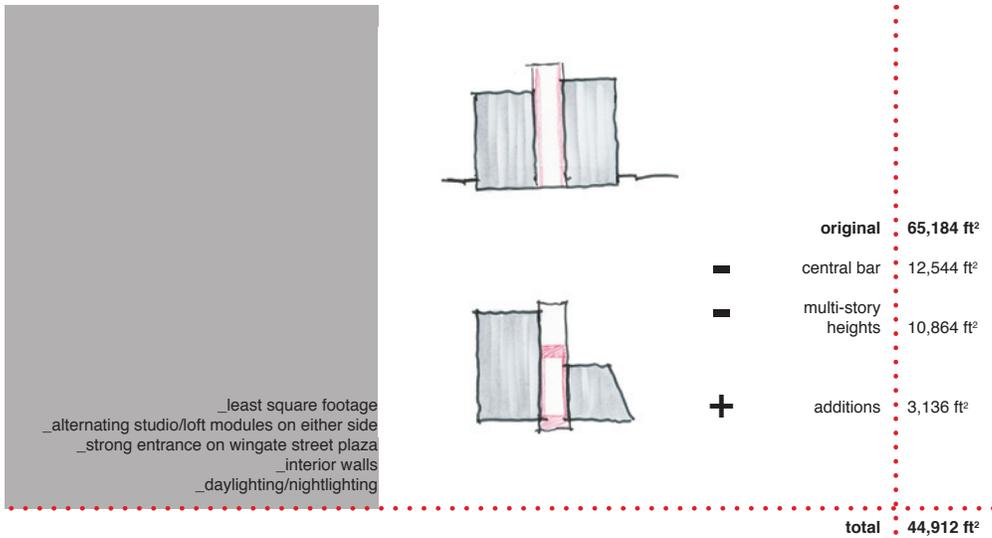


Illustration 43
Warehouse reuse study: F

the building and portions are added to the existing structure to create more interior spaces.

In much the same process as the initial design investigations, some additional drawings further explore some of the implications of these schemes. Illustrations 44 and 45 show an idea about the creation of an interior “street” and the light qualities during the day and night it would provide, which contrast to the existing masonry walls but incorporate some of the existing structure. This can be seen most clearly in scheme F, in which a large portion of the building is taken away, and new structure added to support a tall interior area. Illustrations 46 and 47 explore the configuration of the studio spaces in scheme E, in which the studios are not located along any exterior wall. The penetration of light through the adjacent spaces indirectly lights the studio space. The south light comes through the residential area attached to the studio, indirectly lighting the studio through windows on the interior wall. The north light is diffused and enters through the north side, along which all floor slabs are removed to create an interior wall with balconies along which visitors can access the studios and be part of a larger space. The walls of the studios facing this side are semi-transparent, allowing the north light to also indirectly penetrate to the space. These details, along with some other specific aspects of the six configurations studied, led to the final proposal for the thesis and allowed for a more cohesive configuration of the program.

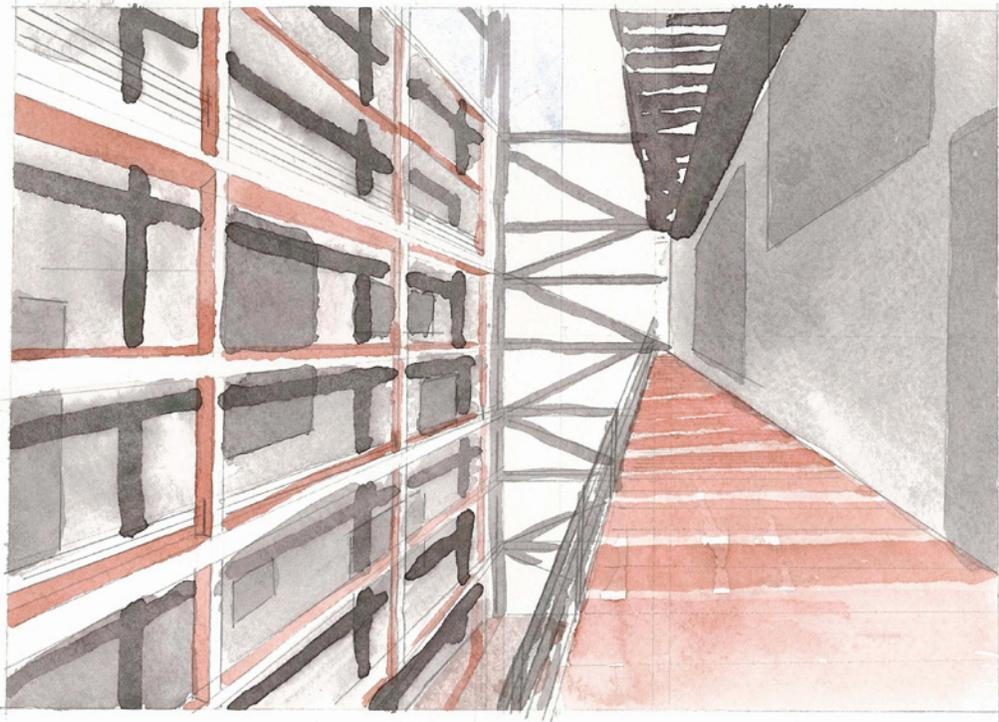


Illustration 44
Watercolor study, interior "street:" day



Illustration 45
Watercolor study, interior "street:" night

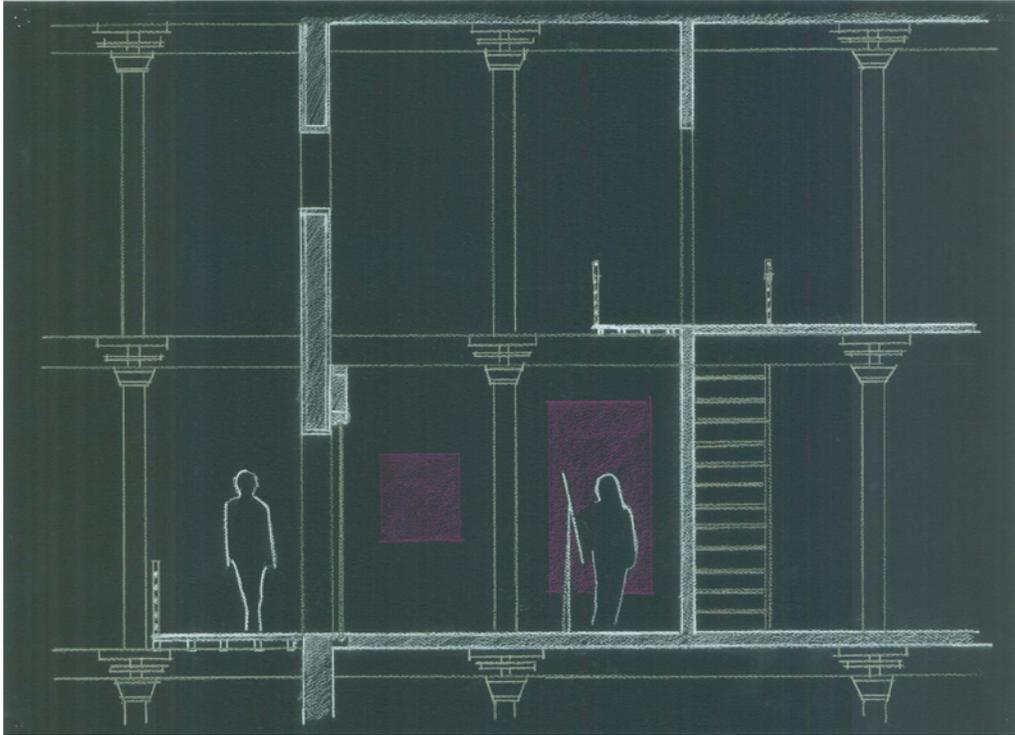


Illustration 46
Studio study: section



Illustration 47
Studio study: light penetration

Flexibility for artists and lessons learned from studies

The six warehouse reuse studies represent different ways in which the C. G. Ellis building, and other warehouse buildings like it, can offer flexibility to accommodate for different programmatic elements and utilize minimal or extreme approaches to adaptive reuse. With regard to this thesis, the problematic aspect about the six studies is that it takes a very modular approach to the residential and studio spaces. In order to accommodate for artists with different needs, these spaces must be flexible themselves and provide for different situations. Incorporation of different types of studio and residential spaces within the building are incorporated into the final design, some of which relate directly to the varieties in schemes A-F.

Other lessons from the six schemes are taken to the final proposal:

1. North/South studio treatment

In scheme C, the studios are placed on the north faces of the building, while the residential units are placed along the south. Because north light is ideal for artists, and south light is desired for residential units, this configuration allows for maximum light potential for different programs. Furthermore, it places the studios along the main streets, Wingate and Essex, while placing the residences in more private areas of

the building.

