

**Derived from the Interstitial:  
An Architectural Investigation into Laneway Development**

by

Jordan P. Molnar

Submitted in partial fulfilment of the requirements  
for the degree of Master of Architecture

at

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**DALHOUSIE UNIVERSITY**  
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## **ABSTRACT**

This thesis addresses the decaying and under-utilized space found within the laneways of downtown Brampton, Ontario. Through studies that examine the role and idea of the laneway an architectural language is derived that is used to inform strategies for materials, thresholds, structure and spatial form that respond to the laneway context. Within the building, a series of architectural interventions utilize the existing infrastructure allowing the buildings to integrate through structural and spatial interactions. These interactions create opportunities for programmatic activity to reclaim the existing under-used spaces for inhabitation as part of the new building. Programmatically, a brewery is used to promote social interaction while also introducing industrial practices to Diplock Lane. Additionally, through the laneway studies an urban strategy is derived that uses a series of interventions to create public space. This space facilitates social programming such as markets, cafes and festivals to reclaim Diplock Lane for the local inhabitants.

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To my parents, Les and Jeanette Molnar, family and friends for their continuous support and encouragement.

## **THESIS QUESTION**

How can the existing conditions found within Brampton's laneways act as a catalyst for generating architecture?

## INTRODUCTION

It also happens that, if you move along Marozia's compact walls, when you least expect it, you see a crack open and a different city appear. Then, an instant later, it has already vanished. (155 Calvino)

Within the city, laneways weave between and behind buildings forming the finer grain of the urban fabric. Their traditional single purpose role as service corridors is no longer viable in the city. Many cities are reconsidering the role of laneways and transforming them into places that are habitable. In several cities around the world, many of the more sought after destinations by locals and visitors are found hidden within laneways. The process of transforming these laneway spaces from service corridors to destinations is the focus of this thesis.

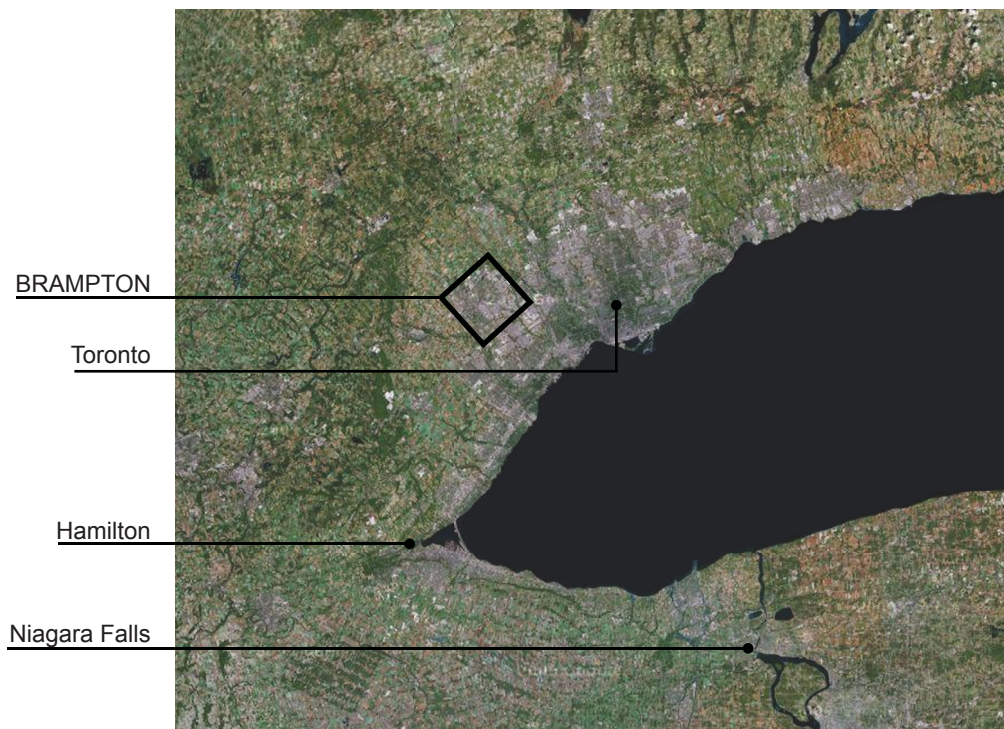
The following investigation looks at the under-utilized space found within the City of Brampton's laneways. In particular, focus is given to how these left over spaces can be adapted into new building strategies. The architectural approach is defined through the examination of both the existing urban and built relationships between the street and laneway. Through this process, strategies for an architectural response are derived. The final stage of this thesis utilize's the strategies from the earlier investigations to form an urban approach to activating laneways.

## Understanding the Site

### *Regional Scale*

The site for this investigation is located within the City of Brampton. Brampton is located within Southern Ontario and is part of the Greater Toronto Area (GTA). Geographically, the city is surrounded by four main geographic features; the Niagara Escarpment, Oak Ridge's Moraine, Iroquois Plain and Lake Ontario.

Brampton, located along the western edge of the GTA, is one of the fastest growing communities in Canada (City of Brampton). Brampton is bordered by the countryside and also the urban setting of downtown Toronto. Connecting these very different places is made possible through the extensive development of infrastructure. In particular, the regional highways (410, 407, 427, 401) that cut through and around Brampton link the city to the rest of southern Ontario. In addition, just outside of Brampton's boundary is the Pearson International Airport.



Southern Ontario. From Google Maps.

### ***City of Brampton***

Brampton has evolved within the GTA as a “city” defined by its suburban lifestyle. Development in support of this lifestyle has concentrated building efforts on expanding the peripheries of the city. In order to connect these communities, vast amounts of infrastructure have been laid out to link the communities to surrounding shopping centers and recreational space. This focus on the peripheries of the city has left the downtown under-utilized until recently.



Brampton's boundary within the GTA. From Google Maps.

## ***Downtown***

Downtown Brampton initially began as a trading post that was located along Hurontario Street which marked the trade route between Port Credit on Lake Ontario to Collingwood on Georgian Bay. (Loverseed 25) Hurontario Street is also known as Main Street and intersects with Queen Street marking the historic center of Brampton. This intersection originally called 'Buffy's Corners' due to the local tavern is now referred to as the 'Four Corners'. (Loverseed 40)

New development within the downtown over the past decade has reformed the urban fabric as part of the city's urban growth plan. (City of Brampton) In particular, this restructuring has integrated several new condo buildings, greatly increasing the population density, which has always been fairly low within the relatively small downtown area. In addition, the new Rose Theatre has been added along Theatre Lane. The construction that is occurring in Brampton is changing the urban dynamic and making it necessary to add programs that will benefit the reactivation of the downtown to support the local population.

Connecting the downtown to the rest of Brampton and beyond is a wide range of public transport. This includes a major transportation hub that connects city and regional bus services along with a national and regional train service. Both of these services transport a large number of workers and students into Toronto and the surrounding area each day.





Rose Theatre

Transportation Hub

Diplock Lane

Site

New Condo

City Hall

Gage Park

Downtown Brampton. From the City of Brampton.



## Urban Study

### *Main Street Typology*



Queen Street. View looking East.

The main streets of Brampton, similar to many southern Ontario towns and cities, initially had a strong presence within the urban life of the community. These streets were once more than the mere traffic routes for vehicles and pedestrians they are today. Instead the streets were a source of activity. Public events such as markets and parades occurred regularly and were times for the community to come together. (Loveseed 71-73) Shops, cafes, restaurants and taverns were continuations of the public realm and provided places for people to congregate and interact. This public realm represented a “collective living space” as defined by Constant and promoted community interaction. (Wigley 134)



Main Street. Looking at McArter Lane leading into Diplock Lane.

Today this idea of the “collective living space” along the street has been reformed into privatized shopping centers and relocated into the suburbs, supporting the surrounding communities. (Herzog 11) As a result, the majority of the population stays within the suburban areas. Furthermore, decreasing the idea of the urban living space is the revised role of the street. The street has become primarily commercialized and mechanized through modern planning strategies, forcing the disappearance of the social role. (Wigley 131) Few activities



Main Street looking North.

remain that support the habitation of the downtown. The farmers market is one of these few activities that allows both locals and farmers an opportunity to interact along the street. With the addition of the Rose Theatre, several community events are held throughout the year and often spill out of Theatre Lane and onto the street. These scheduled events leave the urban realm socially inactivated for the majority of the time. According to Constant, this social role along the street is crucial for supporting a healthy urban environment and helps promote the exchange of culture(s). (Wigley 131)



Main Street. The farmers market takes place on Saturday mornings during the summer and closes down part of Main Street.



Main Street. This image is the typical Main Street condition and shows the same area as the above image.

The idea of the street as a social corridor further dissolved with the increase in vehicular traffic. (Wigley 134) Instead of facilitating interaction, the street became a dividing line that made distinct urban realms: the vehicular roadway, pedestrian sidewalk and the storefront.



Main Street Typology. Diagram showing the relationship between the street, sidewalk and storefront.



Main Street looking south.



Queen Street looking east.

In reference to the previous page, the first realm is the vehicular, which accommodates the flow of traffic. On either side of this realm, the outside lane accommodates street parking during specified times. This edge condition creates a transition to the pedestrian realm. The pedestrian realm is characterized by sidewalks that line the street. Benches, trees and street lights rhythmically spaced along the street edge create a transitional zone. Patterning of pavers distinguishes this transitional zone from the paved walking surface that is adjacent to the building. The storefronts distinguish the third realm and are typically characterized by large display windows that line the street face. Adjacent to these display windows are glass entry doors that are set back from the window. These entries are typically on the ground plane, however are occasionally elevated with no more than one step. The facades are usually animated with detailed brickwork around the windows which contributes to the character of the street. Above the storefront window, signage is attached onto the façade and typically runs the width of the unit.

The dynamic created by the realms that make up the street, layout a distinct functional role. This dynamic is illustrated through the idea of porosity. Along the street facades, large storefront windows display goods for sale creating a visual connection to the street and people passing by. These storefront windows permit the extension of space and allow the atmosphere of the street to penetrate into the building. Additionally, the upper floors contain large windows that allow light into the living/office spaces creating a strong connection to the street. These functions along with the animation of the facades sets the tone for the role of the street. Sharply contrasting these conditions, the rears of these buildings operate to a different rhythm. The following pages illustrate the above observations.



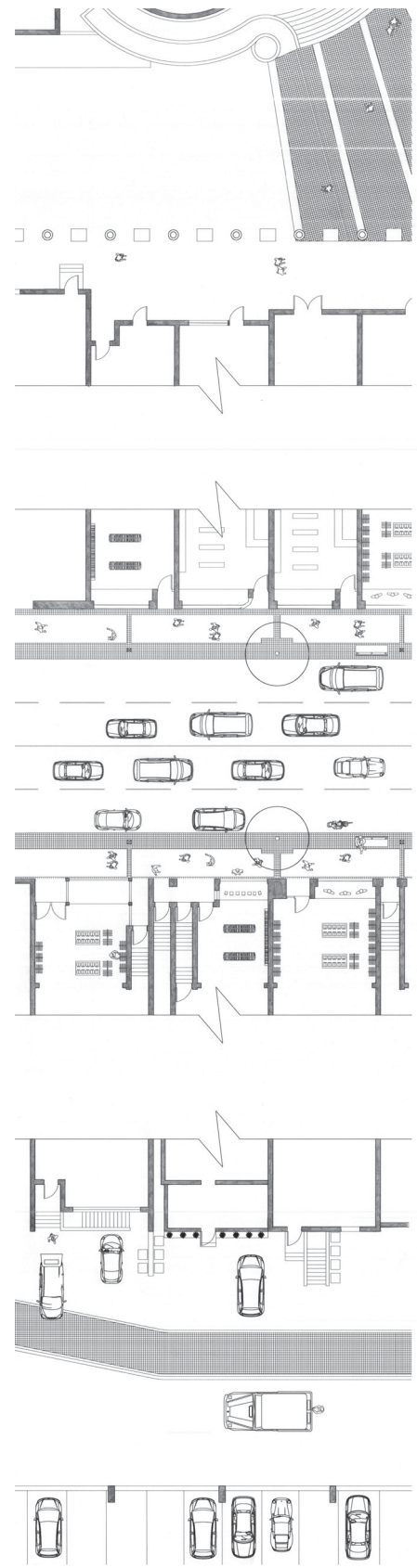


Diplock Lane

Main Street

Theatre Lane

Spatial Study. Sections look at the idea of porosity along Diplock Lane, Main Street and Theatre Lane conditions.

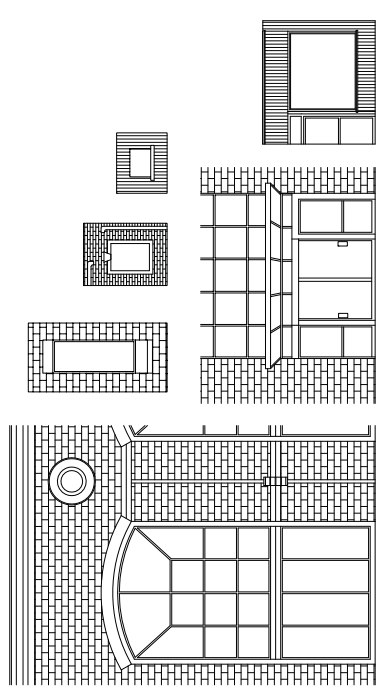


Diplock Lane

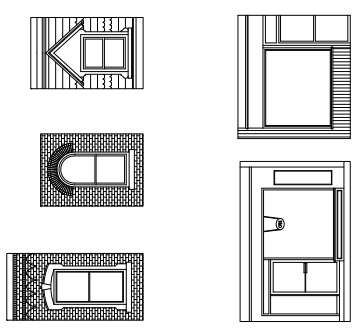
Main Street

Theatre Lane

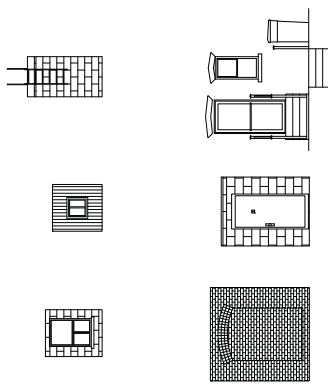
Programmatic Study. Drawings look at the programmatic relationships between Diplock Lane, Main Street and Theatre Lane.



Theatre Lane

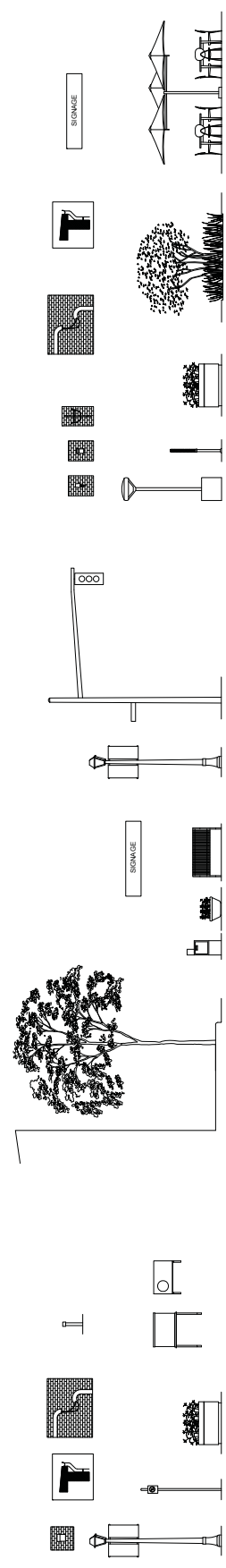


Main Street



Diplock Lane

Threshold Study. Study showing the porosity of Diplock Lane, Main Street and Theatre Lane.



Diplock Lane

Main Street

Theatre Lane

Urban Elements Study. Study looking at the elements that help define the different urban realms.

### ***Laneway Typology***

Within the urban fabric of cities, laneways occupy the finer grain and represent a collection of spaces distinct from the typical street. These spaces are defined by the original built form, plus the additions and sometimes the removal of these forms incrementally over time. Several characteristics define Brampton's laneways, including program, thresholds and materials.



Diplock Lane. Void space is used for garbage storage and vehicle parking.



Diplock Lane. Programs in the back end of the buildings is used for storage.



Diplock Lane. Image showing mechanical units, egress ladders and eaves troughs attached to existing building.

The initial distinction between the main streets and laneways is through program. In general laneways are used for storage or transitional activities such as garbage storage, parking, egress, passing through and deliveries. The distinction between these activities is not evident like the street where the vehicular realm transitions to side walk and then into the building. Instead within laneways, these realms merge to form a collective space. Closer to the building the spaces are used for parking and garbage storage. Within the buildings, the rear spaces typically contain back of house activities such as storage. On occasion, the roofs of these buildings that step down are inhabited as an extension of the internal program, whether residential or office. In general, these spaces are used for social activity by one or more units that back onto the space or are adjacent to it.

The thresholds that wrap these buildings directly relate with the programs inside. For instance, the doors are generally meant for service and not for inviting people in. These doors are usually metal and punched into the facades, however some glass doors are present. Typically, doors are on ground level, but several buildings do need to elevate their entries with stairs. Windows on the other hand, are dependent on when the building or addition was built. In general, the smaller punched windows are found on the older buildings while the larger windows are found on the newer additions.



Harmsworth Lane.  
Electrical cables  
attached to exterior  
facades.



Vivian Lane. Lights  
attached onto wall.

Materially, these laneways are characterized by a variety of building materials. Brick, concrete, concrete block, wood, and vinyl siding are the most common. The array of materials and how they are used illustrates the fact that these spaces are not meant to form a unifying street façade with ornamented thresholds or elements. Instead these buildings represent a collection of afterthoughts that shelter the inner workings of these buildings. Additionally, these buildings are cluttered with items that are tacked onto their exterior surfaces. For instance eaves troughs, lights, air conditioners and awnings are attached onto the buildings, not as decoration but as a response to necessity.