2. Public spaces along Wingate Street

In scheme E, a large portion of the building is designated for the public realm and is located parallel to Wingate Street, engaging the interior of the building on the north face with the existing Arts District. As an extension to this current Arts District, it is important to engage Wingate Street in the public realm of the building configuration.

3. Variety of heights within the building

Scheme C utilizes a very tall space with clerestory lighting for the main gallery, and other schemes use a variety of heights for different program throughout the building. The final design will incorporate a variety of heights in the programs, particularly for the display areas, in order to accommodate for different sizes of art and importance of public spaces.

design solution

Using the lessons learned from the urban development investigations and the warehouse reuse scheme options, a final design proposal utilizes the programmatic categories of living, working, displaying, and teaching, and incorporates the public realm into the building. As an extension to the current arts district, the design provides ways by which the building can become a catalyst for development of the Washington Street Shoe District.

The proposal utilizes the lessons outlined in the previous chapter and precedent research (figures 30-32) to create a sequence of public spaces along the face of Wingate Street and on the entirety of the first three floors. The private, residential spaces are on the upper stories on the south side of the building. The facade along Wingate Street is manipulated by adding “drawers,” which house artists’ studios and extend past the facade, providing contrast between new and old structures and denoting the public spaces of the building continuing up throughout the entirety of the structure, all the way to the roof.

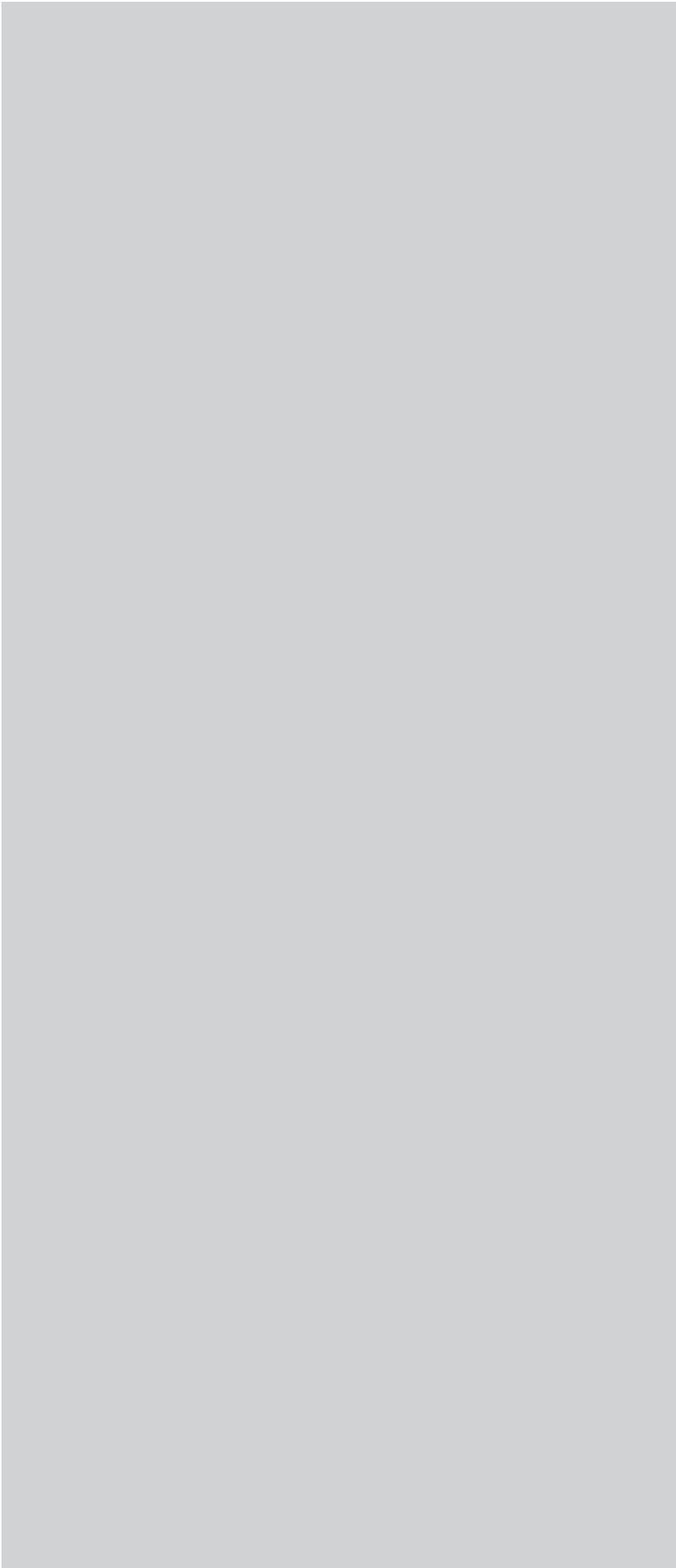


Figure 30

Precedent study: public signage and promenade

Sources (from left to right): holl, pg. 115; Latham, pl. 07b; Cerver, pg. 77; Cerver, pg. 142; Latham, pg. 29; Cerver, pg. 61; Cerver, pg. 141; flickr.com; flickr.com

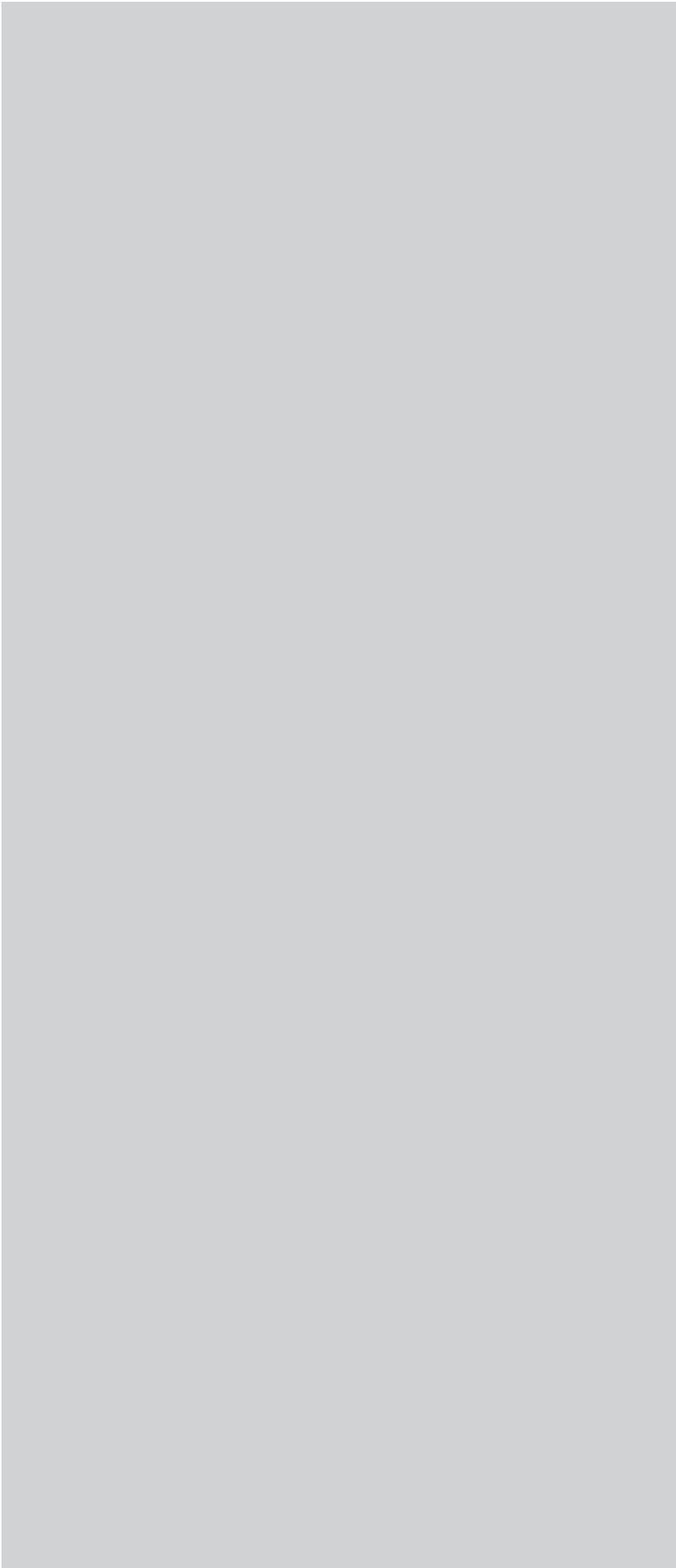


Figure 31

Precedent study: light and visual penetration

Sources (from left to right): Broto, pg. 15; Cerver, pg. 159; Cuito, pg. 173-174; Cuito, pg. 101; Cuito, pg. 175; Cuito, pg. 174, Holl, pg. 38-39; Holl, pg. 122; Cuito, pg. 56-57; Holl, pg. 29

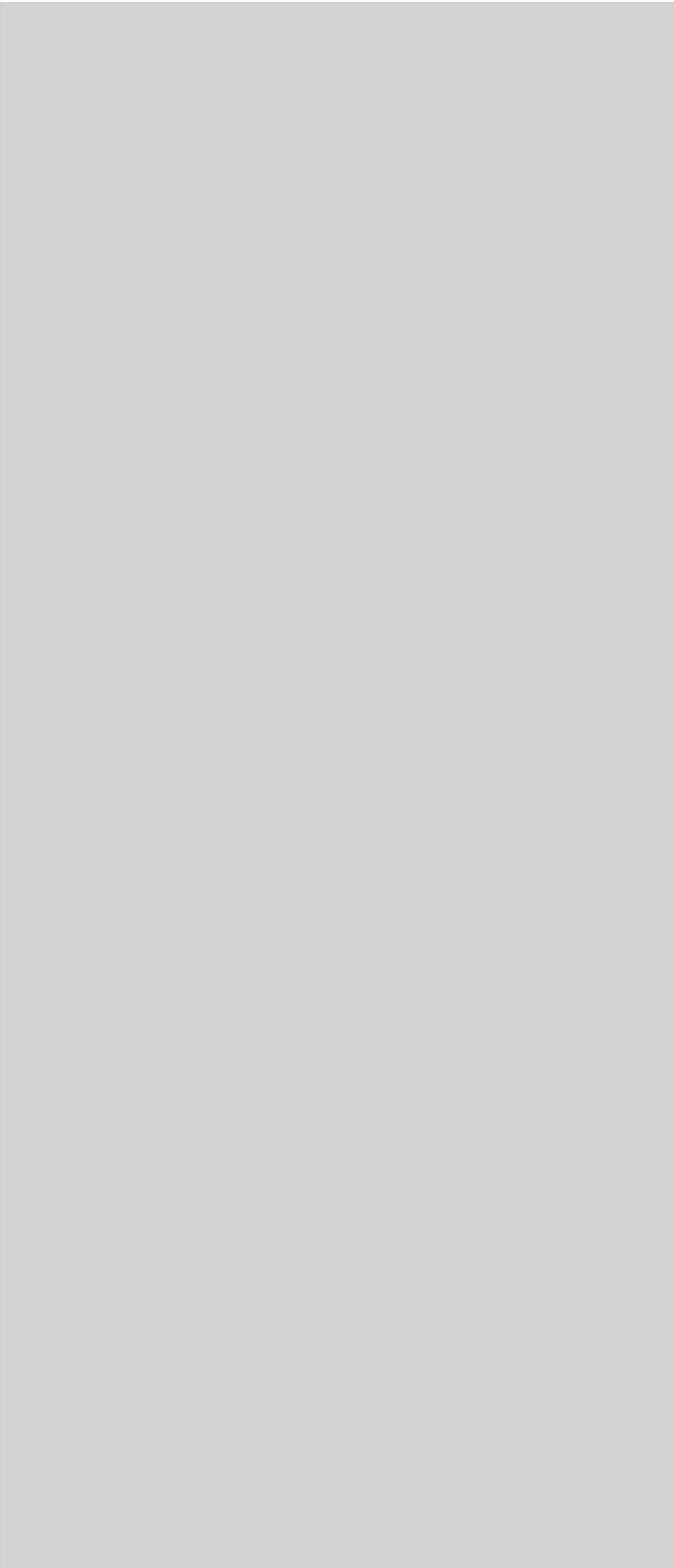


Figure 32
Precedent study: exterior “box” configurations

9 Sources (from left to right): Images 1-5, Phaidon Atlas; Latham, pg. 29; Phaidon Atlas, Images 8-10, flickr.com



Illustration 48

Approach to building from the center of the Washington Street Shoe District

The manipulation of the Wingate Street facade wraps around the corner to Essex street. The second floor studio "drawer" creates an overhang, under which the building can be entered through the large cube on the plaza between the older and newer structures of the building.

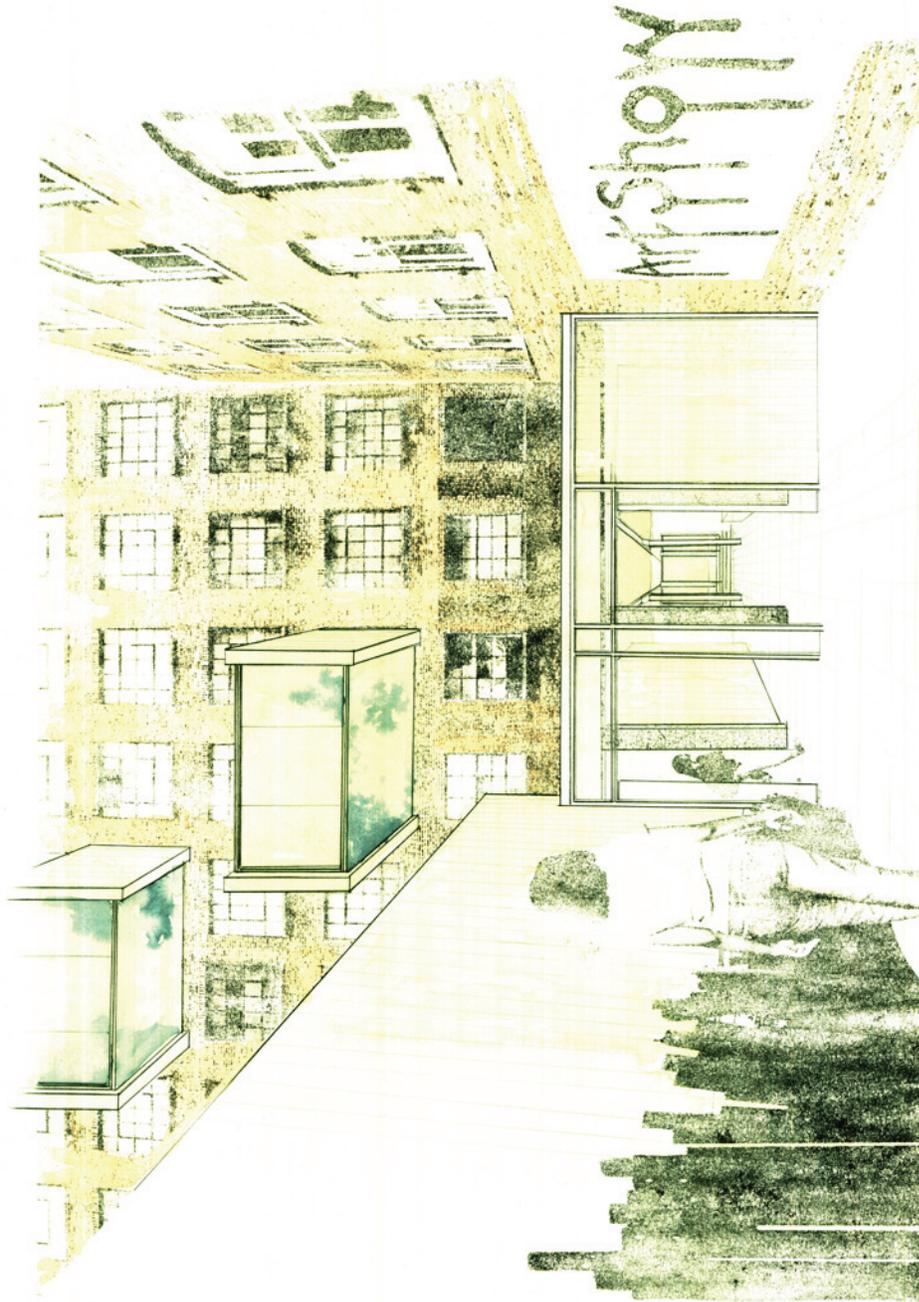


Illustration 49
Entry to the building from plaza

The main entry to the building is located along Wingate Street. The entrance is defined by the space located in-between the newer addition to the existing structure and a cube structure on the street corner, in which a large communal production studio is located. The entry to the main gallery on the first floor is on axis to this entry; the doorway is visible in the background of the drawing.