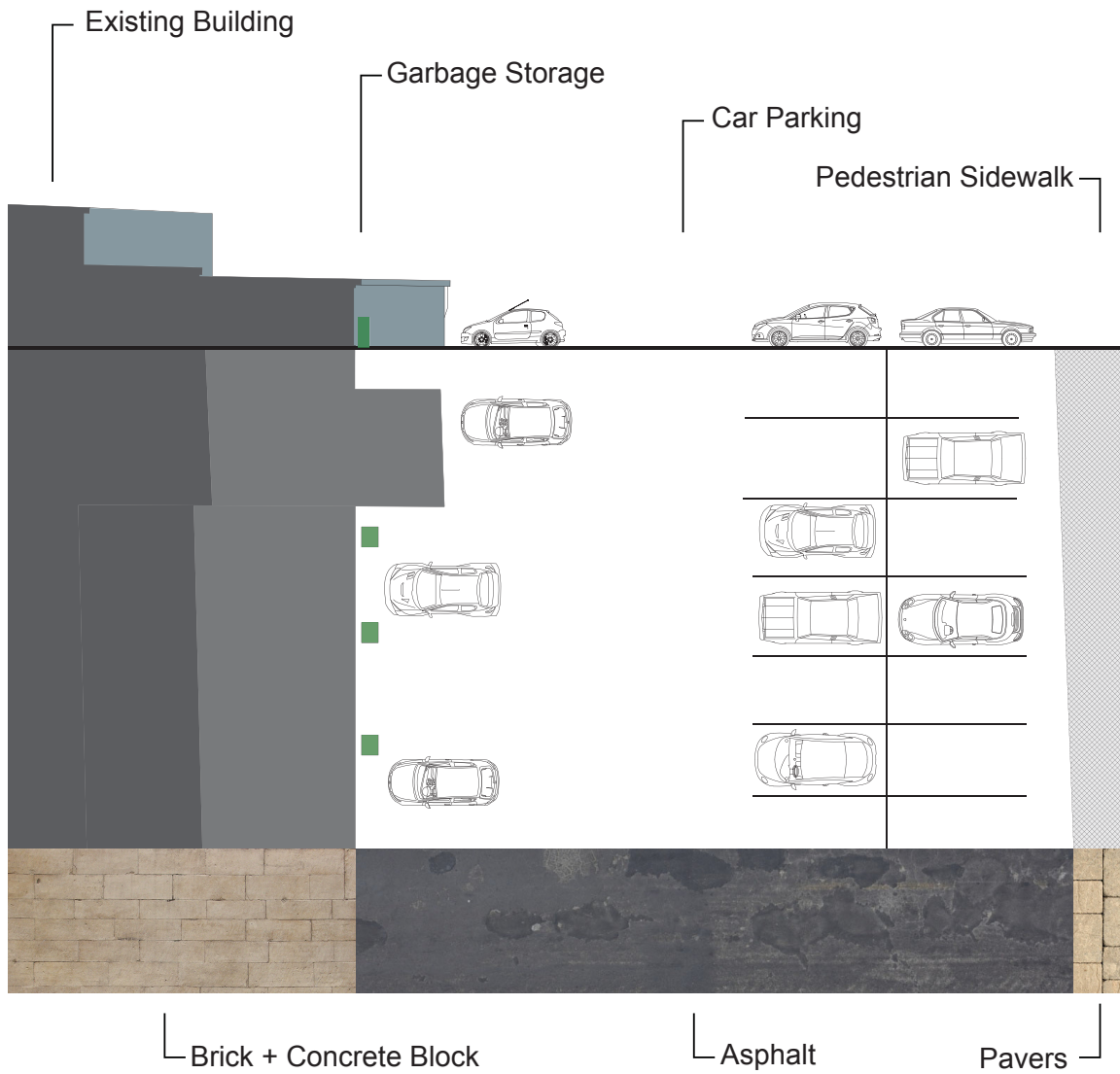


Diplock Lane. Image of additions with a varying array of materials.

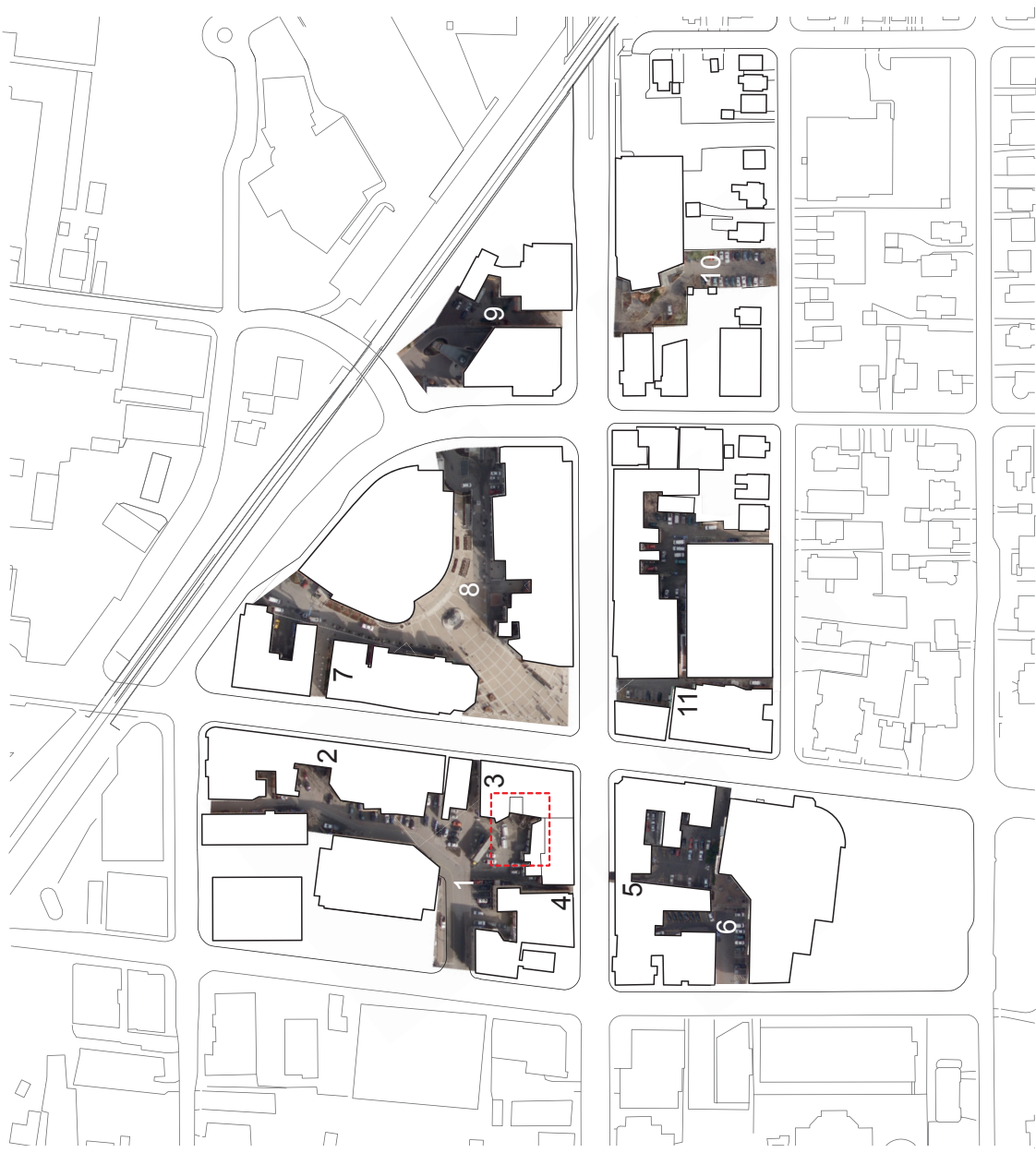


Diplock Lane. Image shows the materials used within laneways and also the elements that are attached onto the facades as needed.





Laneway Typology. Diagram illustrating the use of space and relationship of the building to the laneway.



- 1. Diplock Lane
- 2. McKinnely Lane
- 3. McArter Lane
- 4. Dalton Lane
- 5. Russell Lane
- 6. Caruso Lane
- 7. Vivian Lane
- 8. Theatre Lane
- 9. Sellors Lane
- 10. Carneige Lane
- 11. Harmsworth Lane

Existing Laneways.



Diplock Lane. Looking at Site.



Caruso Lane. View looking into Russell Lane.



Vivian lane. Chess tables lead from Main Street to Theatre Lane.





Theatre Lane. Cafe tables fill the middle of the lane.



Sellors Lane. Site of the Old Mill that operated in Brampton.



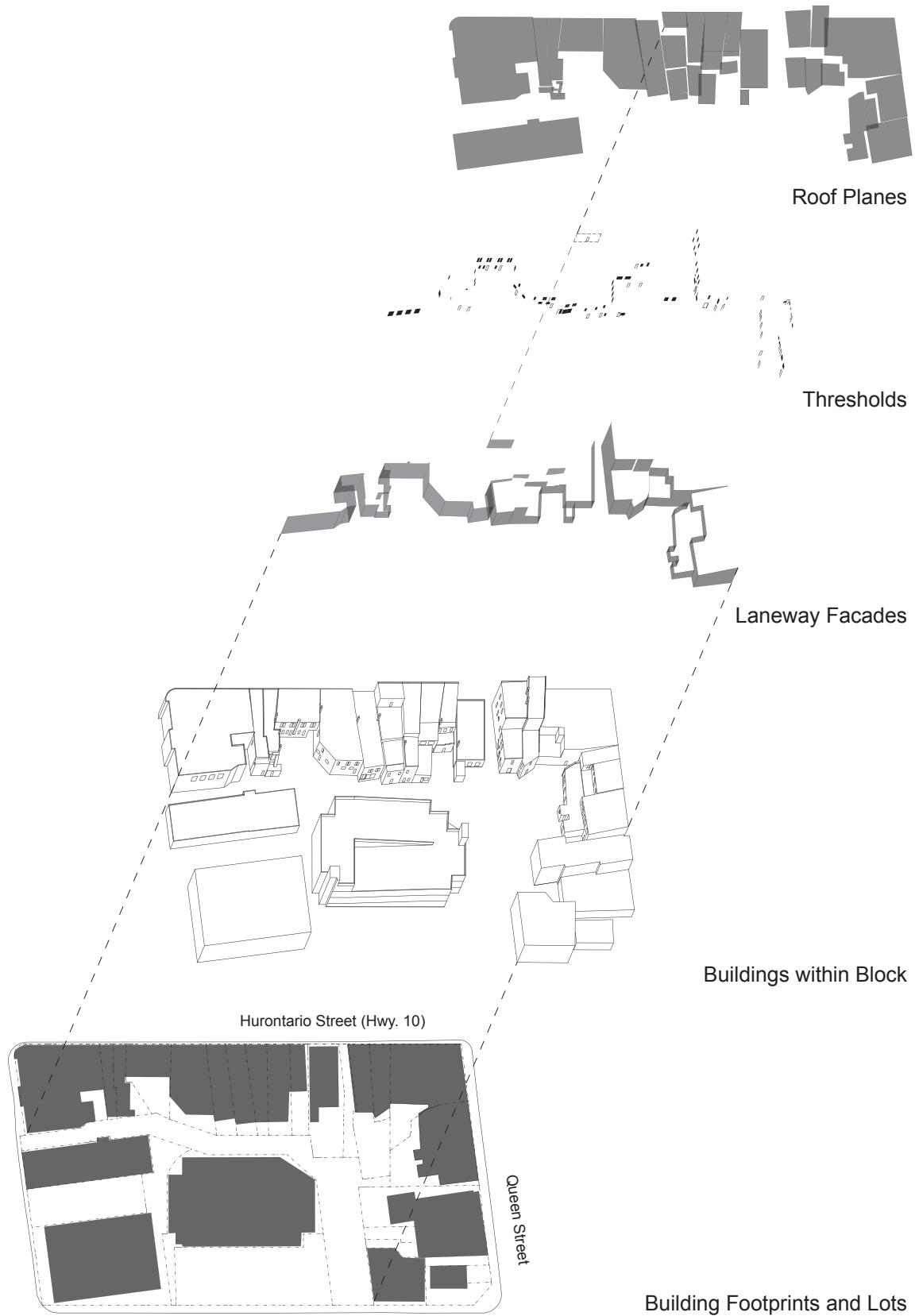
Carneige Lane. Image of the entry to the Brampton Public Library.



Harmsworth Lane. Lane currently used for garbage storage.



Laneway. This laneway feeds off of Harmsworth Lane and was just created with the addition of a condo building.



Diplock Lane Axo. Drawing looks at the formal characteristics of what defines the laneways.



**Theatre Lane**

Theatre Lane is the new home of the Rose Theatre, offering a wide range of activities within the theatre as well as public events outside. Activity within the site occurs all year round, helping maintain activation within the downtown. Along the periphery of the laneway, shops are beginning to adjust their services and entries to facilitate this activity. As activation on the laneway is occurring and is benefiting the community, Theatre Lane is setting up design criteria that begin to gentrify the laneway experience.



Theatre Lane. Lights create street edge within the laneway separating shops from public space.

Initially noticeable is the ambiguity of whether Theatre Lane is being designed as a street or laneway. This is first seen within the transitional area leading from both Queen Street and Main Street into Theatre Lane. Initially, this transitional zone was occupied by building, completing the four corners. Two laneways flanked this building creating entries onto Theatre Lane. The removal of these buildings opened up the streetscape creating a direct view to the Rose Theatre, allowing the street to penetrate into the laneway on a scale that eliminates the sense of discovery that is inherent in the experience of laneways. Furthermore, bringing the street into the laneway begins to disintegrate the role of the laneway.



Theatre Lane. Lights and planters rhythmically spaced.



Theatre Lane. View into Theatre Lane opens up the street to the lane.



Lighting feature carried in from Main Street to Theatre Lane.



Theatre Lane. Vegetation and lights along Rose Theatre.

In addition, bordering this transitional zone buildings wrap their glass facades around into the laneway strengthening the ambiguity between what is street and what is laneway. Consequently, this wrapping begins to erase the character of the laneway, sacrificing the unique qualities that it could contribute to the architecture, space and the overall experience.

Further uncertainty is added with the elements that are used to make the laneway atmosphere. This can be seen in the rhythmic positioning of the lamps and planters that create an edge between the shops and public space mimicking that of the street. The lights used in creating this edge, transition to more intimate lighting closer to the theatre.



Transitional Space. Glass facades wrapping around into the laneway.



Theatre Lane. View looking out to the Four Corners.



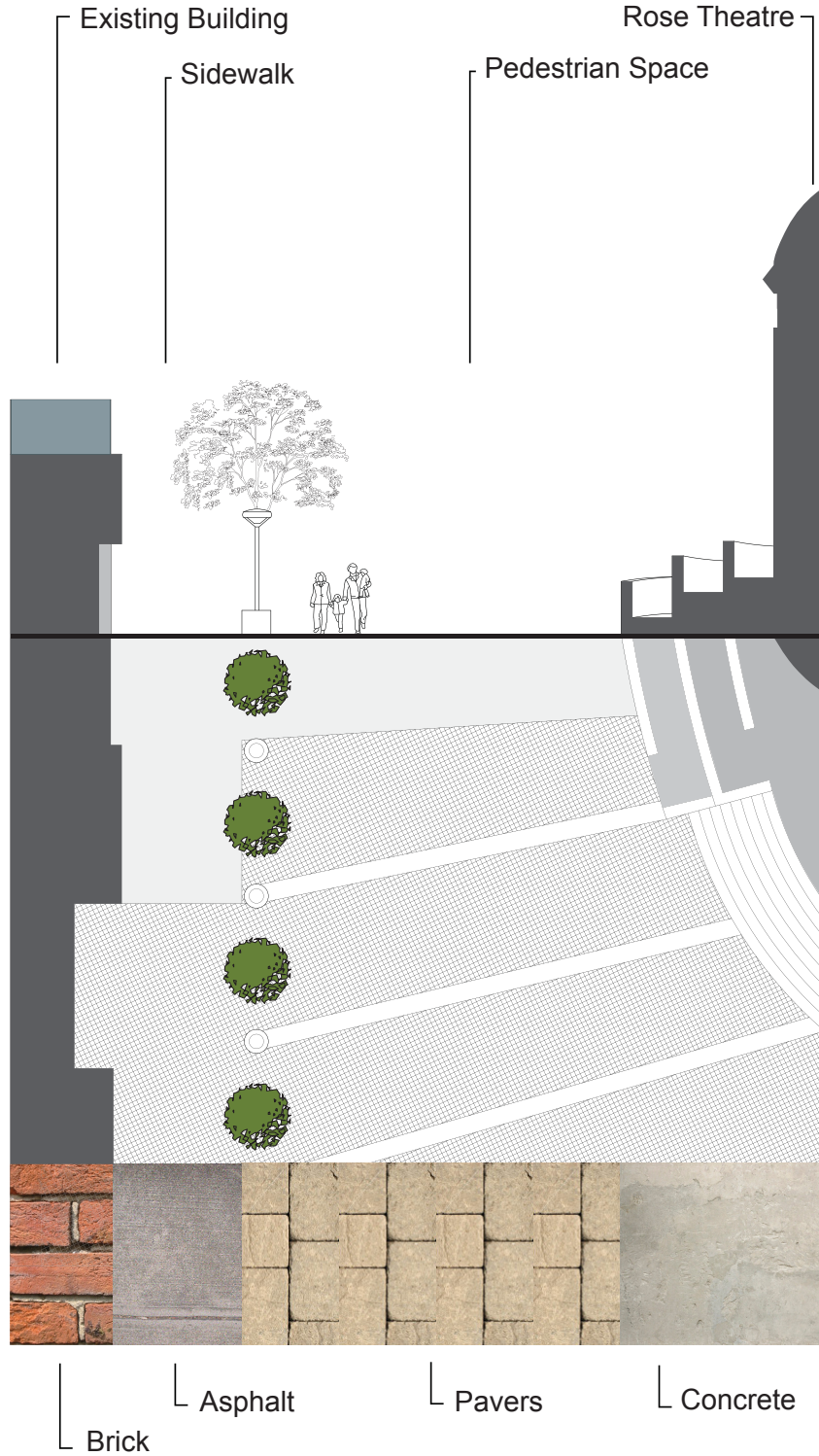
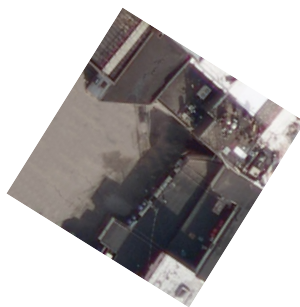


Diagram of Theatre Lane. Showing the street condition setup within the lane.

## Site

The site of the thesis design study is located within the south-east corner of Diplock Lane.

There are currently five access points to the site. Diplock Lane itself is vehicular oriented and enters off of George Street and exits onto Nelson. Both garbage and delivery services for existing programs are maintained through the vehicular access. Three other lanes enter off of both Main Street and Queen Street. These thoroughways are pedestrian oriented and when on the street they visually connect to other lanes in the adjacent blocks.



Closer view of the site.



Aerial view of downtown Brampton. Site highlighted in yellow, entries and paths marked in orange. From the City of Brampton.

The existing spatial conditions for the site contain several under-used spaces that currently exist as voids within the urban form. The most noticeable is the ground plane which serves the majority of activities on the site. Three other planes exist off the ground level within the form of the existing buildings. The first set of spaces are related to each other and only separated by a small vertical gap. The third space is located on the adjacent building which is used by a small portion of mechanical equipment, with the majority of the space vacant.

Current activity on the site is mostly used for parking. Further activities include deliveries and garbage bin storage. Five entry points also exist along the existing facades facilitating back of house activities and also egress exits.



Diplock Lane. Looking south toward site highlighted in orange.



View looking at existing condition of site.

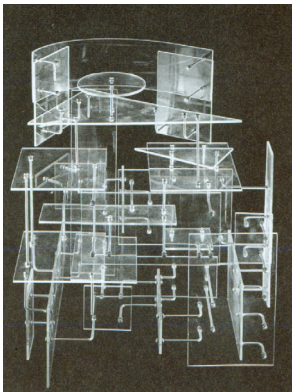


### ***Rethinking Laneway Infrastructure***

Laneways are filled with masses and voids that form a complex interplay of spaces that are often under-utilized and decaying. In many cases, the potential of these spaces is over looked and not explored to the extent that they are utilized in a way that reclaims this space. As a response, this investigation looks at how these spaces can contribute to the renewal of the laneways by integrating the existing spaces with new built form.