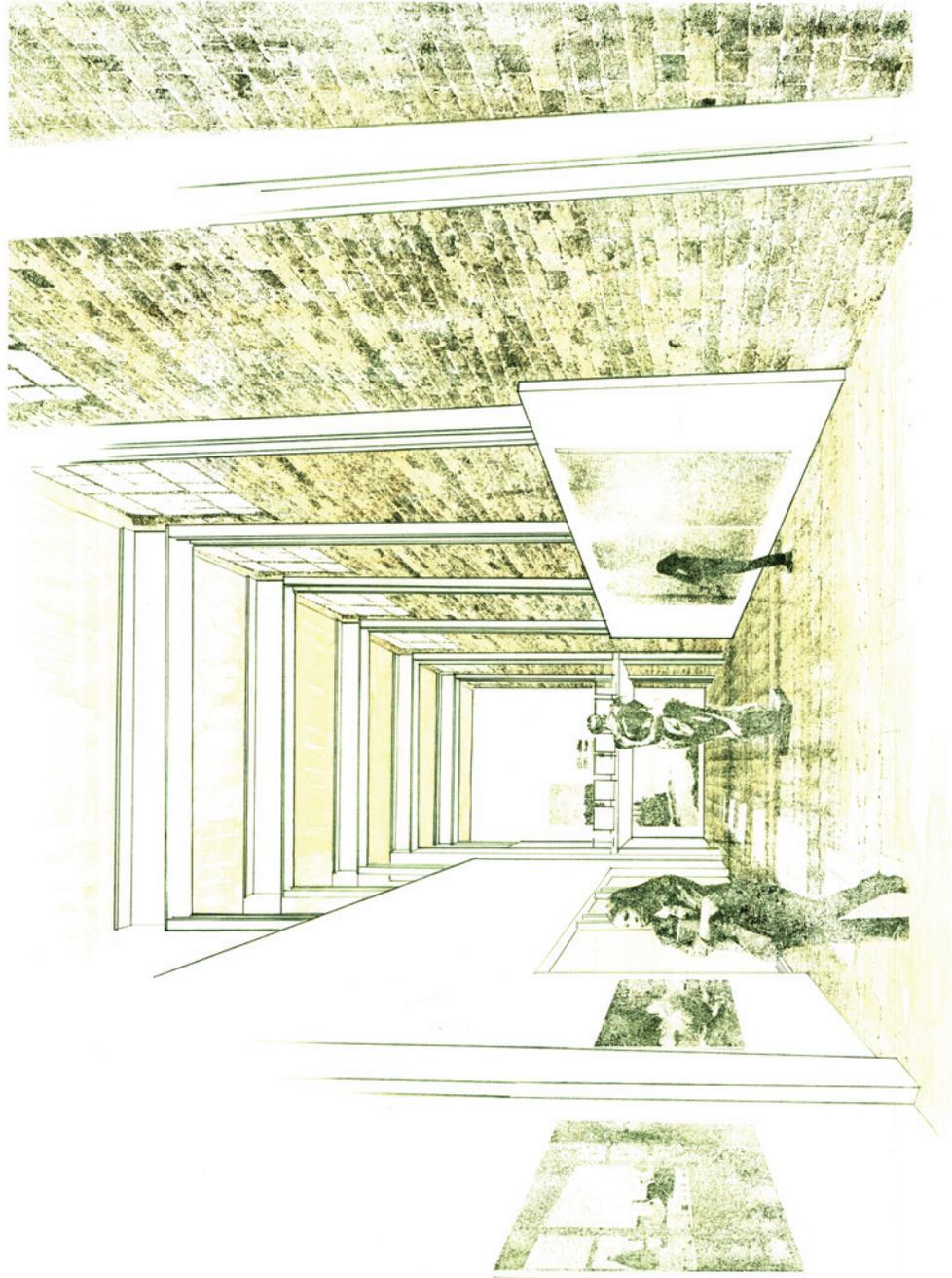


Illustration 50
Main gallery space

The gallery is entered on the first floor and is three stories tall. Mezzanine levels enter the space from the second and third floors. The old structure is taken away, and a steel structure is added to carry the loads from the floors above and brace the original masonry wall.



Illustration 51

Transverse section through entry

In this section, the ground floor is devoted to entry from the plaza and circulation to the main three-story gallery. The gallery has a clerestory for indirect lighting. The second and third floors contain artists' studios and mezzanine levels connecting to the gallery, designating the first three floors completely to the public realm. The fourth-seventh floors contain both residential units and artists' studios, dissipating the public realm as one moves vertically through the building. These studios can be visited upon request or by invitation from the artist. (studios=blue, residential=yellow)

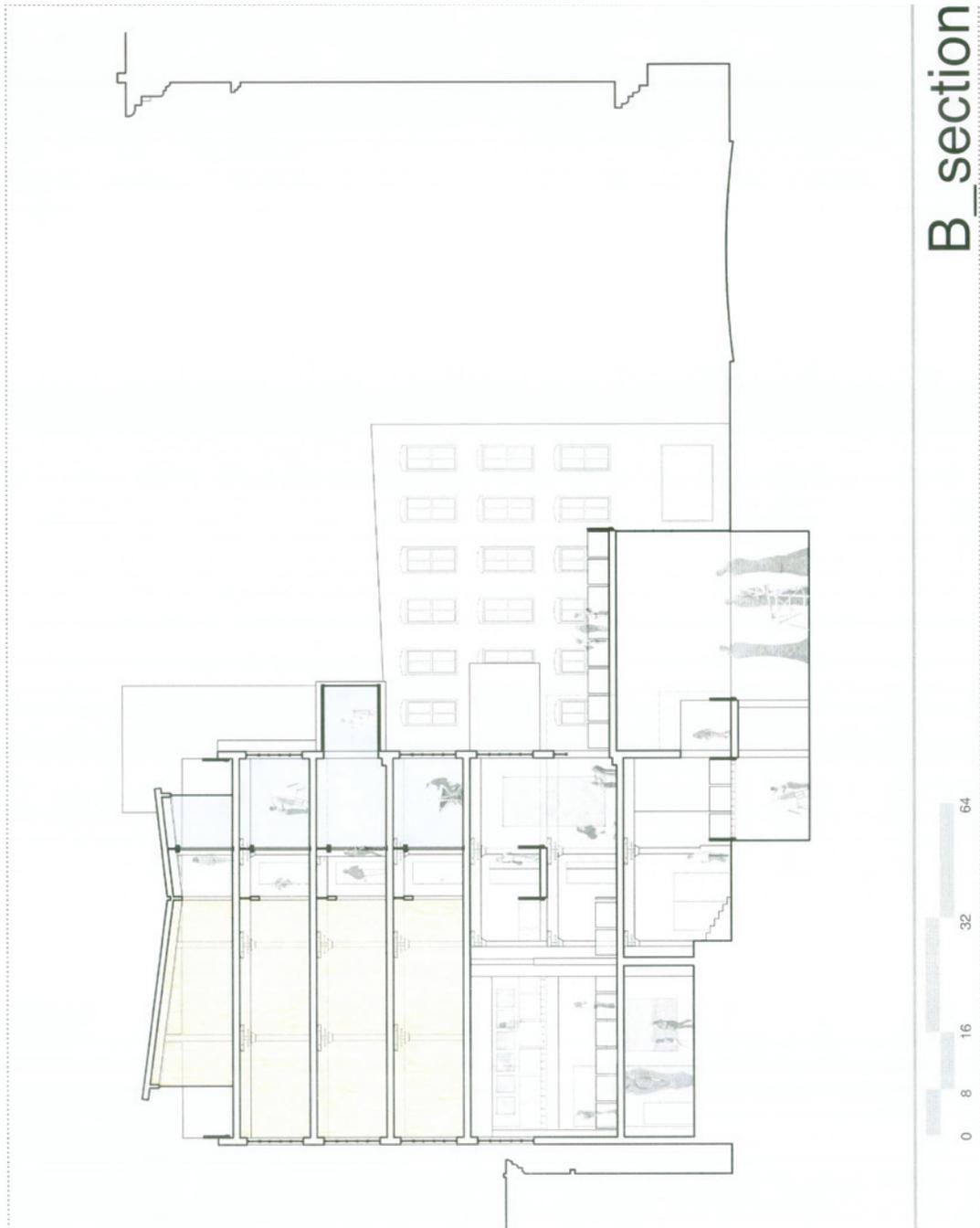


Illustration 52

Transverse section through large studio “cube”

A large cube structure, reflective of the newer addition to the existing structure, is placed in the corner plaza between the old and new structures. Within it is a large studio space, in which artists can work together or create installation pieces for display. A secondary entry from Essex Street allows access to a catwalk through the space, which leads the visitor to the main entrance from Wingate Street. From this catwalk, the art being produced below can be witnessed by the visitor. (studios=blue; residential=yellow)



Illustration 53
 Longitudinal section through gallery

The main gallery is three stories high, and is accessed from the second and third stories by mezzanine levels. This allows for a variety of different heights within the one space, which accommodates for different sizes of artwork and feelings of spatial grandeur in one of the most important public spaces of the building.
 (studios=blue, residential=yellow)

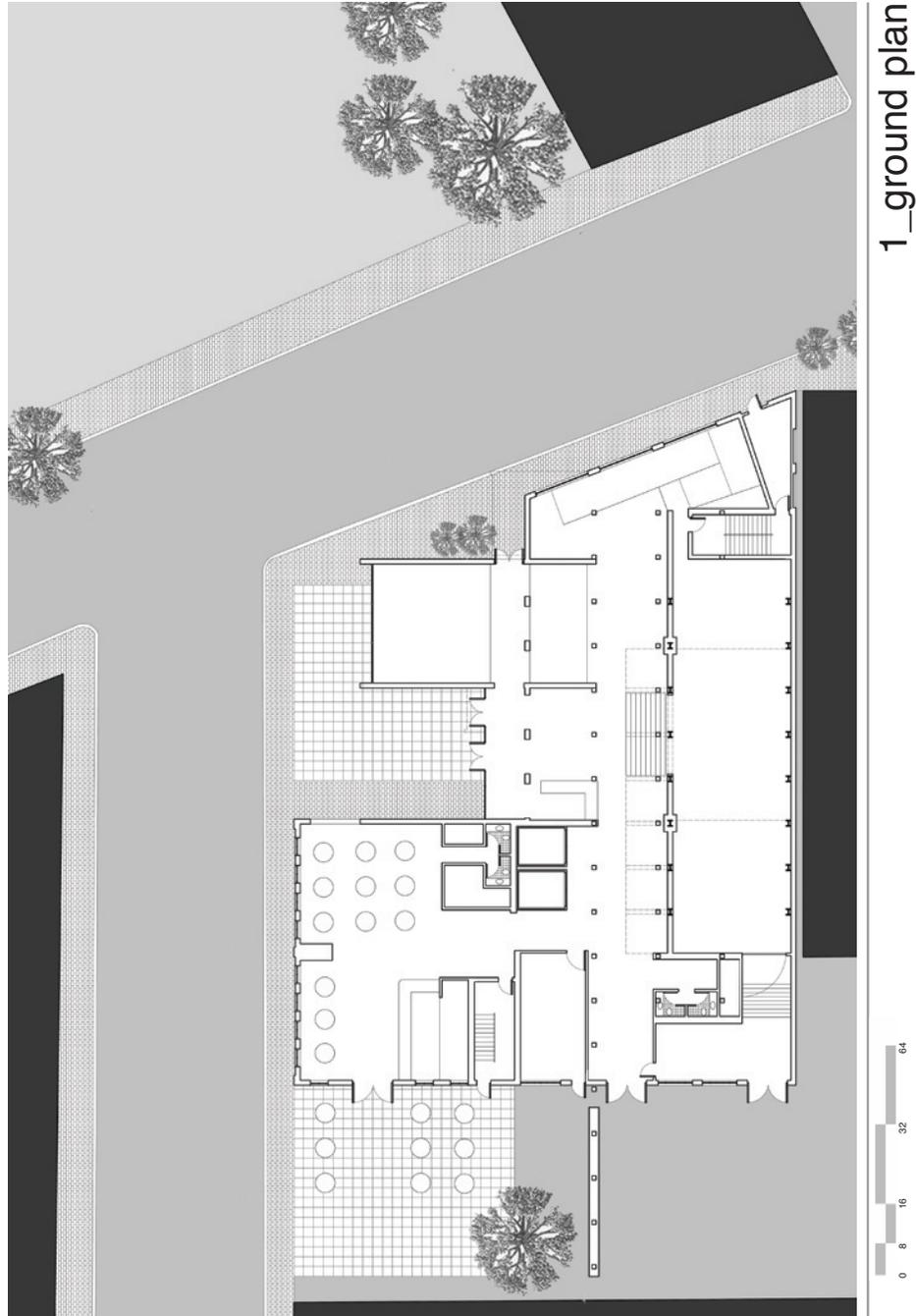


Illustration 54
Ground floor plan

The entire ground floor is dedicated to the public, with the large gallery against the south side of the building, circulation, service, and a gift shop in the rest of the older existing structure, and a cafe in the newer addition to the structure. All of the first floor has been shifted down to be level with the ground except for the gallery, which is accessed mainly by the stairs and secondarily by a ramp in the northeast part of the building.

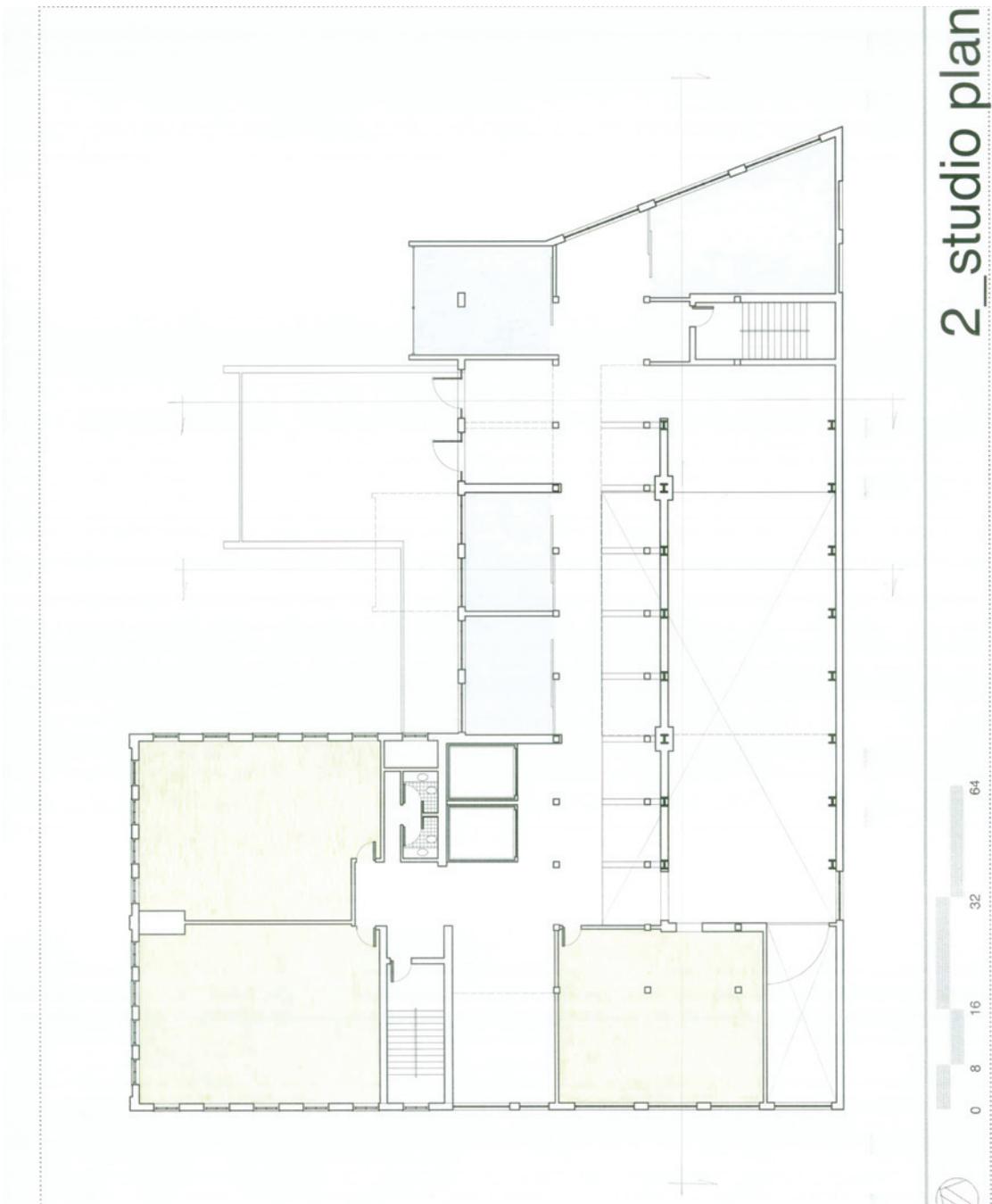


Illustration 55
Second floor plan

The second and third floors are similar in that they house only studios and classrooms, designating the first-third floors as all public. The studios on these floors are intended for use by artists who do not wish to live adjacent to their workspace; instead, they live elsewhere in Haverhill, commute from Boston, or reside in the upper stories of the building. (blue=studio; green=classroom)