The aim was no longer seen as building for a new era and remorselessly replacing the old one, of erasing the existing context to create a tabula rasa. Now there was a concern for integrating the modern with the existing fabric and for seeking new possibilities for transforming both old and new structures. (Risselada 85)

Integrating new and existing structures can provide opportunities for increasing the efficiency of the urban fabric. This idea mentioned by Team 10, was against erasing the existing context and instead thought to integrate the new and existing spaces. Strategies for integrating these spaces are often found in the play between forms and structure. These ideas are further expanded upon by Constant's exploration of New Babylon.

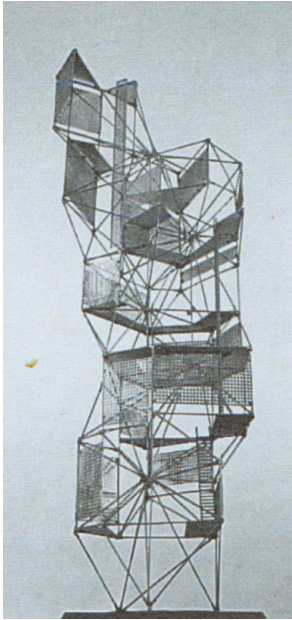


Model. Constant's idea of the "Playground of Architecture". (Wigley 24)

The traditional distinctions between inside and outside...have to be replaced with a more complex sculptural play between masses and voids that sets up a new kind of urban rhythm. (Wigley 26)

For Constant the "Playground of Architecture" was about the spatial play and experience of both mass and void. (Wigley 22) Constant's early investigations of form were constructions that began to bridge the world of art and architecture. His early studies looked at the elasticity of space as something that is not fixed but offers the spatial freedom to play between forms and voids. This play of structure and space removed the traditional divisions between the interior and exterior that were originally defined by buildings. (Wigley 26)

Coupled with this understanding is the idea of "Infrastructure at

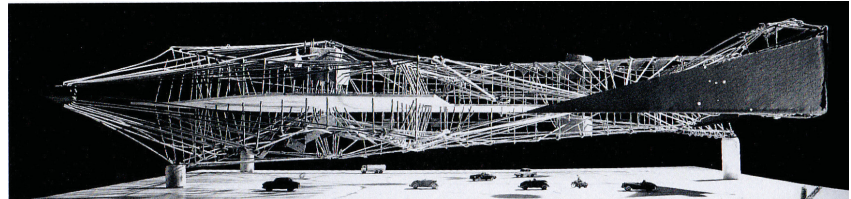


Model. Constant's idea of "Infrastructure at Play". (Wigley 48)

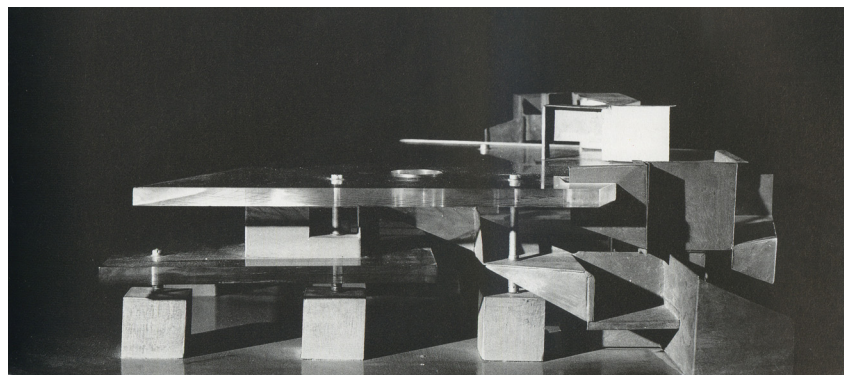
Play". For Constant the structural representation of New Babylon was about the reflected spatial qualities. This meant that the structure was to be free and irregular, allowing for random networks and interactions between the inhabitants (Wigley 28). Ultimately, the structure was a way to facilitate the desired atmospheric conditions that connected the spaces. Debord expanded on this point by stating:

The comrades who call for a new, free architecture must understand that this new architecture will primarily be based not on free, poetic lines and forms – in the sense that today's lyrical abstract' paintings uses those words – but rather on the atmospheric effects of rooms, hallways, streets, atmospheres linked to the gestures they contain. (Wigley 29)

Constant believed that people are influence by the structures they inhabit. (Wigley 9) Therefore, spatial development through the freedom of structure was significant in expressing the desired atmospheres within New Babylon. The theories developed by Constant have played a role in influencing how structure and space can be used when designing within existing contexts for this thesis.



Model. Early structural concept of New Babylon. (Wigley 84)



Model. Demonstrating Constant's theories of how mass, void and structure can be used to create space. (Wigley 105)

## **Precedent**

The following series of case studies create an understanding of laneways, indicate programs that have been introduced, and show how these spaces have been utilized in different situations.

## Melbourne



Laneway Restaurant.  
From *ABC Melbourne*  
(Web Site), 2009.



Laneway Cafes. From  
*The Age Melbourne*  
(Web Site), 2007.

Behind Melbourne's grand facades and imposing main streets lies a network of narrow laneways where city life is at its most intimate and intense.

In this myriad of smaller thoroughfares the many layers of Melbourne's urban history are revealed and the skeleton of the city is on display. This is a world of contradictions, where derelict spaces play host to sleek enterprises, allowing for countless experiences. The city's laneways offer a world of unique discovery, and an opportunity to understand Melbourne's history while grasping its future. (Melbourne Laneway Commission 2008. Website)

The city of Melbourne in the south east corner of Australia has developed a reputation for their laneway network. Laneways have become the heart of the social and cultural experience of the city with restaurants, cafes, bars, galleries, art installations, offices and boutique shops scattered throughout. (Only Melbourne) They offer unique opportunities that highlight the history, architecture, urban form and local shops as an alternative to main stream culture that resides along the streets. The unique atmosphere of the laneways offers both the visitor and local different experiences of the city. For the visitor, the discovery of this new world is an opportunity to explore the city through a cultural portal that speaks to the early foundations of Melbourne's urban history. This history goes back to when the large city blocks were subdivided by settlers to create more manageable lots. Many of these laneways were filled with residential units for workers, however they also contained stores, pubs and hotels. (Only Melbourne) Today, these lanes have flooded with a variety of programs that support this back alley life which ultimately creates the laneway phenomenon we know today. On the other hand, the local experiences the laneways as a way of life. For them, the laneways are not so much about a sense of discover but are an alternate way of travel, a representation of culture and a collection of paths and spaces that often hold many of the preferred local destinations.

Melbourne's laneways provide an example not only for the pedestrian life but also for their servicing abilities that support the many restaurants, cafes, shops and businesses. Access to the laneways by vehicles is typically during the early morning in order to allow the restaurants and cafes to operate from mid-day into the night. Garbage storage within the developed lanes is generally in a collective space that services the surrounding units or stored inside by individual units. In some instances, the garbage bins are permitted to remain in the laneway, which are considered part of the laneway atmosphere. Collection of garbage occurs regularly during specified times by the City. (Enterprise Melbourne)

Melbourne's experience with laneways has also inspired other Australian cities such as Sydney, Brisbane and the Gold Coast to begin activating their network of lanes. In developing these lanes, the cities have outlined strategies that maximize building use, encourage public art and define the pedestrian realm through materiality and lighting, creating specific laneway atmospheres. Additionally, the Gold Coast has implemented strategies that control vehicular movement and give the right of way to pedestrians in these public spaces. (Gold Coast City Council)



Laneway Cafes and Shops. From *The Sydney Morning Herald* (Web Site), 2010.



## Montreal



Montreal. Photo of cafe infilling left over space.



Montreal. Cafe extends out into area that is also used for parking along the side.



Montreal. Photo of fire stairs being used as balconies.

Montreal provides an example of remedying back laneways and infilling odd spots within the urban fabric. Evident within Old Montreal is the abundance of spaces that were once used for back of house activities but are now reprogrammed into restaurants and cafes. These spaces are generally discovered from the main streets and accessed through walkways between or through existing buildings. These spaces are most commonly programmed with chairs and tables for a restaurant or café. Additionally, the laneways harbor local artisans that utilize the existing walls of buildings to hang artwork or other items for sale or display. Awnings are attached to the existing building and used to denote the different exhibits and space used. Lighting along the lane is suspended above pedestrian traffic, not interfering with usable space along the walkway. This lighting also sets the atmosphere of the laneway by creating an ambiance separate from the main thoroughfares at either ends.

Commonly observed in Montreal is the use of fire stairs as exterior balconies for the adjacent unit. Furthermore, fire stairs can provide alternate entries into the building and access to the roof. Roofs provide additional habitable space where residents are often found occupying these spaces. Programmatically they are used for a variety of uses including social and recreation.



Montreal. Laneway being used by artists and artisans. Lighting is suspended above and awnings are attached onto existing walls.

### ***Toronto: Distillery District***

Toronto's Distillery District is a project that reclaimed a decaying element within the city. The district is currently one of the most visited in Toronto and recognized as a National Historic Site. Originally built along the shore of Lake Ontario as a grist mill, the Distillery became one of the largest in the world. (The Distillery District)



Coffee Shop.  
Initiated the reactivation  
of the Distillery District.

The Distillery District relates to this investigation through the process of reactivation with programs specific to a sustainable economic network. Programmatically, this process of reactivation was initiated by the introduction of a public node that supported the primary users of the site who were film crews. Conceived as a coffee shop, this node became a central gathering node. New programs were later considered incrementally with local businesses and artists selected as the tenants. As a result, the selected programs formed a network where the local exchange of goods with other tenants was possible. To help maintain a sustainable market, residential towers are being added to ensure a high population density. (McClelland)



Young Centre for the  
Performance Arts.  
Main Lobby space was  
created by straddling  
two existing buildings to  
allow infill between the  
two buildings.



Exterior Patio. View of cafe utilizing void space as patio.



### ***Ottawa: Byward Market***

Ottawa's Byward Market is a destination for both the local and visitor. Local businesses, artisans and farmers all benefit as they supply everything from produce up to designer furniture. (Byward Market) The attraction to the market is not limited by the seasons. Even as the temperatures drop well below freezing people return to the market. The appeal at this time of year can be restaurants, pubs and occasionally local vendors braving the cold at Christmas time. (Byward Market)



Byward Market.  
Vendors at Sunday morning market.

The Byward Market is pedestrian oriented but does accommodate vehicular traffic through its streets. To accommodate the vendors, sidewalks are generally wide enough for the display of goods however the streets do allow for infill. Also occurring in the market are buskers which provide entertainment to the market visitors. These activities promote activity and gathering which help form the ambiance of the market.



Byward Market.  
Buskers performing.

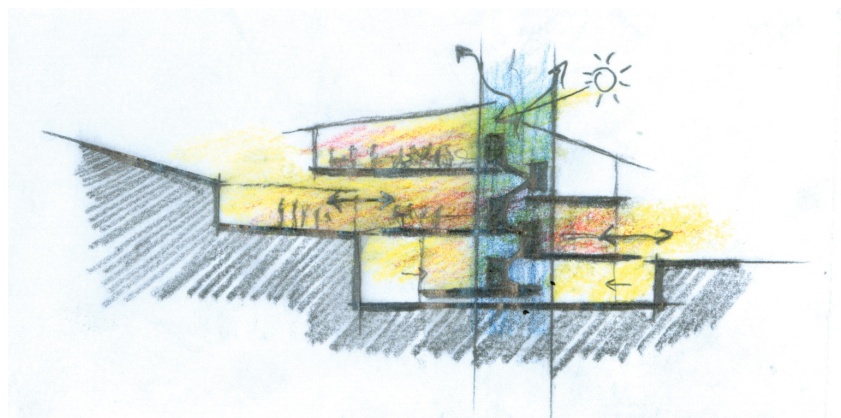


Byward Market. View of market vendors along the wide sidewalks. Pedestrian traffic is given the right of way in the market.

## DESIGN

### Architectural Strategy

The architectural approach of this thesis is centered on how to integrate the existing spaces of Brampton's laneways into new built form. This approach builds off of Constant's ideas about connecting spaces together through the interplay of form, void, structure and ambiance. These strategies along with earlier investigations into the tectonics of Brampton's laneways have been used to derive the architectural response. This response is explored through the program of a brewery as a way to instigate development and introduce a social destination within the laneways of Brampton.

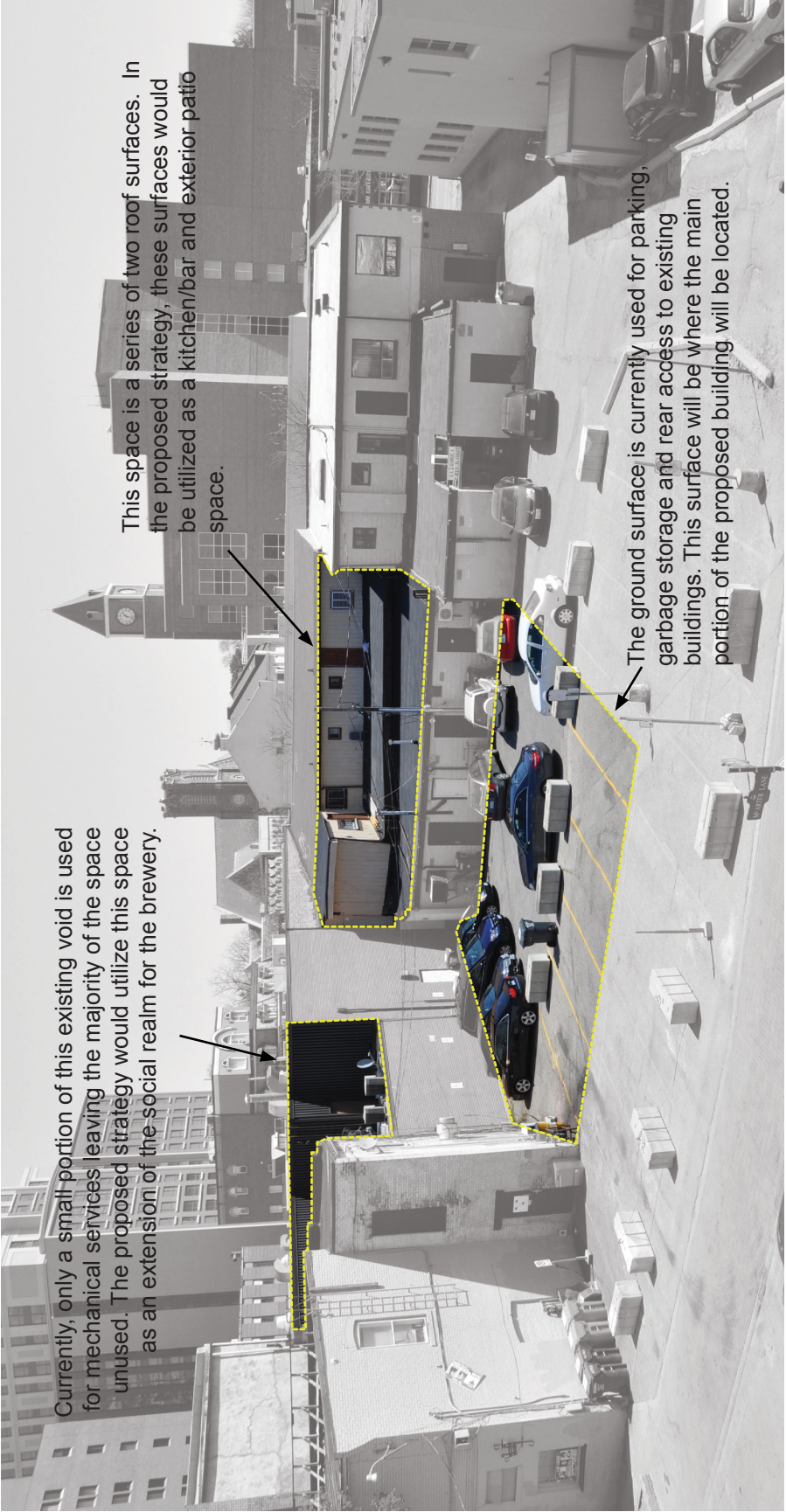


Parti sketch.



## **Site Strategy**

The initial site strategy was centered around the idea of maximizing the use of existing infrastructure. As a result, the spaces that are identified are done so with the intention of integrating them into new architectural strategies that demonstrate how these spaces can be better utilized within the urban form. These spaces are illustrated on the following page.



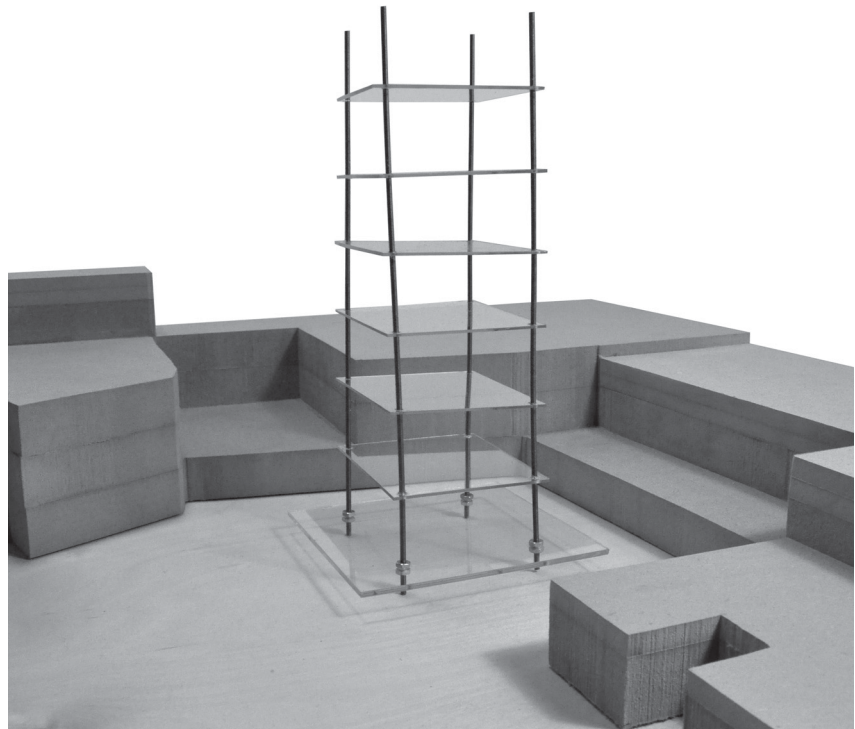
Currently, only a small portion of this existing void is used for mechanical services leaving the majority of the space unused. The proposed strategy would utilize this space as an extension of the social realm for the brewery.

This space is a series of two roof surfaces. In the proposed strategy, these surfaces would be utilized as a kitchen/bar and exterior patio space.

The ground surface is currently used for parking, garbage storage and rear access to existing buildings. This surface will be where the main portion of the proposed building will be located.

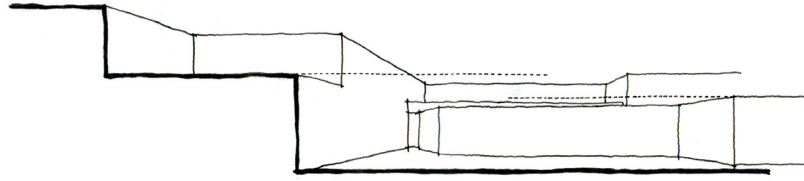
Site Strategy. Several spaces remain under-used or decaying within the site. The architectural strategy will look at how these spaces can be integrated into the new structure.