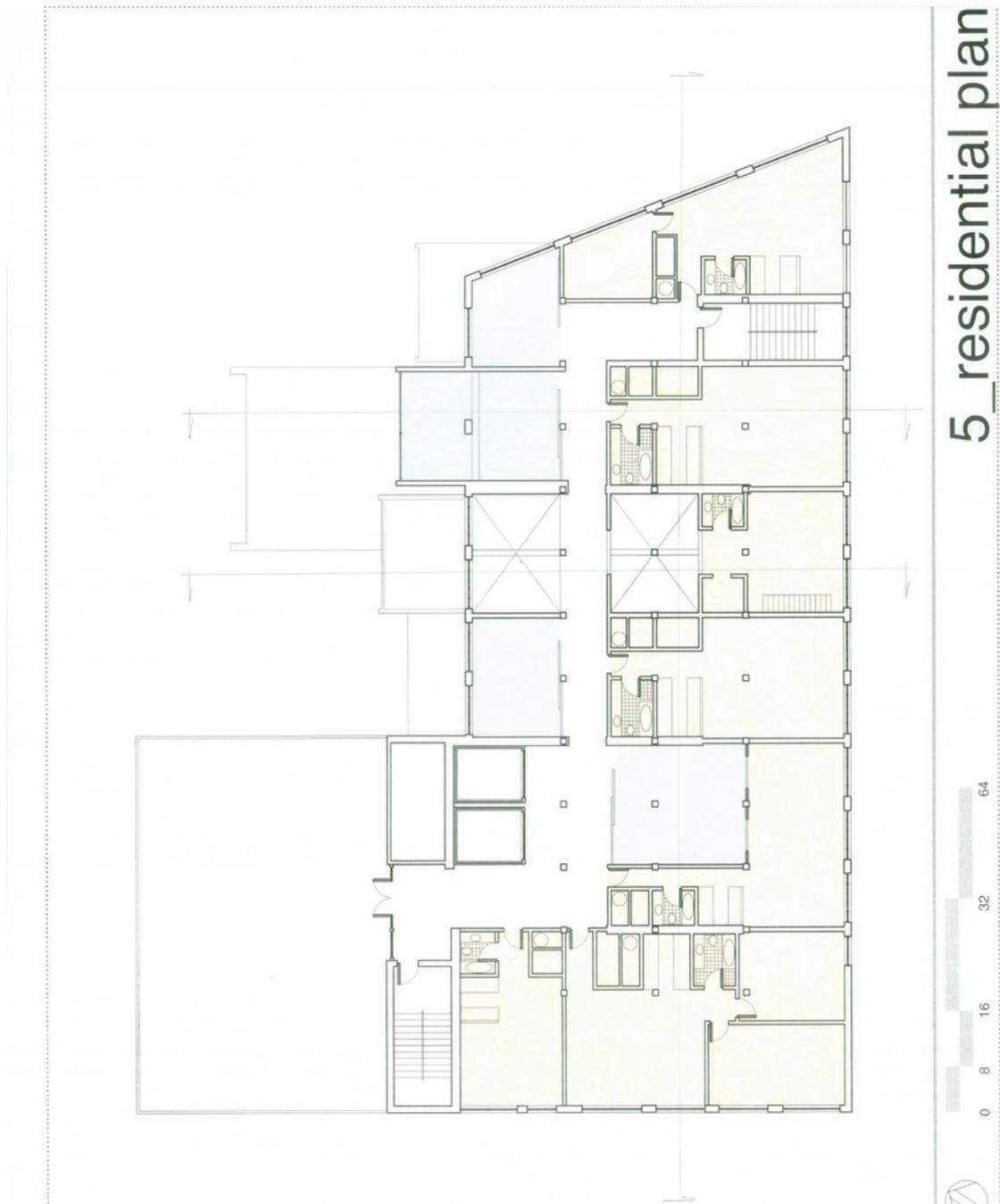


Illustration 56
Fifth floor plan

The fourth-sixth floors are similar in that they all contain residential units and artists' studios. Some of these studios are attached to the residential units, some are across the hall, and some exist in the "drawers" extending away from the existing structure. Units without studios adjacent have been provided in the case that an artist may wish to work separately from the place in which they reside.
(blue=studio; yellow=residential)



Illustration 57
Seventh floor plan (roof)

The seventh floor follows part of the same pattern of live-work modules present on the fourth-sixth floors, and provides public outdoor areas for events as well. The public areas are present throughout the building, even as high as the roof.
(blue=studio; yellow=residential)