As a result of the spatial constraints on the site, usable space for the brewery operations is limited. To overcome this, a vertical strategy is employed. The first test utilized a gravity feed system, as used by early breweries. This approach allows the brewery operation to fit within the site however, overwhelms it through the resulting vertical height. In addition, this system allows little opportunity to integrate into the existing spaces.

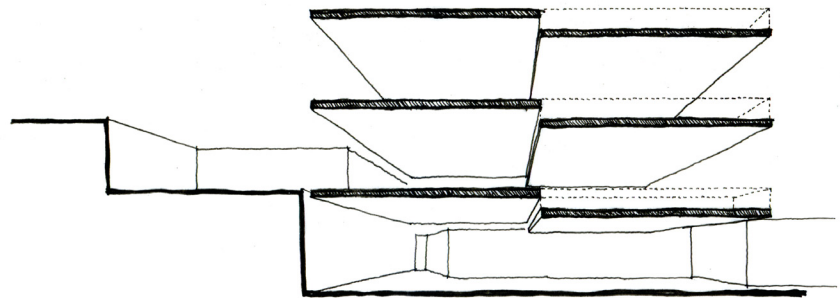


Vertical Strategy. View of the gravity feed brewery within the site.

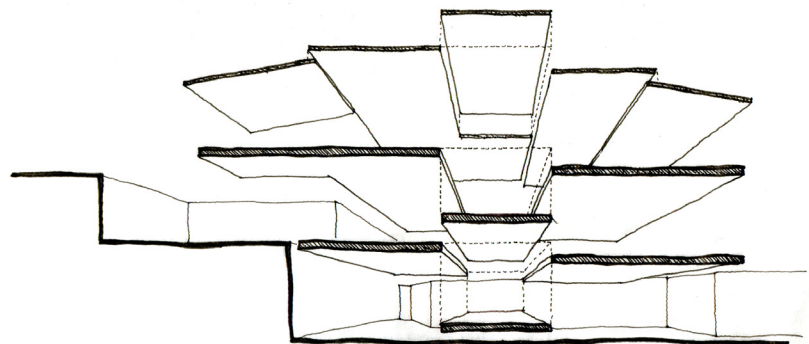
The following approach looks at modifying the vertical system by reducing the height of the building and also allowing the opportunity to incorporate the existing spaces. This was accomplished by fracturing the plates of the gravity feed system and staggering them around a central axis. The change in levels from the fracturing, allows the new floor plates the flexibility to move vertically to integrate with the existing spaces. Additionally, staggering the plates further decreases the height and creates a clear circulation strategy for the brewery visitors and brewery itself.



Existing Levels. The existing spaces that are used within the building are on two different elevations.

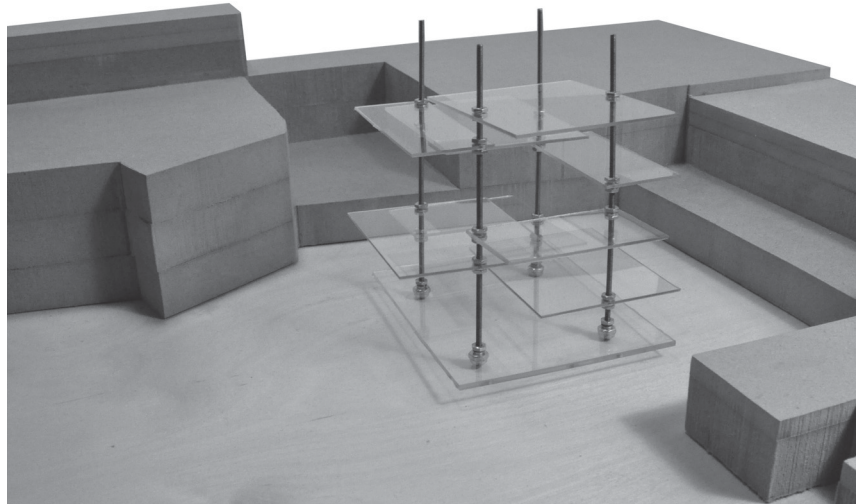


Creating Connections. Fracturing the plates allows the building the flexibility needed to connect to existing levels.



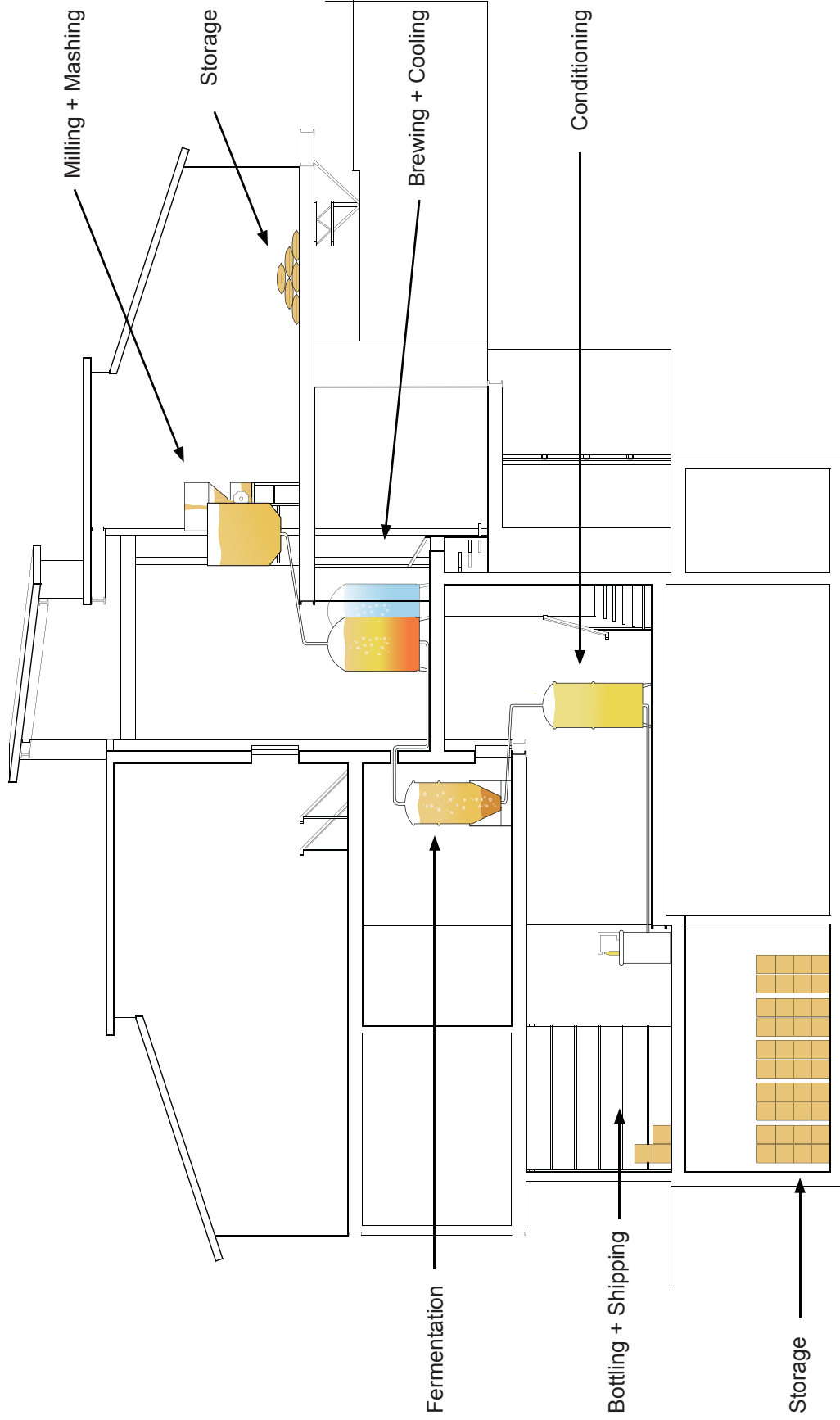
Modifying Strategy. Shifting the middle floor plates allows the brewing process to be experienced on different levels. Additionally, the fracturing of the roof planes allows light to penetrate into the middle of the building.





Final Strategy. Fracturing and staggering the floor plates allows the brewery to connect with the existing buildings and also does not overwhelm the site vertically.

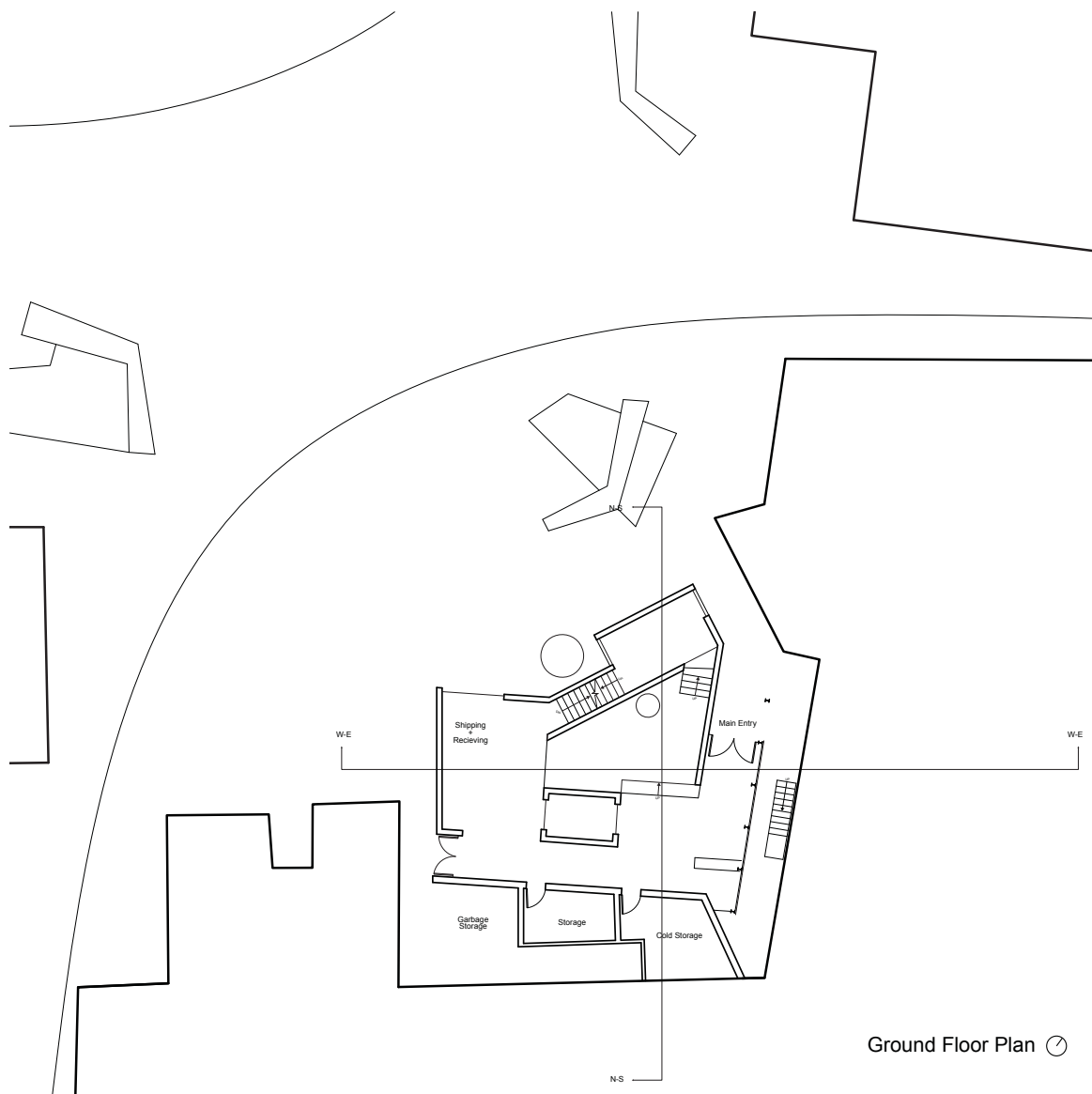
The concentration of the brewery process along the central axis of this strategy, provides opportunities for an unobstructed brewing operation. Along the periphery of the brewery, building circulation serves both the brewery operations and visitor movement. Extending out from the circulation space, both social and service spaces are located. These strategies are further illustrated on the following page.



Brewery Program + Organization. The brewing process is located in the middle of the building. Circulation space moves around the brewing process connecting the social and service spaces on the outside.

## The Building

Designing and integrating the brewery into both the site and lane-way context involves several layers of development. These layers look at the negotiation of space between the new and existing buildings through programmatic interventions, spatial play and structural integration. These layers are discussed in the following sections.



Site Plan. Brewery building is located in the South-East corner of Diplock Lane.

Integrating with the existing buildings included both spatial and structural play in order to maximize the efficiency of both existing and new building. These strategies are listed below and correspond to the drawing on the following page.

1. The first strategy employs the negotiation of existing space where new program is plugged into a small portion of the existing building. This allows storage space for the brewery, egress for the existing building and also consolidates garbage storage for the surrounding units.

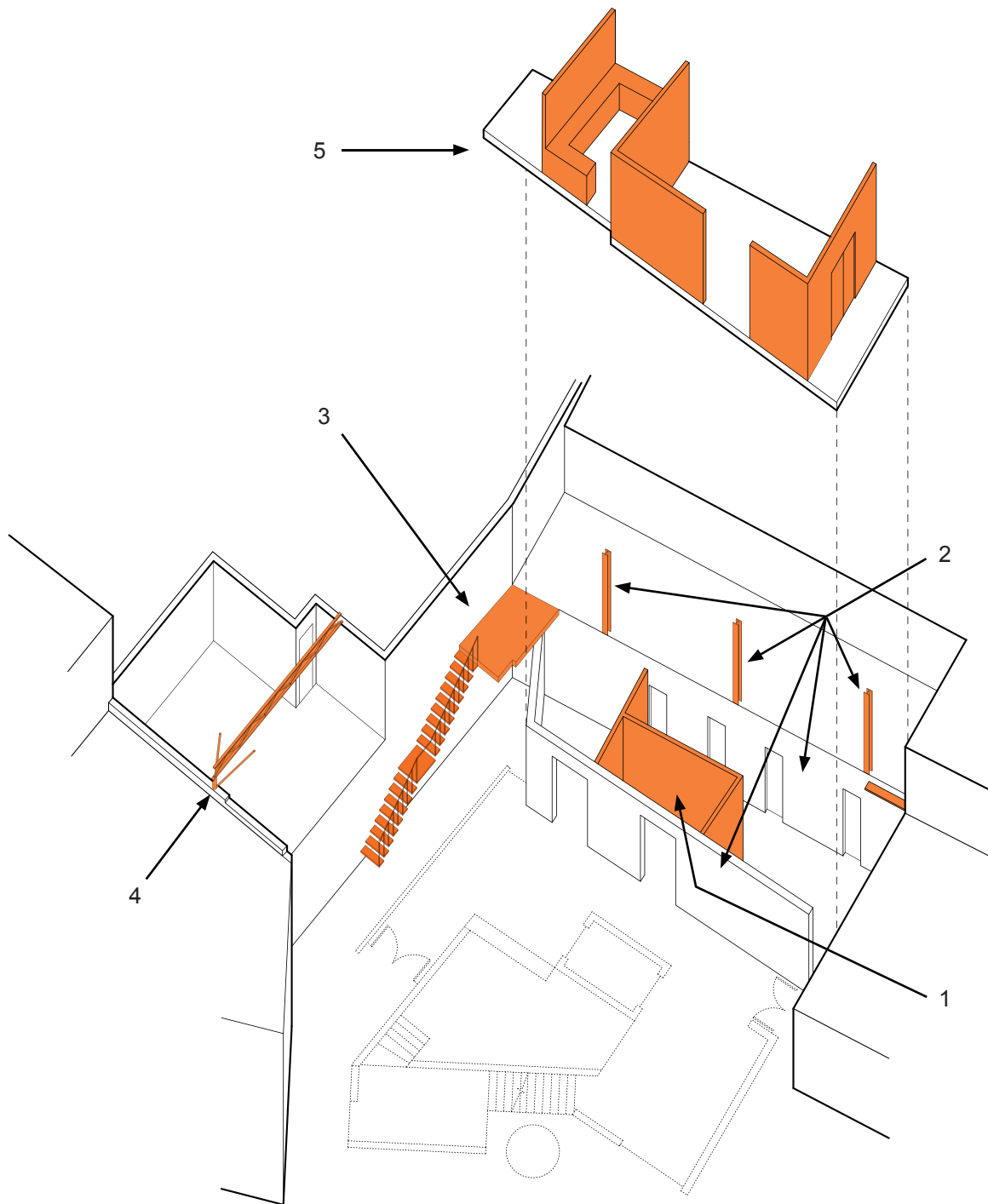
2. The existing concrete block walls are utilized for structure in supporting the programs on the existing surfaces and upper floors. In these cases, the new structure is anchored onto the existing walls allowing the new spatial opportunities that further connects the buildings.

3. The secondary stair anchors to the existing wall for additional structural support. The purpose of this stair is to facilitate existing egress routes while alternatively providing a secondary access point, or more direct route to the restaurant/bar.

4. Structure anchors to the existing walls in order to allow the brewery building to engage this space. The truss straddles the void and articulates the height difference between both the existing structures and new building.

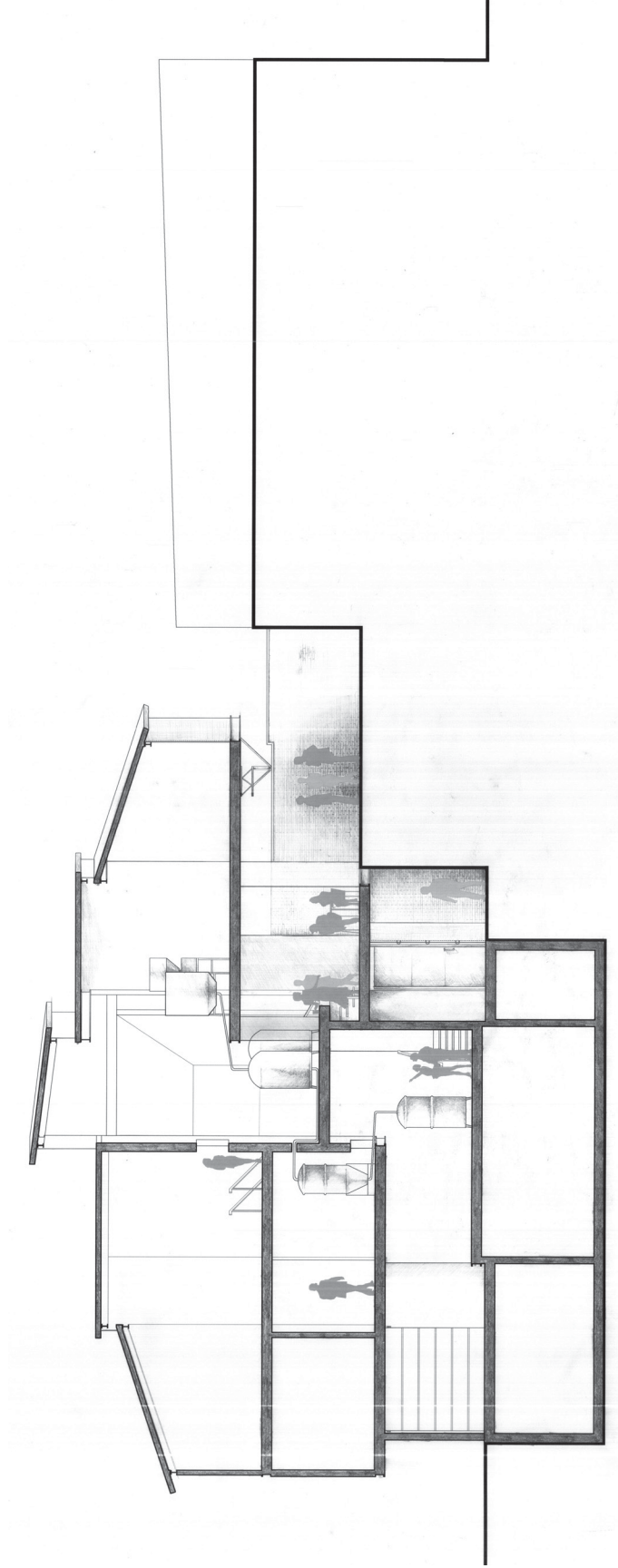
5. Existing roof surfaces are utilized by adding program such as the kitchen and bar.





Interventions on Existing: Illustration showing where the new building (orange) integrates with existing. Numbers also correspond to the previous page.

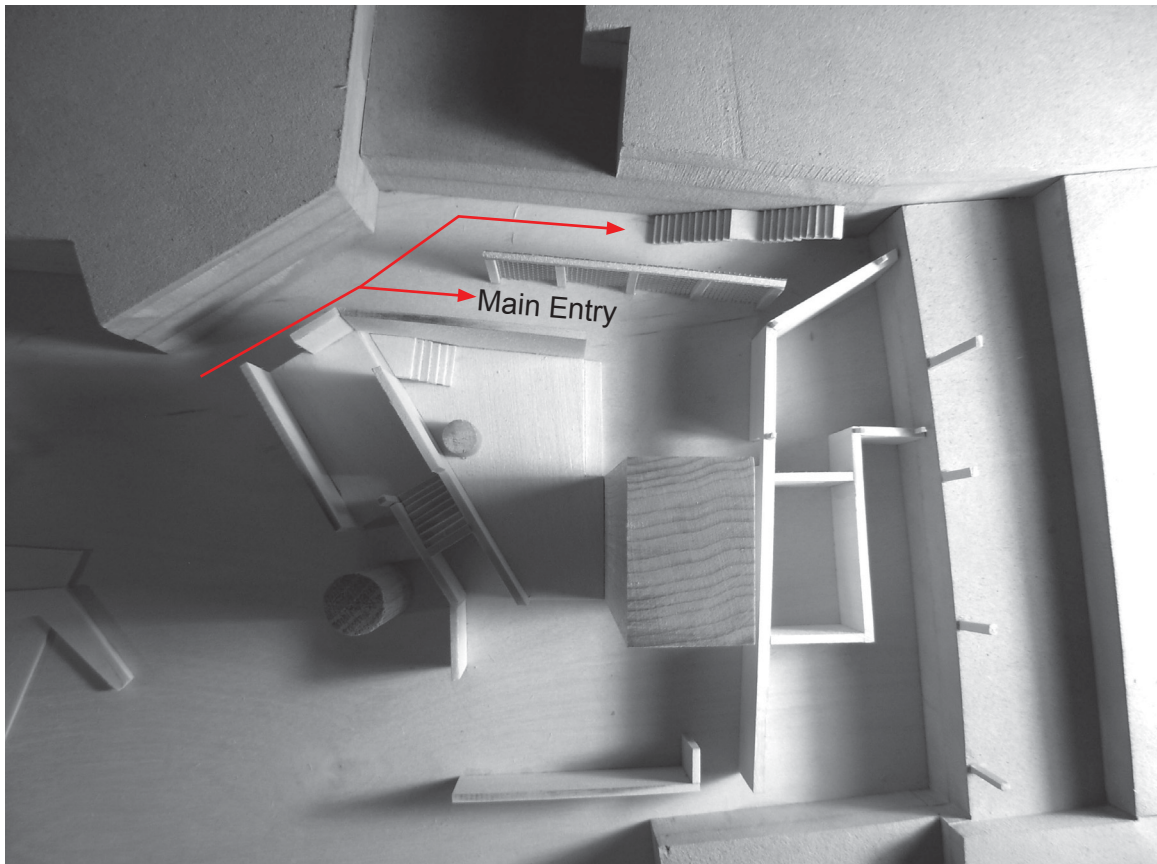
1. Insert program into existing building.
2. Utilizing existing concrete block walls to support new structure (orange).
3. Utilize existing wall to support stair.
4. Utilize existing walls to support new truss.
5. Add program to existing surfaces.



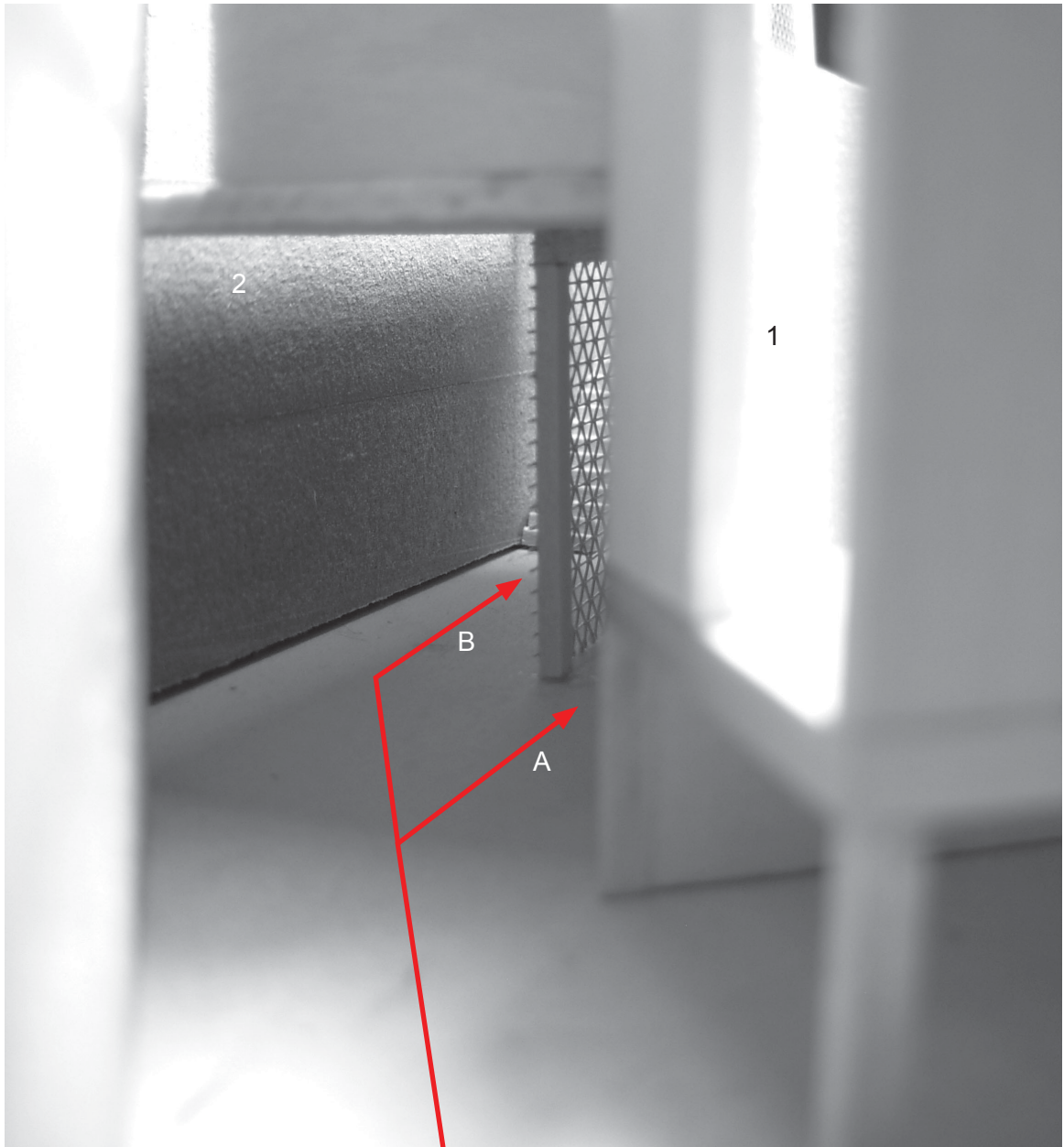
East - West Section. Emphasis is added to illustrate the spaces where there is interaction between the new and existing buildings.

Initial design moves for the brewery, pull away from the existing buildings along the ground floor. This allows several opportunities to utilize the existing walls and materials in the design of the brewery, while maintaining existing programs such as garbage storage and egress.

The entry sequence is of particular importance and is located on the east side of the building. On approach, the entry is first noticed through the use of light that escapes through a window and illuminates the existing brick wall. Proceeding through, one enters into a space that opens up with two options, either access to the main entry or into a little alley that leads to a stair which offers a more direct route to the social spaces on the above floors. This stair and space is illuminated by the interior light that passes through a screen.



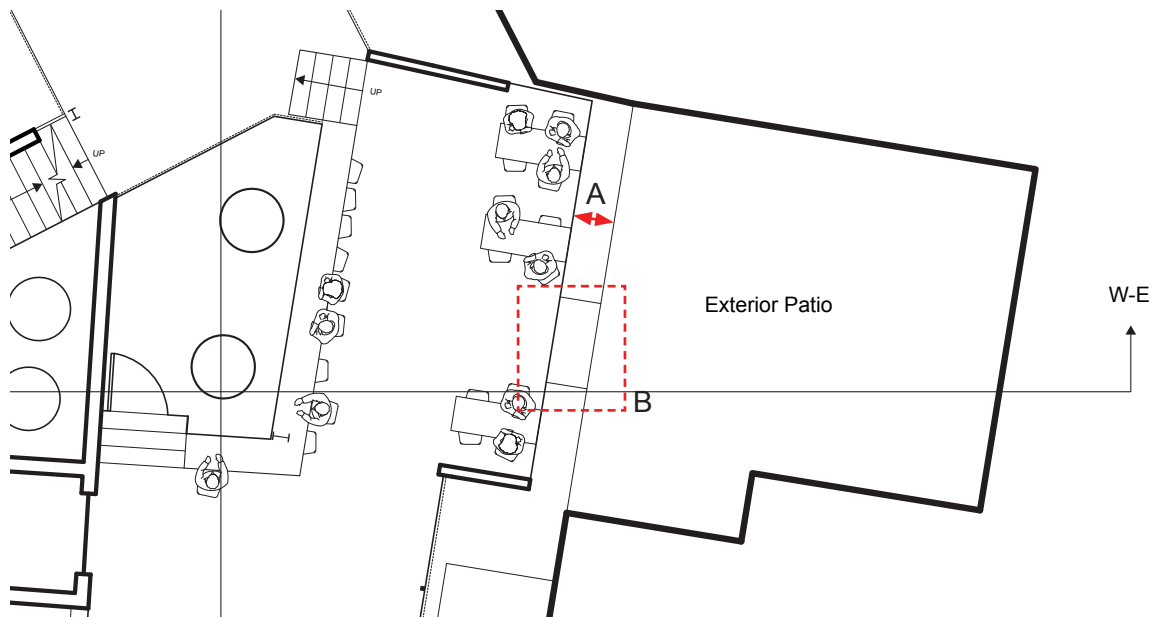
Final Model: Photo showing the walls pulling away from the existing, creating space that engages both the new and existing.



Final Model: Light passes through a window that illuminates and signifies the entry way (1). Additionally, the new building pulls away from the existing wall, creating a play of light that leads to both entrances (2) (main entry 'A', secondary entry 'B').

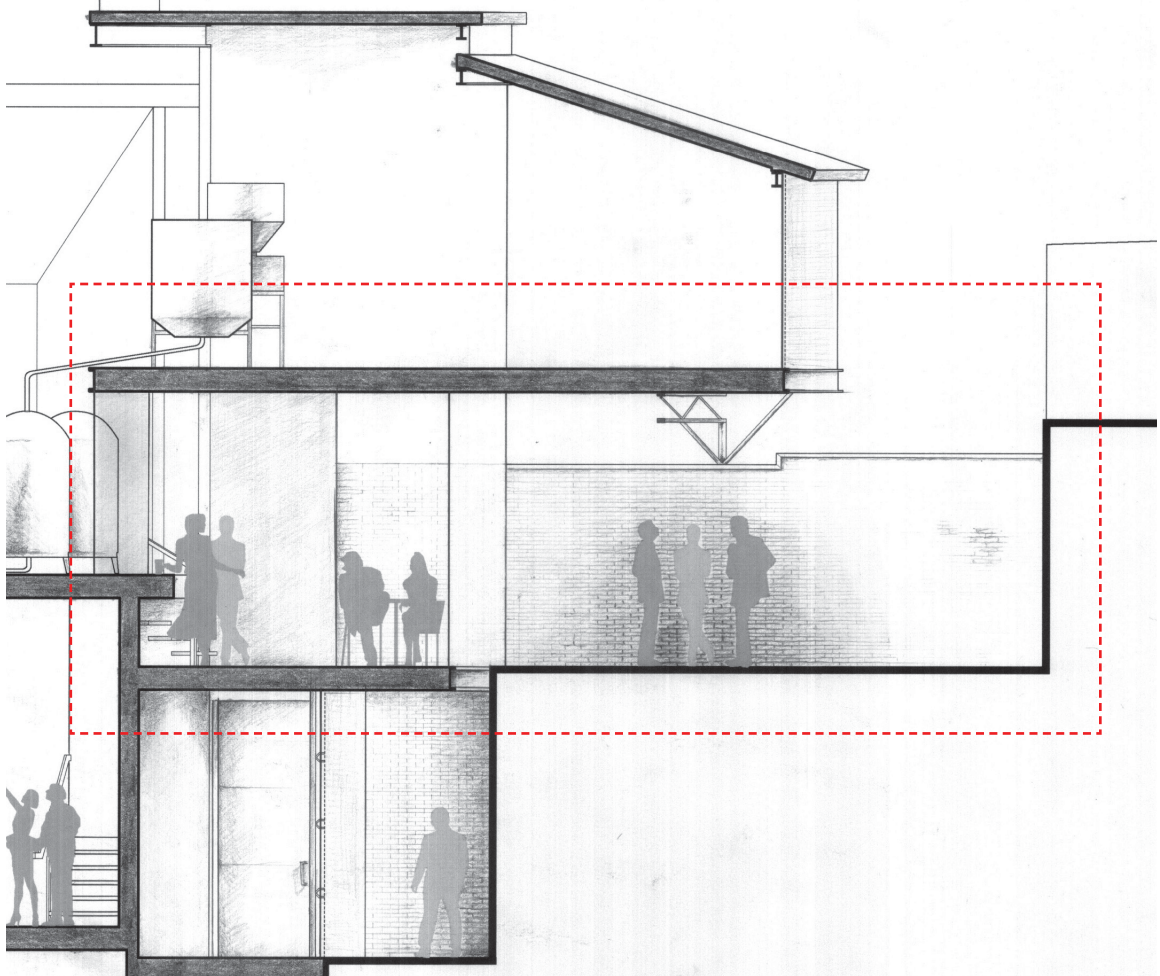


Additionally, directly above this entry space the floor that connects the new and existing spaces pulls slightly away. The gap allows the articulation of the different structures and can be seen on the previous page referenced as (2). The connection between the spaces is then by means of a bridge.

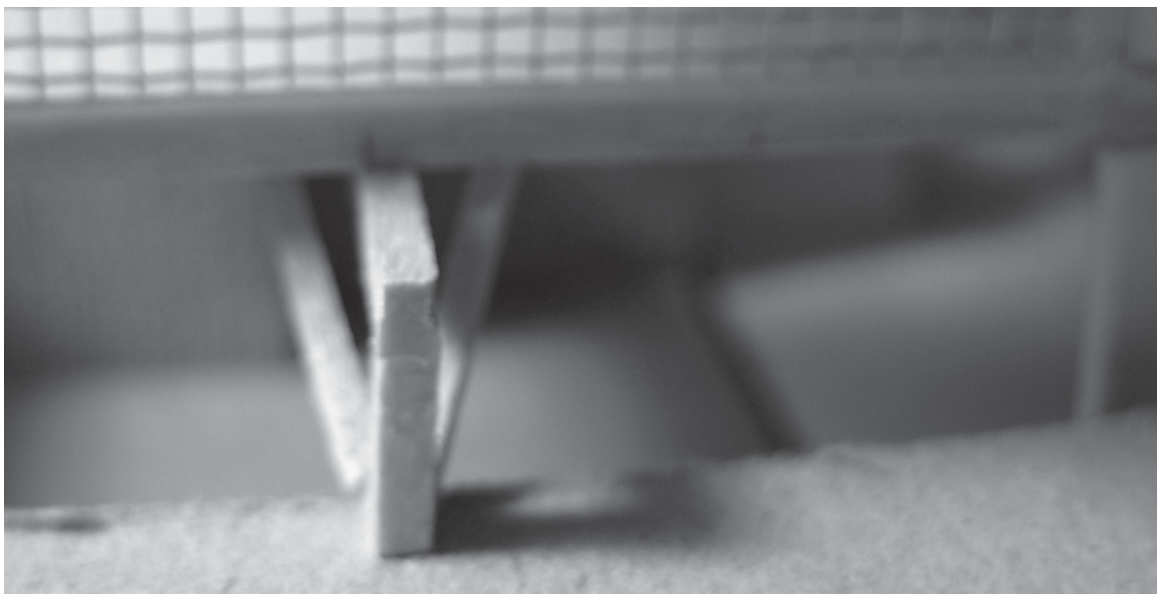


Second Floor Plan: As the floor pulls away from the existing structure (A), light is allowed to pass through articulating the difference between the two buildings. The connection between the breweries social space and existing void is by means of a bridge (B).