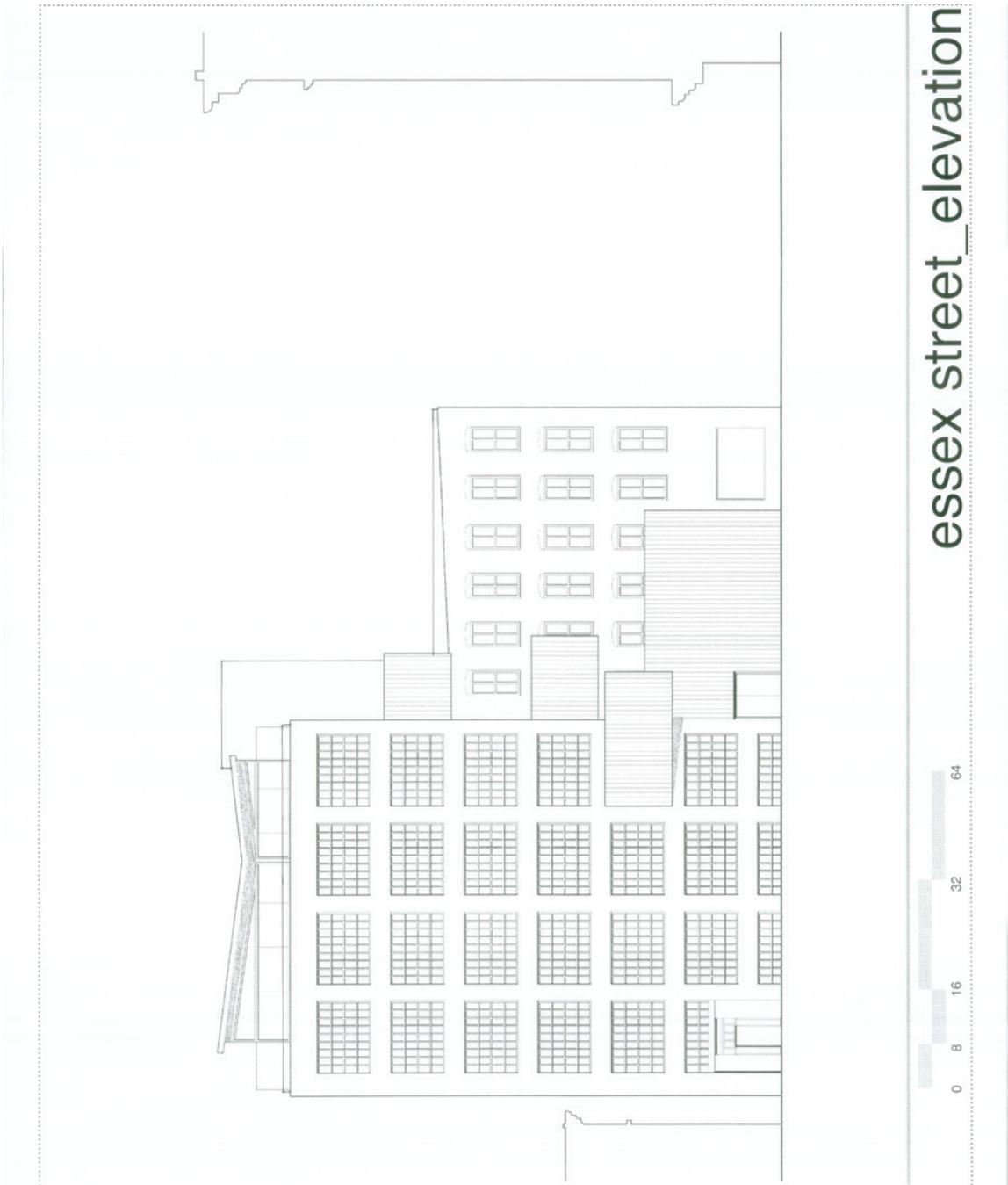


Illustration 58
Essex Street elevation

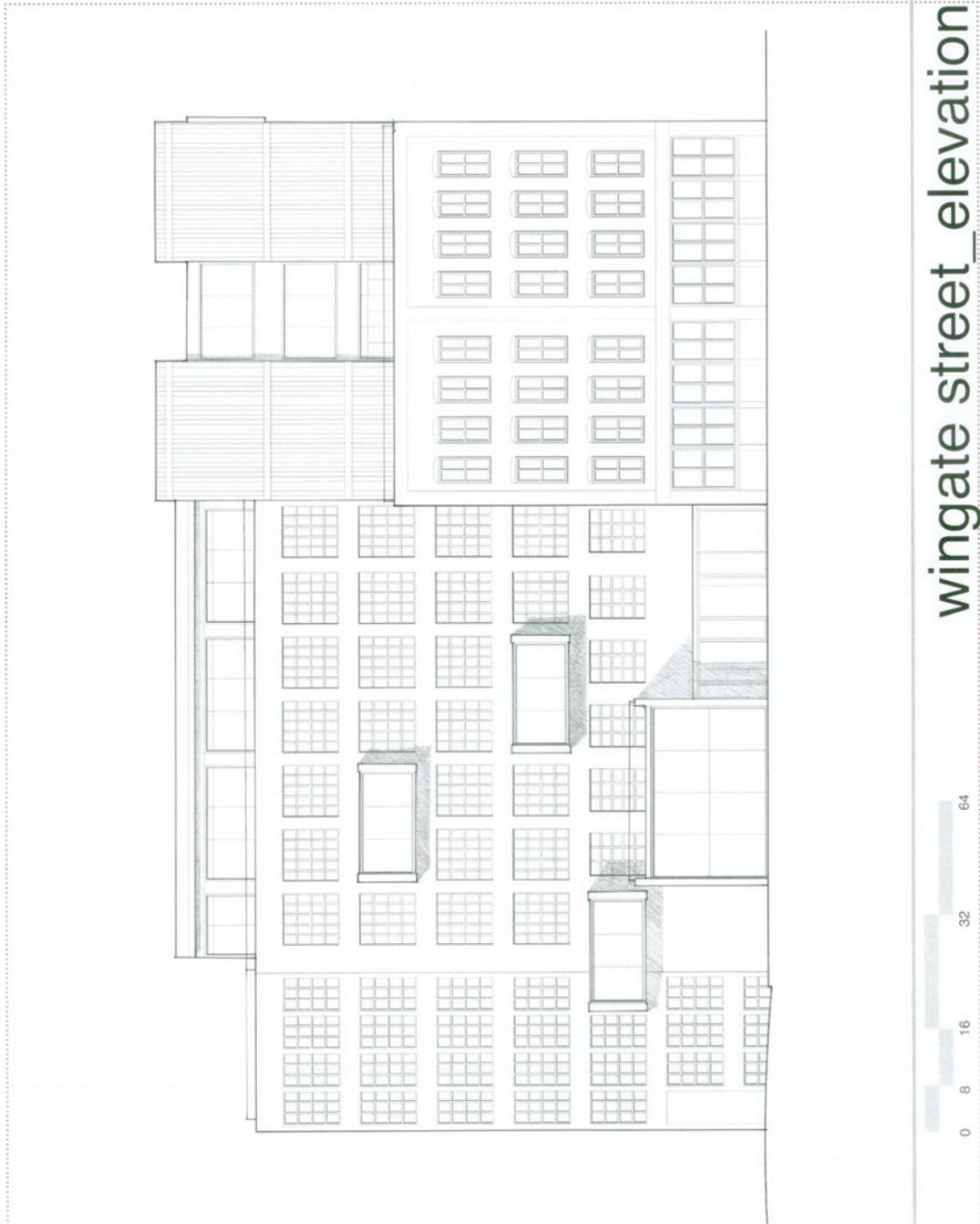


Illustration 59
Wingate Street elevation



_studios

Illustration 60
Interior “street” perspective

As explored in the initial design approaches, an interior “street” is created which designates the public realm of the building, and along which reside the artists’ studios and access to mezzanine levels of the gallery. This drawing depicts the interior “street” on the second floor. A triple height space in this area reflects the triple height space within the gallery, and allows the original structure to read.



_display

Illustration 61

Small display area perspective

Flexibility in terms of display areas was explored, in addition to the studio and living arrangements. Small, double height display areas are provided every other floor within the studio and residential areas for more informal artist display. In all display areas, the original masonry wall is exposed, in order for the public to interact with the original conditions of the structure.



Illustration 62
Rooftop public area perspective

The rooftop is built on with new structure, and the existing parapet becomes integral in providing places for people to sit. There is an indoor and outdoor area in which events and more display can occur.



Figure 33
Model of “drawer” parti exploration



Figure 34
Model of final proposal

conclusion / post-critique

After participating in the public reviews at the second-to-last meeting, feedback was provided for further consideration. Based on this critique, a few further explorations for the thesis were investigated.

Treatment of the corner

The entry from Essex Street and the corner of Wingate and Essex Streets seemed to have minimal intervention and needed something more drastic to represent an entry, as this approach was deemed to be the “gateway” into the arts district. Illustration 48 in the design solution chapter illustrated this approach, and one problem with the proposal lied in the way the perspective was drawn. The image does not show the contrast between the “drawers” and the facade to the extent imagined.

Illustration 63 proposes a rendering which makes the “drawers” appear more prominent. An evening view allows the light from the interior to penetrate to the exterior, and the channel glass is colored to promote individuality.



Illustration 63
Essex Street approach: evening view

Treatment of the roof

The language of the roof (in terms of materiality and reading as a public destination) was not cohesive with the rest of the additions; mainly, the drawers. A more uniform language in terms of materiality with everything added to the structure, as well as visibility of the roof structure from the entry level, will help tie the scheme together and help signify to the public that there are destinations on the roof.

Another drawing was made to change the Wingate



Illustration 64
Wingate Street facade: evening view

Street elevation, in which another “drawer” is added to engage the top level and denote that there are places to visit on the roof as well as the other levels. (illustration 64) The evening view allows for more color arrangements of the “drawers” to be investigated, further individualizing the studios. Furthermore, the vertical circulation begins to separate the old structure from the newer existing structure, denoting importance of the ascension through the building.

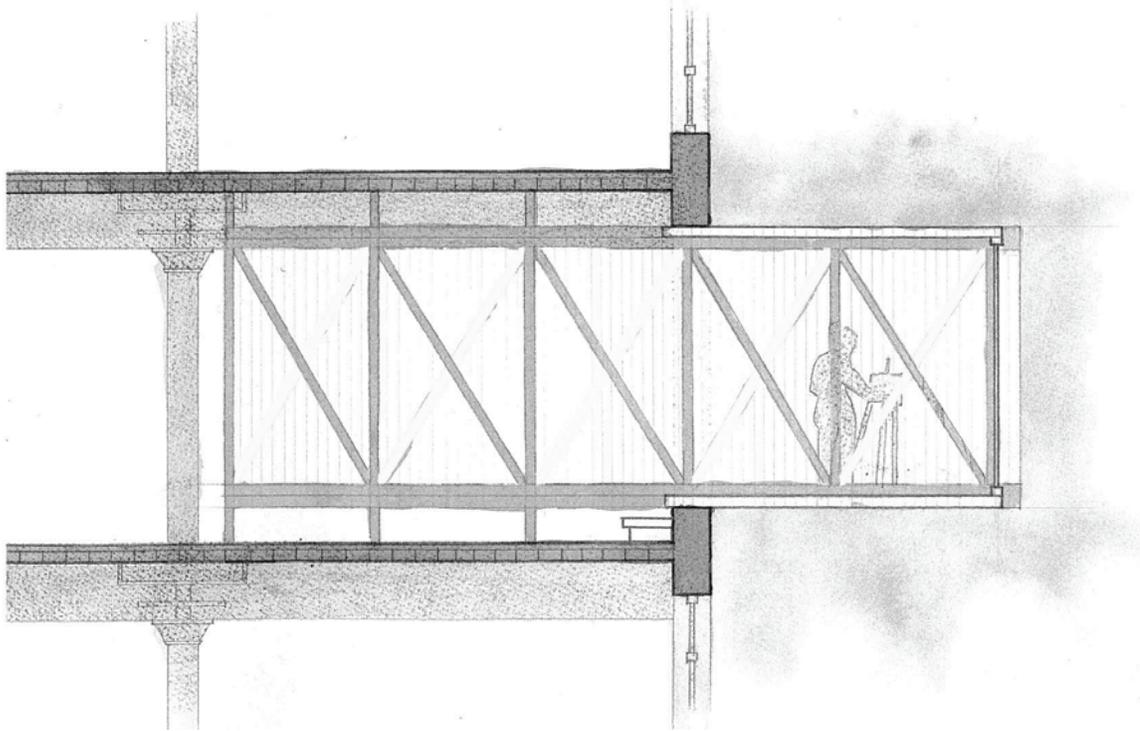


Illustration 65
Section of structure of "drawer"