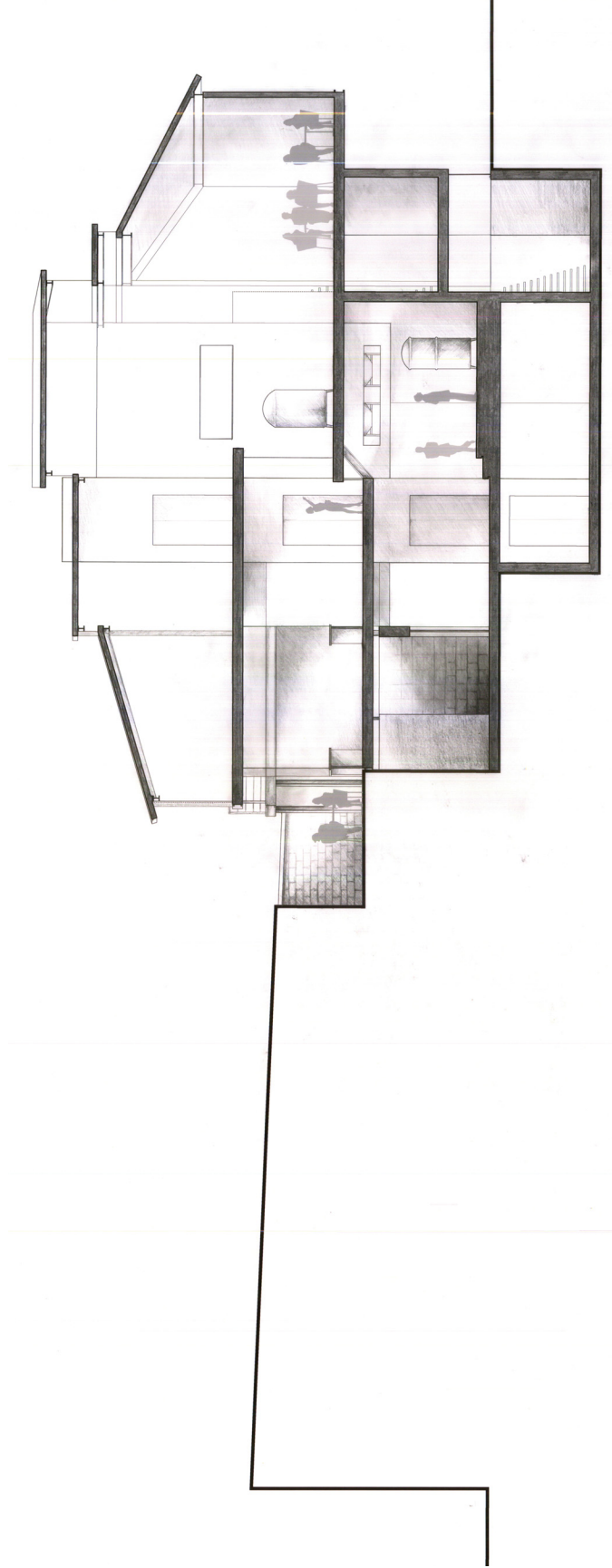
The notion to inhabit the existing void is strengthened by the brewery extending out and hovering over the space. This engagement allows the new and existing to interact through the structure which anchors into the existing walls and straddles the void. The exposed structure enhances the quality of space and buildings by articulating the differences between them.



Section Drawing: The space denoted is used for social space as an extension of the adjacent bar area.

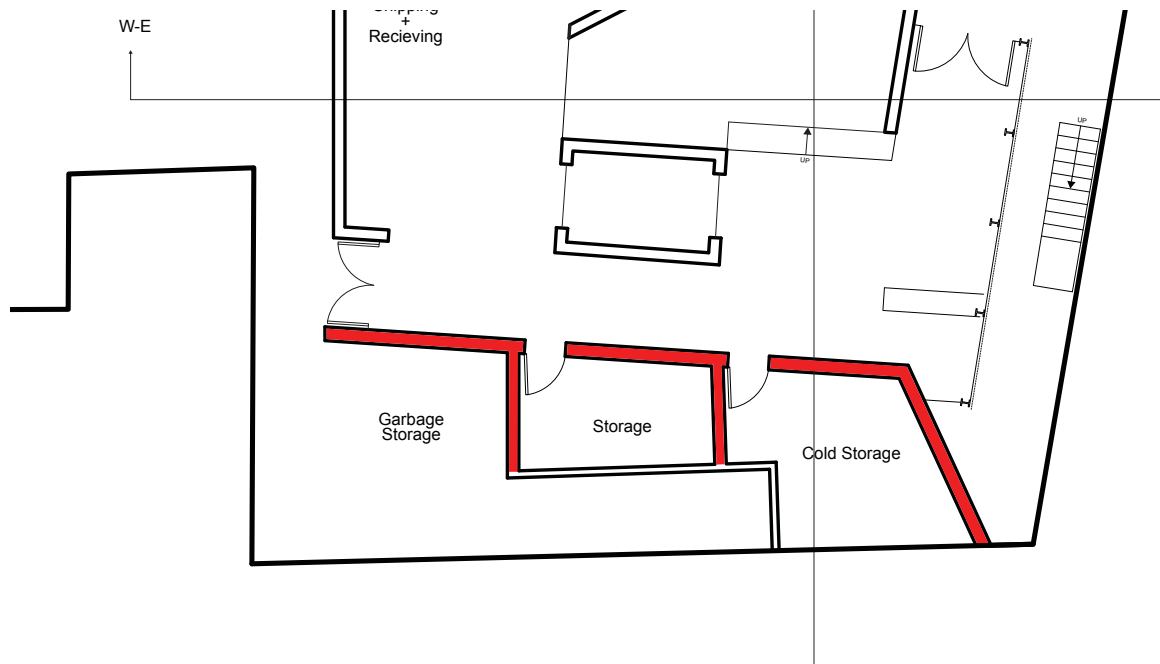


Final Model. Image of structure anchored to existing wall.



South - North Section. Section further illustrates where the new and existing connect with the spatial and structural play between them.

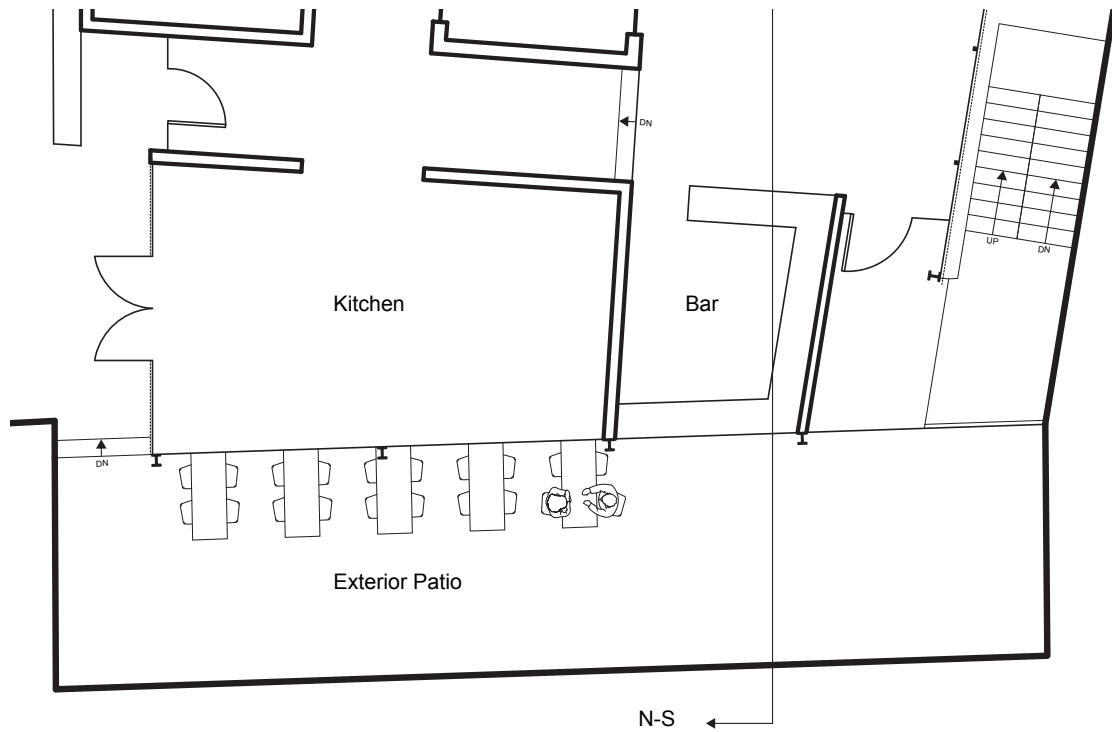
The preceding section drawing expands upon the relationship of new and existing. The first strategy is the negotiation of space between the buildings. This involves the insertion of program into the existing building, allowing storage space for the brewery as well as consolidated garbage storage for the surrounding units. Additionally, access to the existing buildings is maintained allowing egress for neighbouring buildings.



Ground Floor Plan. New program is inserted into existing building. Also, a consolidated garbage storage space is added in for surrounding units. Existing walls being used are marked in red.

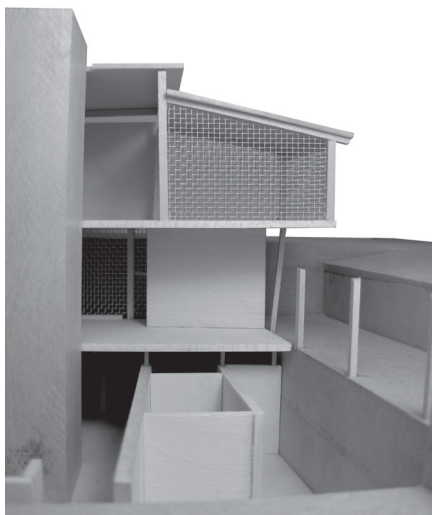
Further to this idea, the roof that contains these new spaces is utilized for the kitchen and bar on the second floor. The position of these services, allows easy access to both the exterior and interior social spaces. Additionally, the area of existing roof containing the bar is lifted off the supporting concrete block wall. Through doing this, the floor plate now extends over to the existing space, providing the point of entry for the exterior stair. This connection also allows more efficient service for the bar and restaurant.



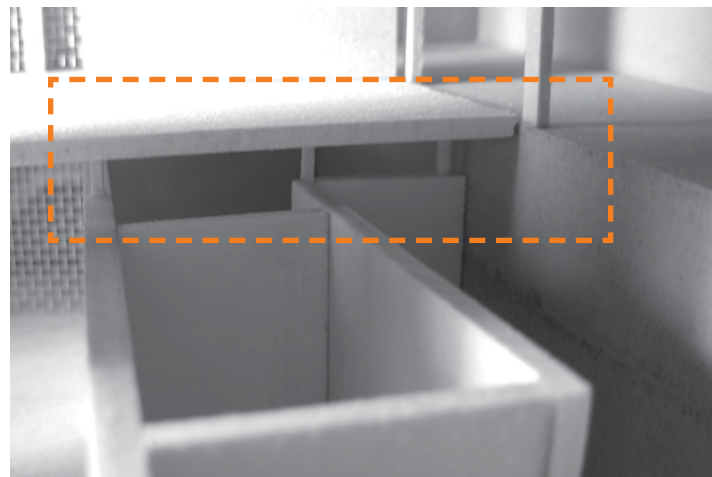


Second Floor Plan. Existing roof space is used as kitchen and bar area.

On the ground floor this intervention is emphasised by structure anchoring into the existing wall, allowing the exchange of light through the resulting gap. This idea is further expressed by the juxtaposition of materials that would occur between the new and existing structures.

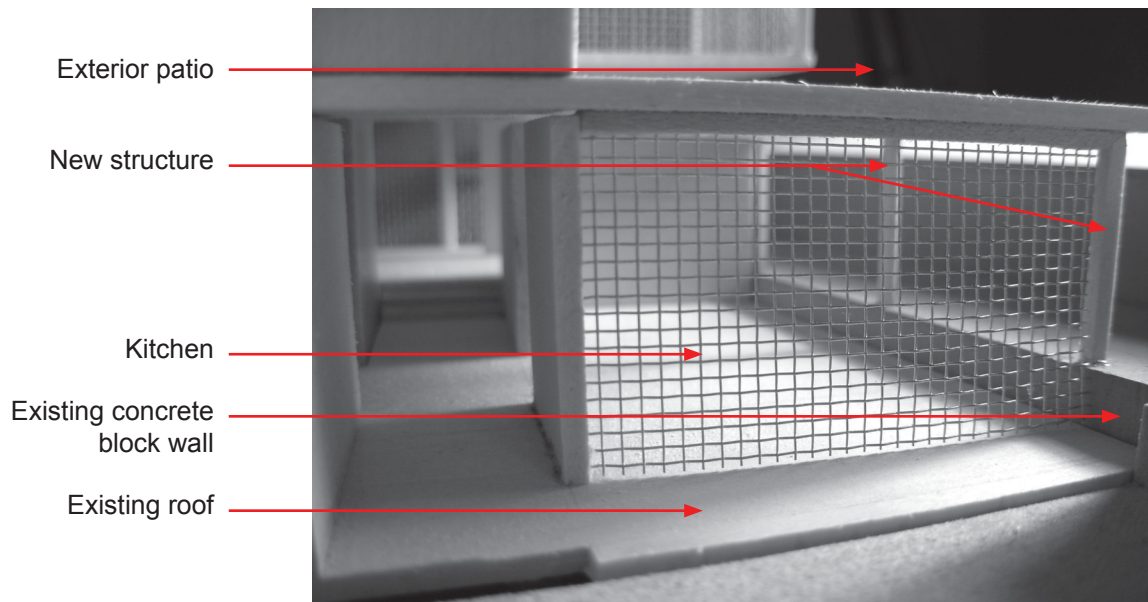


Final Model. Spatial relationship.

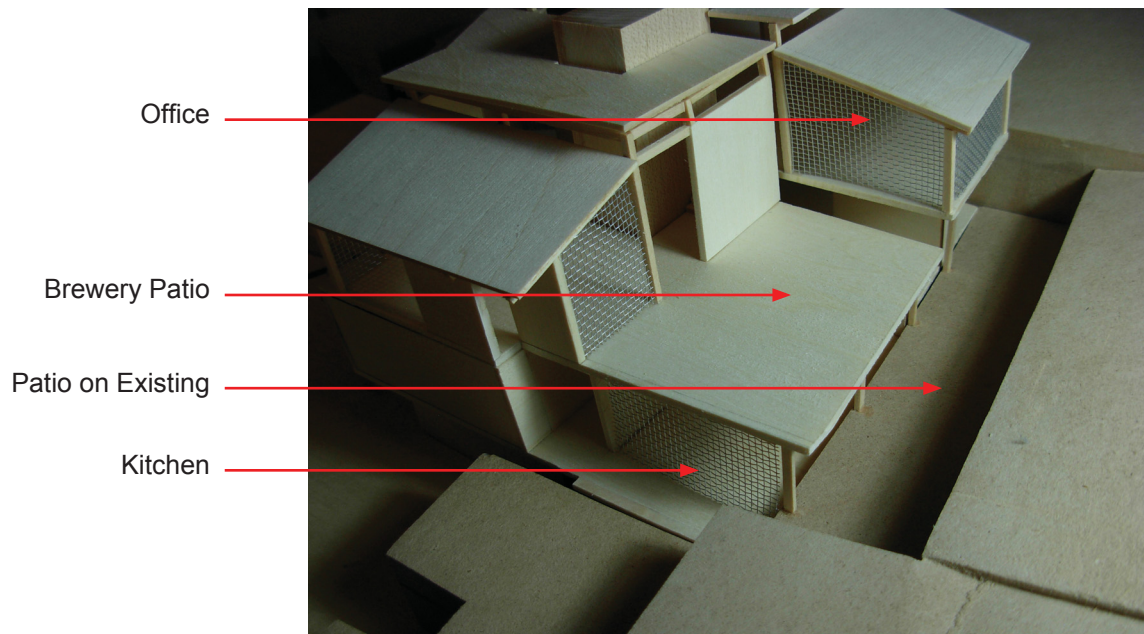


Final Model. Floor is elevated off existing wall to allow the connection between the new and existing structures.

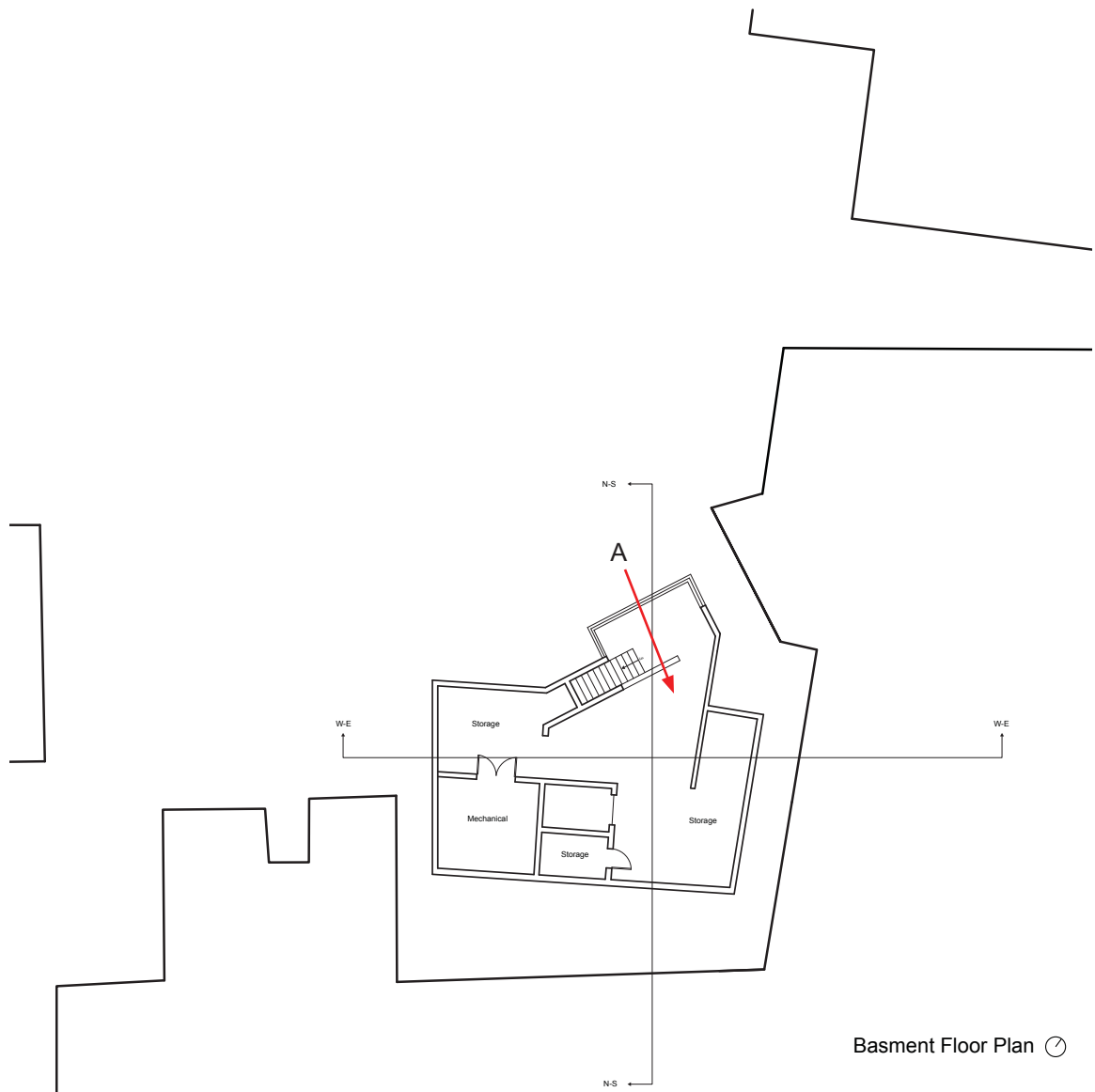
Hovering over top of the kitchen and bar area is the office and exterior patio. These new spaces engage the existing building by anchoring in new structure to the existing concrete block walls.



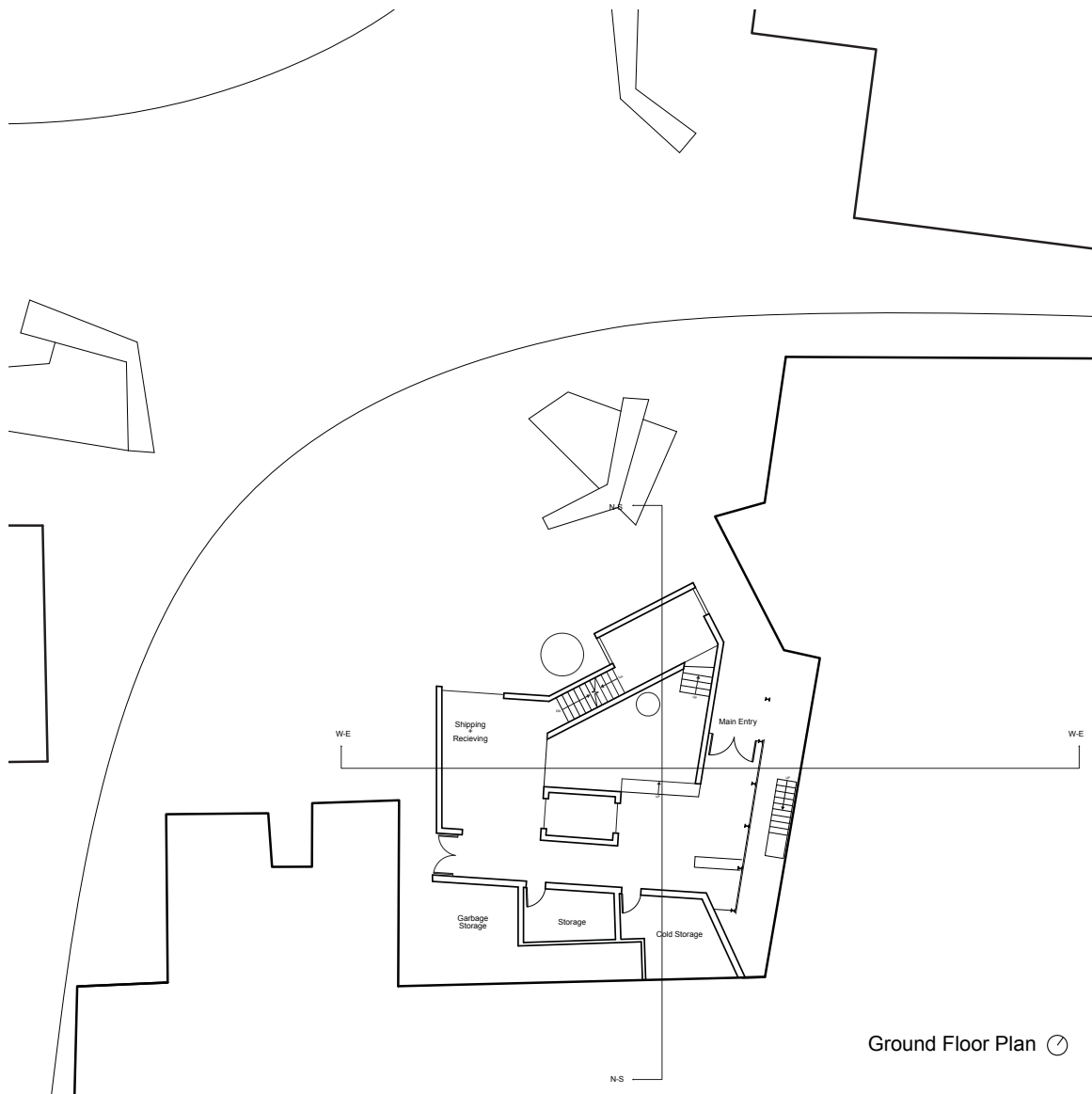
Final Model. View of the south-west corner of building.



Final Model. Overall view of brewery building from the south.



Basement Plan. With the first floor plate elevated off the ground floor, light is allowed to penetrate into the basement storage areas (A).



Ground Floor Plan. The main entry into the building is located on the east side. The entry is highlighted by light penetrating through the window and illuminating the brick on one of Brampton's original buildings. Proceeding into the little side alley, one is met with the main entry doors and the secondary stair which provides a more direct route to the bar and restaurant. This area is also articulated by light passing through a screen to illuminate the existing brick wall and stair. On the south side, storage spaces for the brewery as well as a consolidated garbage storage area is inserted into existing building. This space also serves existing egress routes.





Second Floor Plan. Entering onto the second floor one is met with the brewing tanks and washrooms with kitchen at the end of the hall. Proceeding up two steps, one enters into the main social space. This space can also be accessed by the exterior stair. From this point, one can access the exterior patios and also see the brewing tanks. The floor plate for the tanks also serves a secondary role as additional table space.



Third Floor Plan. Moving up to the third floor one enters into the dining space. This space is highlighted by the fractured roofs which allow light to penetrate into the building. This space also opens up onto the exterior patio on the south side of the building. The brewery office and initial brewing processes are located on the top floor.

## REFLECTING THE LANEWAY

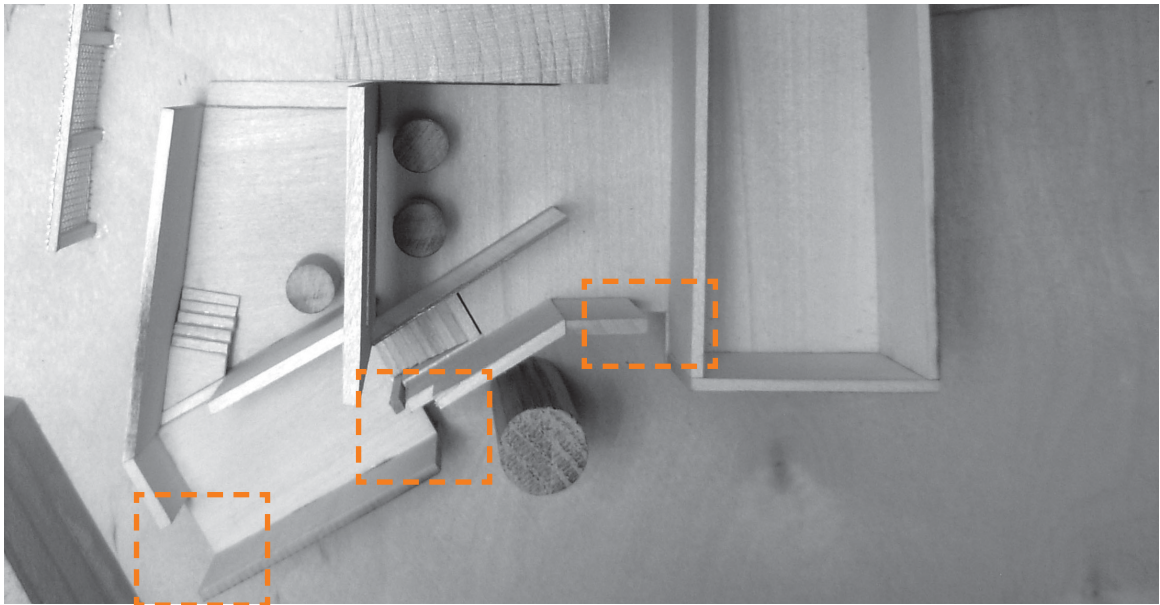
As this investigation is based around designing within the laneway context, the final chapter summarises the results of the design exercise. These results illustrate how the design is expressed through criteria that were established in the beginning of the thesis.

During the initial discussion leading up to the design, the idea of porosity became an evident distinction between the Main Street condition and that of the laneway. Throughout the brewery design scheme, the translation of this idea has been expressed through several strategies that strategically use thresholds and light to emphasis specific areas or events.



Final Model. Windows along the exterior facade are small allowing light to penetrate and highlight specific spaces, while screened walls allow diffused light that penetrates deep into the building.

Evident in the design of the front facade, the building reacts to the laneways in a similar manner to the existing buildings. Thresholds allow light or views at specific moments but do not display internal functions. As a result, the majority of the facade is not transparent, and the windows that are used, highlight moments, such as the transition from platform to stair or indicating a change in material or building function. In some of these cases, the walls pull away from each other allowing a slit window to be used. Light passing through the window indicates the transition. In most circumstances, the windows are small and punch through the facade with no articulation.



Final Model. Where the program has allowed the building to push out, the wall pulls away, allowing light to pass through and a slight view.

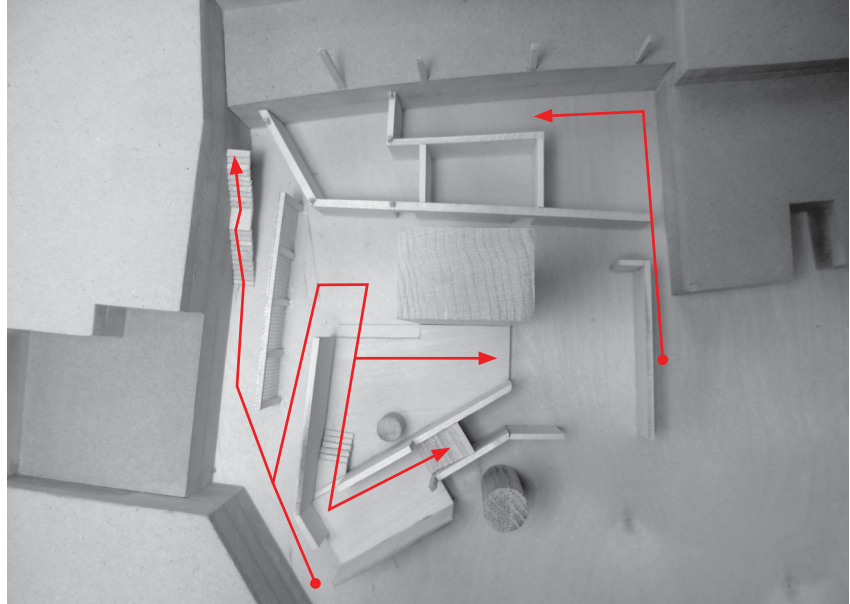
Similar to the existing context, as the building begins to serve different programs on the upper floors, the porosity of the facade reflects these changes to allow more light and views. On the upper floors of the brewery, more of the social areas are located and these spaces are opened up. At many points, screens are used to allow diffused light into the spaces, while more punched windows highlight key moments and allow views out.



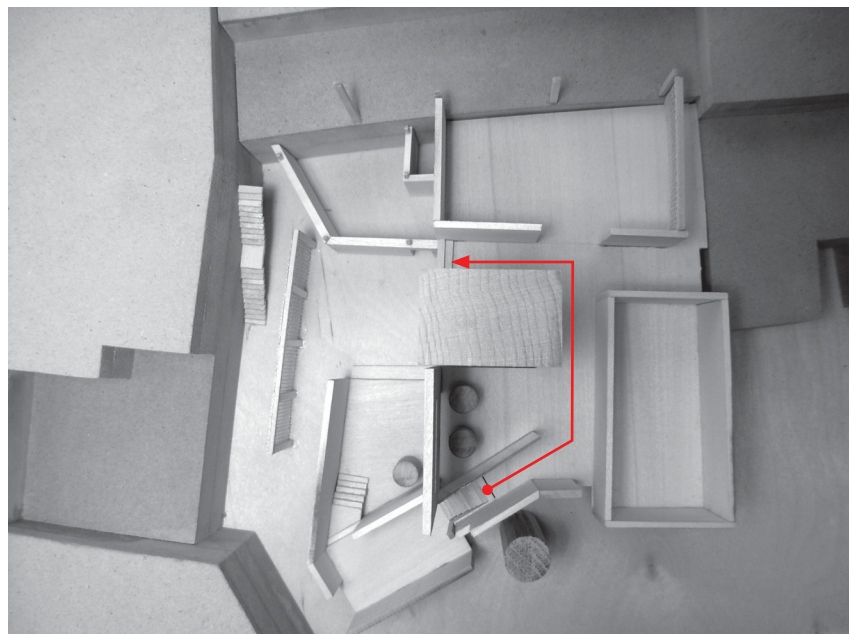


Final Model. The upper floors become more porous as the program changes to social spaces.

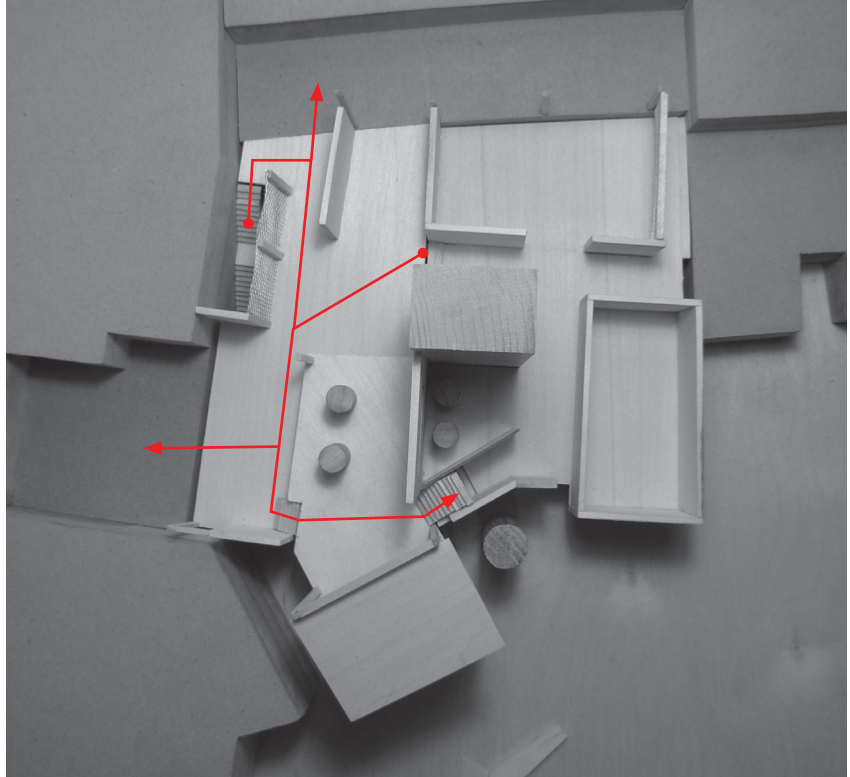
Internally, the idea of porosity continues with small openings that allow the brewery to function. These openings allow glimpses of the brewing process, however these views only convey fragments of the brewing story. The whole story is experienced through the procession up the building.



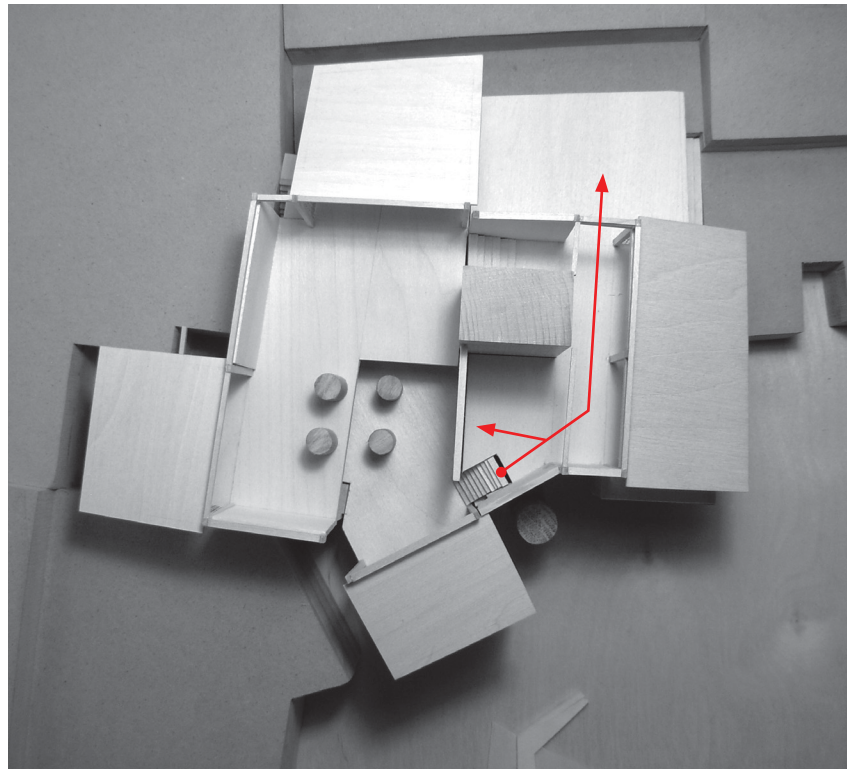
Final Model. On the ground floor one is first meet with the conditioning tanks and bottling area. The grain silo sits on the exterior of the building.



Final Model. Moving up from the conditioning tanks is the fermentation process.

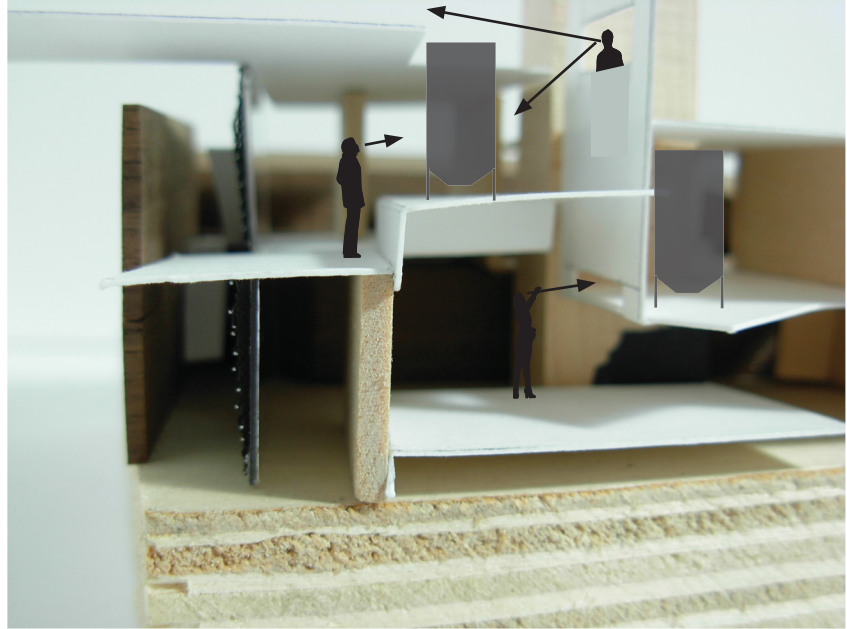


Final Model. Up from the fermentation tanks, the cooling and brewing tanks are located.