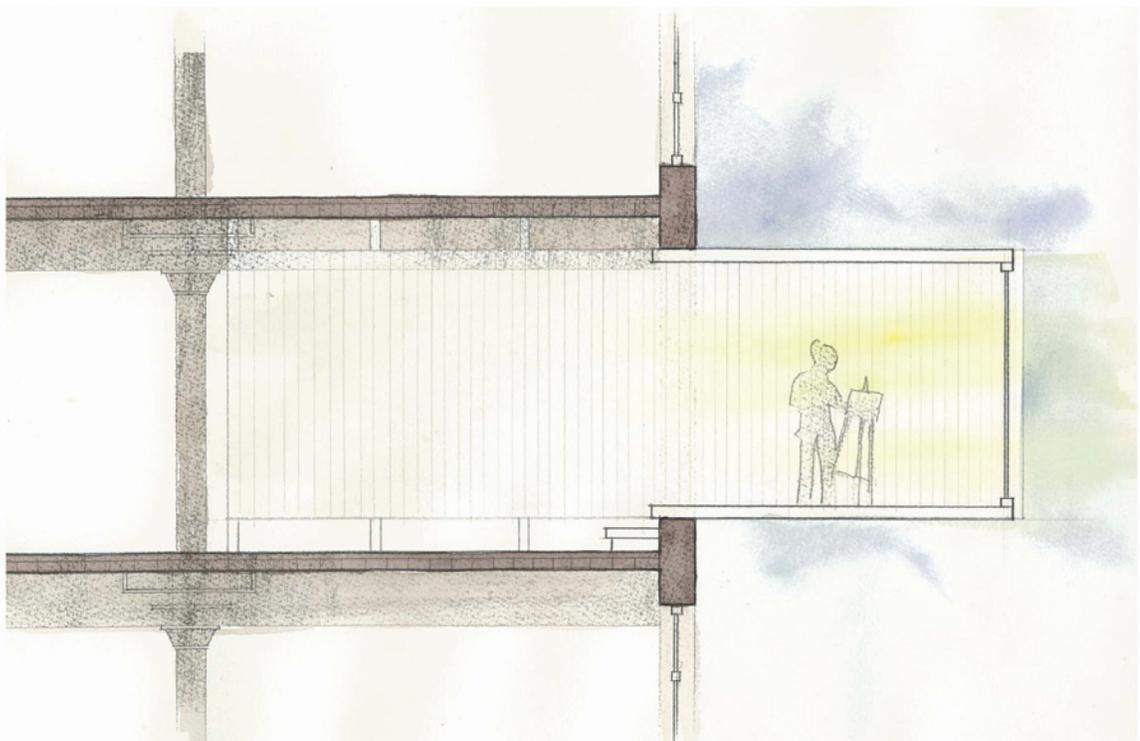


Illustration 66
Section: light penetration through "drawer"

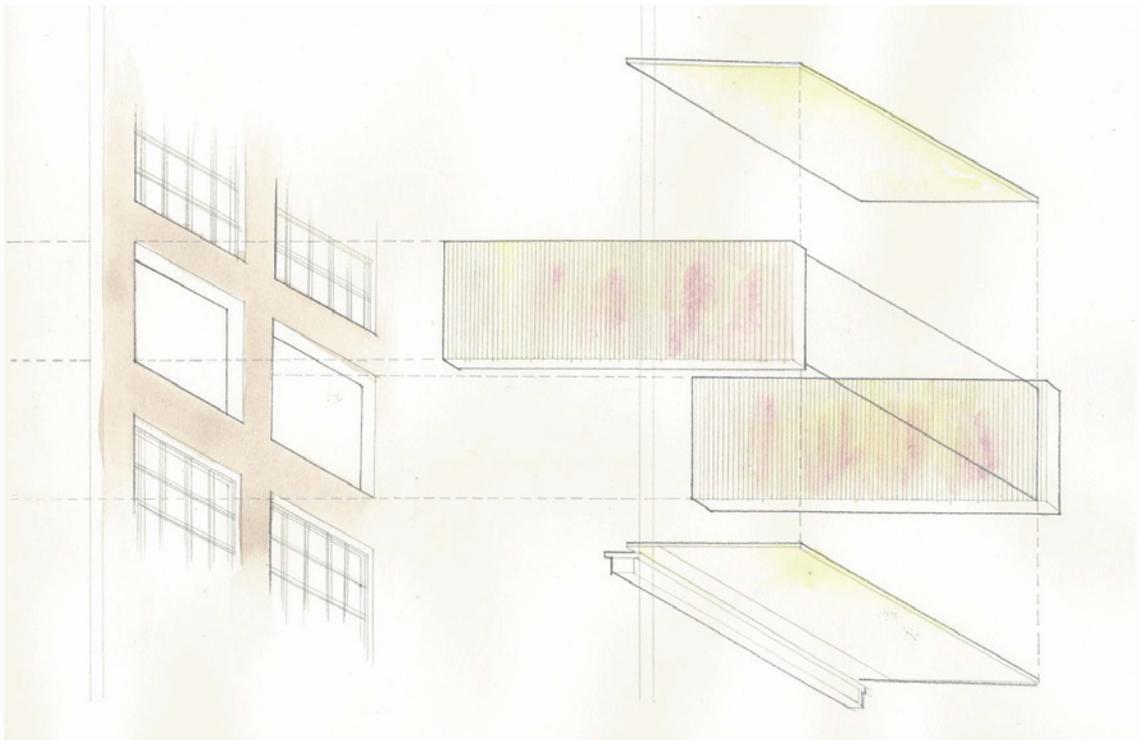


Illustration 67
Exploded axonometric: how “drawer” is configured within existing wall

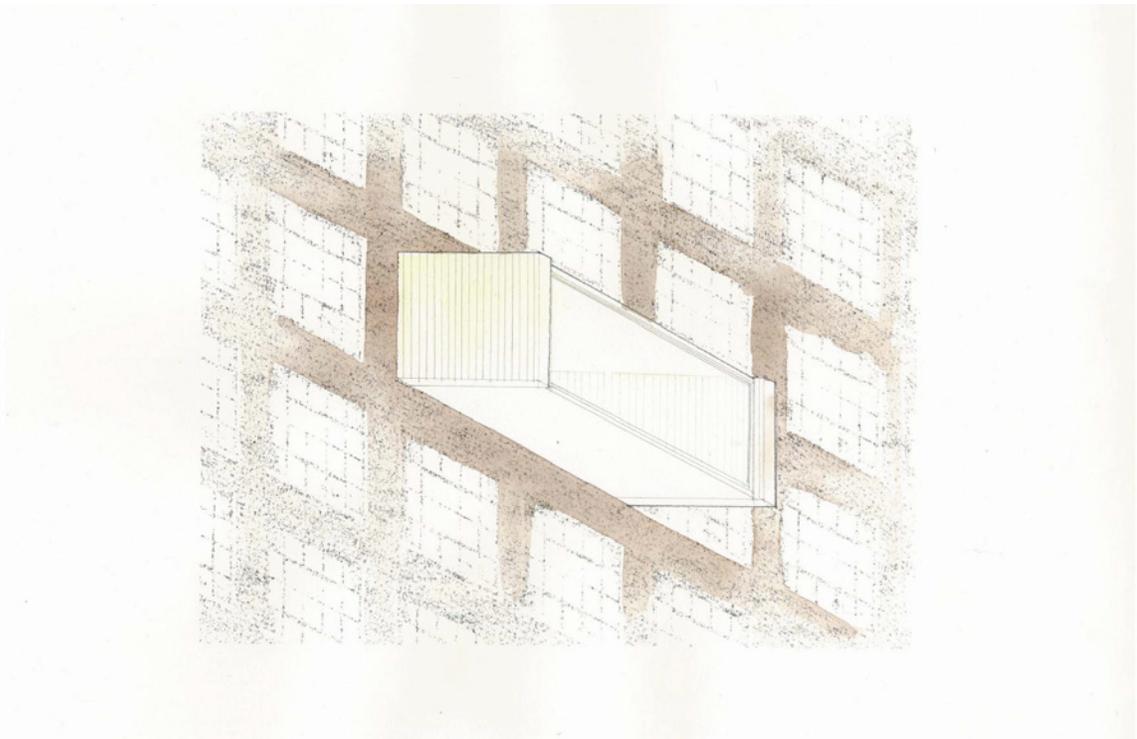


Illustration 68
Axonometric: juxtaposition of contrasting textures between existing wall and new “drawer”

Language of the “drawers”

The structure and materiality of the “drawers” were discussed a lot during the public review. It was suggested that the structure of the boxes may be more of an extension of the existing structure of the building, however, because the additions to the building are meant to contrast with the existing conditions, the juxtaposition of different structures enhances the scheme. A more detailed exploration showing the insertion of the “drawers” and how they situate within the existing structure is explored to show contrast and how they are put together. Furthermore, the concepts of light, color, and texture come into play once again, as explored in the art and architecture chapter. (illustrations 65-68)

The rehabilitation of the C. G. Ellis Building at 24 Essex Street provides a flexible environment for artists to live, produce, display, and teach art. It provides different accommodations for different kinds of artists and their preferences.

The building houses all the needs for art, thus contributing immensely to the currently lacking arts district. It provides a public arena for the industry of art to be engaged with the visitors, and provides a destination in the center of the Washington Street Shoe District. By further developing the Wingate Street Arts District, the building is a catalyst for the renewal of the entire downtown area.

endnotes

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