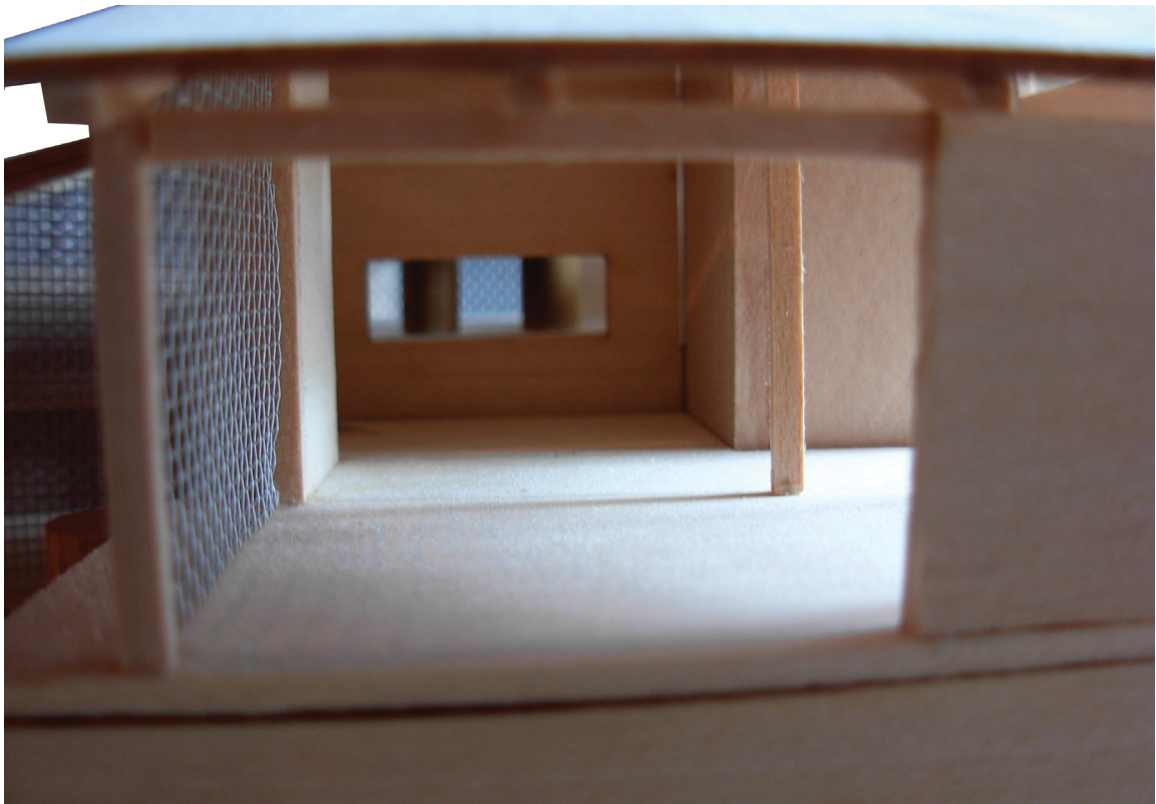


Final Model. On the top floor the milling and mashing/lautering.



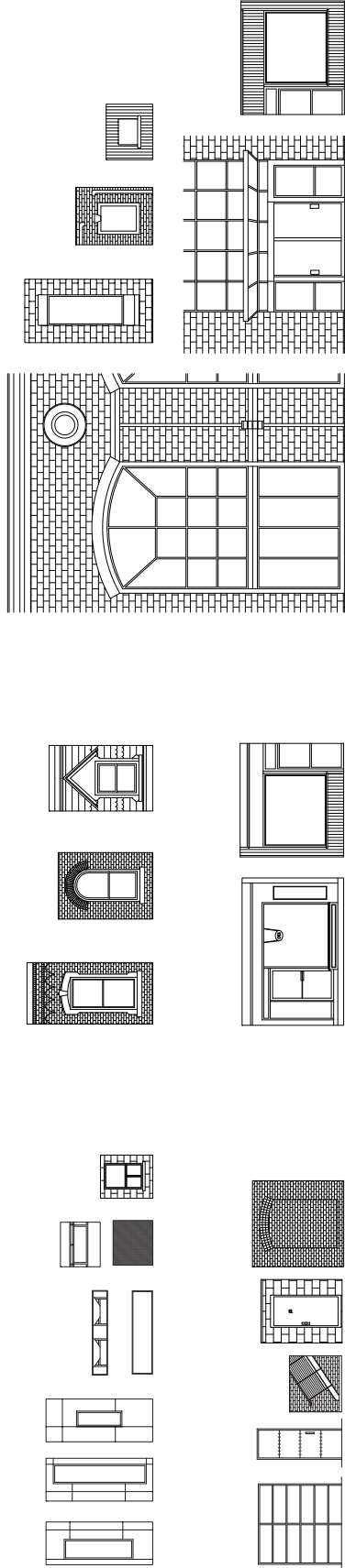


Sketch Model. This is an early representation of the views within the brewery.

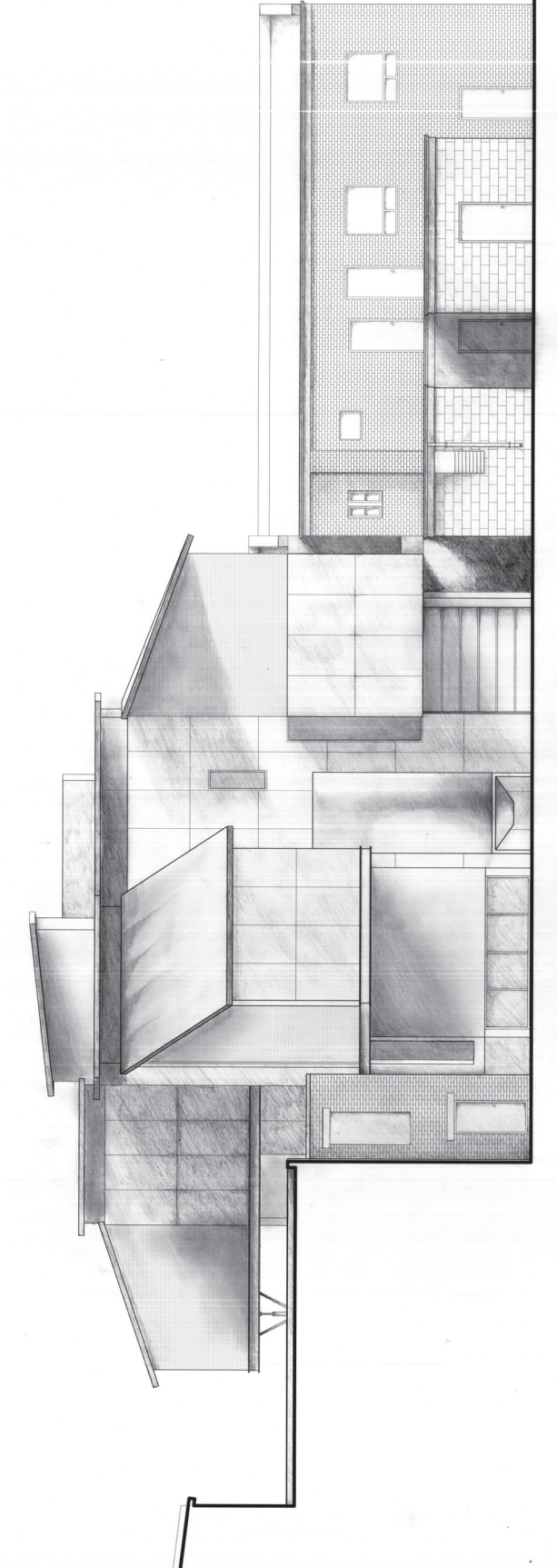


Final Model. Viewing window on the top floor allows views to the brewing process. In addition, the screen on the south facade brings in diffused light.





Threshold Drawing. This drawing is a modified version of the 'Existing Street and Laneway Thresholds' diagram that now incorporates the brewery thresholds for comparison.



North Elevation. Illustrated through the elevation, the brewery shows how the idea of porosity is integrated with the front facade. In addition, the drawing makes apparent the material qualities of the brewery that reflect the character of the laneway.

The expression of the laneway character through the brewery building continues with the material palette. The materials used through the design scheme are concrete, steel (structural and cladding), perforated metal, wood and glass. The materials of the existing laneway buildings, such as brick and concrete block are also part of the palette of laneway materials.

Along the ground level, concrete is used for the main walls. Visually, this material contrasts the texture of the surrounding buildings leaving a clear distinction between the new and old. Over time, the exposed concrete will begin to take on new character as it reacts to the environmental conditions and daily operations. Moving up the building, weathered steel and perforated metal are widely used. Both of these materials maintain the subdued character of the building, while adding unique textural qualities to Diplock Lane. On the interior, structural steel and the exposed concrete continue throughout the building. Wood, is added in to emphasize the character and quality of these materials.

## SUMMARY

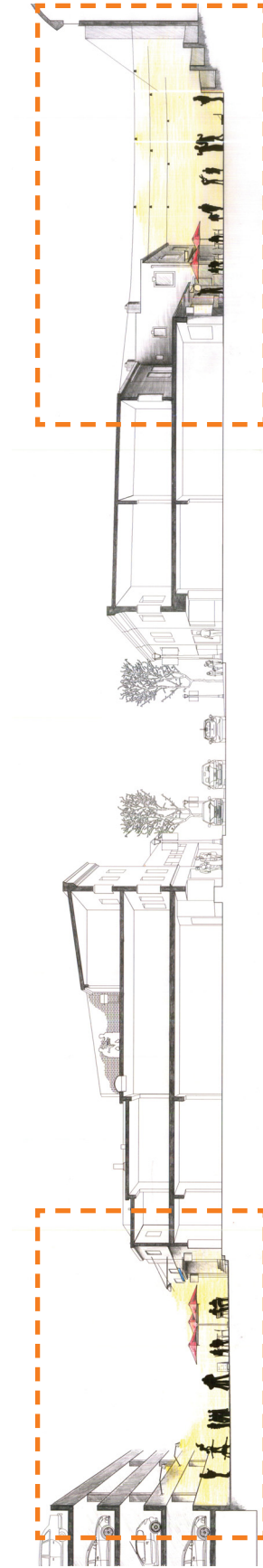
### Laneway Strategy

Brampton's laneways offer many opportunities to strengthen and support the downtown. These opportunities allow for spaces that extend the public realm through the urban fabric, creating a stronger network of urban systems. These systems in return, provide the urban and suburban inhabitants places to congregate and interact, contributing to the activation of the downtown.

Introducing a brewery into the laneway provides several opportunities to connect with the downtown at varying scales. First, the brewery encourages interaction, allowing the community and visitors a place to connect throughout the year. In support of other urban programs, the brewery can accommodate local workers throughout the day; spectators before and after performances at the Rose Theatre; and provide a place for people to congregate after skating at Gage Park. On another scale, the brewery introduces industry back into the downtown. This not only helps strengthen the local economy through the production of goods, but also can support a local economic network within the region. For example, regional farmers can provide ingredients for the production of beer, and meats and produce for the restaurant.

Additionally, other programs can be introduced to support the network. Such programs include restaurants, cafes, shops, bookstores, grocers, artists and artisans stalls. These programs should be permitted/encouraged to extend their services into the laneways, creating a more engaging atmosphere within the laneway spaces and encouraging interaction. Along these same lines, the brewery can extend a beer garden out into the laneway. Serving a dual purpose, the facade of the brewery building can also be utilized to display projected televised events such as sporting events or new years celebrations.

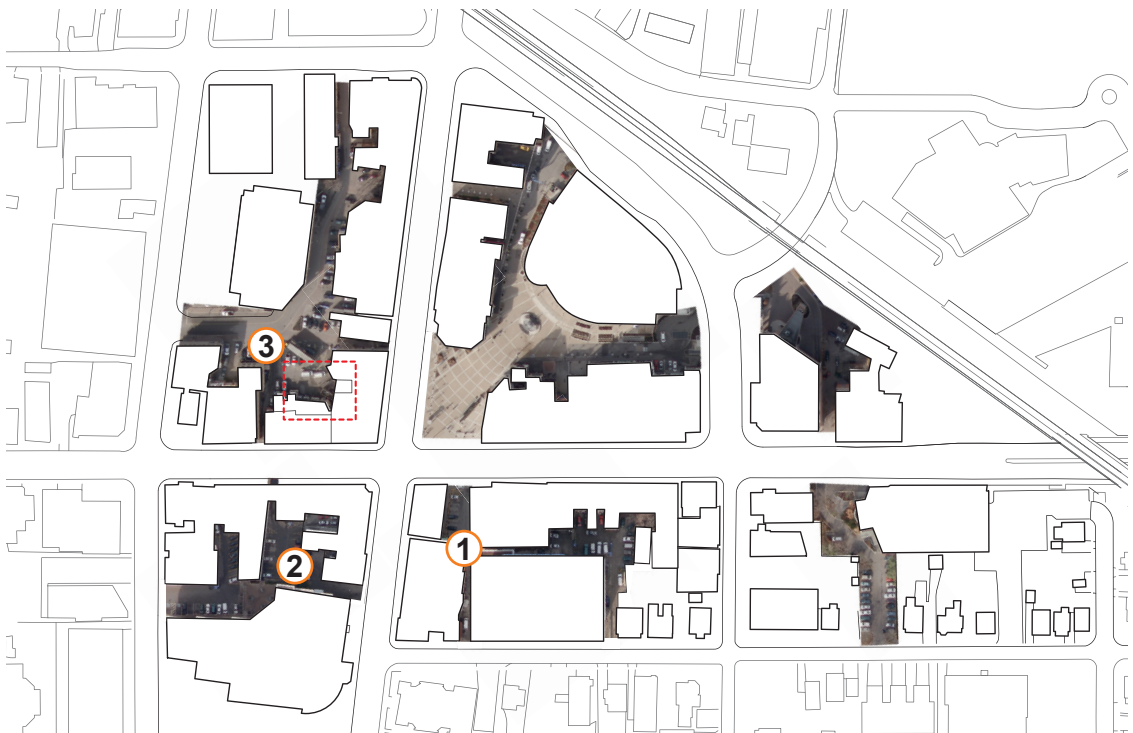




Section drawing of the proposed interventions on Diplock Lane and Theatre Lane.

This idea of maximizing the use of the laneway spaces and existing buildings is a key concept for designing successful laneways. Allowing these pieces to take on multiple uses also maintains the laneway character. Implementing these ideas may take multiple forms. For instance, a facade can be used to display an artists paintings. Awnings can be attached onto the facades to encourage this use and denote space. Lighting these spaces must be adaptable to multiple forms of activation. In addition, lighting strategies create the ambiance and reflect the programs that are utilizing the spaces.

The following images begin to summarise the above ideas in Harmsworth Lane, Caruso Lane and Diplock Lane.



Map of Laneway Interventions. Numbers correspond to the images on the following images.



Harmsworth Lane (1). Laneway can be filled with artists, artisans, small shops and cafes with tables outside.



Caruso + Russell lane (2). These spaces can be used in a similar manner and offer opportunities for shops to extend their services into the laneways.



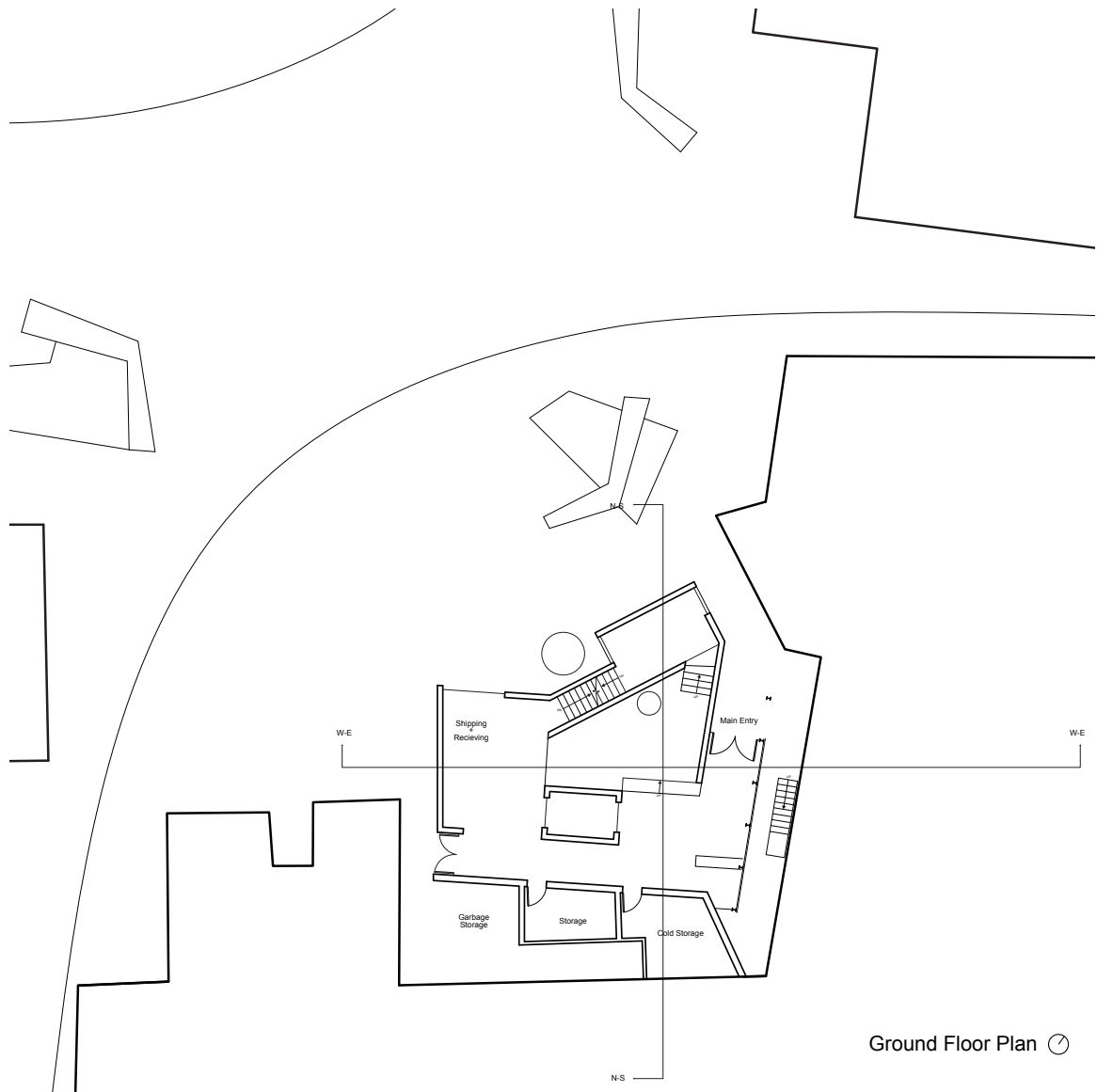


Diplock Lane (3). View looking at open space that could be used by buskers or as extension of the farmers market. The brewery sits on the right side of the image.

This thesis demonstrates that laneways operate according to a distinct set of rules from those of the street. As a result, the distinction between vehicle and pedestrian traffic should be eliminated. Instead, using Diplock Lane as an example, vehicles move into the laneway en route to the parking garage. The clear distinction through the change in character between street and lane, indicates to the driver a change in vehicle behaviour. Within these spaces, the pedestrian would have the right of way.

Opening up the interior space of Diplock Lane allows opportunities for public events. These events may include the extension of the farmers market (which could occur multiple times throughout the week), winter festivals, and casual interactions. Surrounding the lane space, benches and landscaping denote space for restaurants, cafes and the brewery patios, while providing seating that offers views of events in the middle of the space.





Diplock Lane. Illustrated through this image, the evidence of the street is removed. This provides the opportunity for a pedestrian oriented space, with the interior of the site open for events and casual interactions. The semi-circular lines running through the plan were derived from the major pedestrian movements and indicate the proposed surface strategy, which uses two tones of pavers. Built in benches and greenery around the periphery of the lane allow opportunities to denote space for programs extending into the laneways.

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