

Creating Place with Palimpsest

by

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Abstract

With the notion of globalization affecting the architecture of cities all over the world, architectural identity becomes lost in what seems like a homogenous cityscape of similar buildings. Considering the removal, and erasure, of buildings, new proposals should incorporate elements of the local architecture along with new implementations. Design utilizing principles of palimpsest will allow for the integration of the present construction methods while also complimenting the existing surrounding identity. This idea of palimpsest will combine Toronto's historic layers with the ideas of identity to create an architecture that establishes a new 'sense of place' to juxtapose the past with the present.

Strategies, that demonstrate the concept of palimpsest, will be applied to the Victory Soya Mills Silos; a structure that is located within one of many layers of Toronto's waterfront history. A design proposal that works with the existing silos can create a unique situation informing and utilizing palimpsest to create a strong identity and 'sense of place.' The design of a library, in conjunction with the silos, will further enhance the idea of palimpsest combining a historic neighborhood of Toronto with a program that represents an evolving building typology. The success of this project clarifies that the concept of palimpsest can be applied towards an old structure to work with a part of identity to create a 'sense of place'.

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1.0 Part One

1.1 Introduction

This thesis project aims to use palimpsest and 'sense of place' to create an identity along Toronto's waterfront which can counter the trends of city likeness. Layering of context, the new on old will be able to create that 'place' which draws in people to generate distinctiveness in areas that lack it. The originating problem is related to the ideas of identity and globalization and their effects on architecture within cities. Prior to globalization, a city's architecture was more distinct from others across the world creating its own place identity and made it unique by comparison. With the onset of globalization, architects and designers from different parts of the world began to transfer their designs into other cities, sharing different ideas. This led to more major cities becoming 'global cities' advancing to more successful appearances that made each cityscape look similar to the many types of globalized architecture. This type of architecture tends to remove the existing local architecture, which had a long building lifespan, to be replaced with new buildings with different life cycles. This has led to homogenous cityscapes which make it hard to differentiate the local identity of a community from other globalized cities.

The concepts to be explored begin with the identification of a phenomenon at hand which is the concept of globalization in architecture. There are several key ideas that can create opportunities to combat the occurrence of globalization which revolve around maintaining the identity of the existing architecture. Through the understanding of architectural identity, the built environment of neighbourhoods and historical buildings define international cities and should remain similar to keep the place recognizable. Reinforcing the identity of a location is to prevent everything from looking like everything else; with a strong place identity, cultural aspects and building designs can become highlighted within a setting to create meaning.

In order to create successful meaning of a place while trying to keep the cultural or historic qualities, I came across the concept of palimpsest which works with the layering from past to present. The original concept of palimpsest, new writing being superimposed on the same material as earlier writing that has been partially erased, can be applied towards architecture. It can be applied in such a way to build upon earlier structures to show the traces of the past while also displaying what is newly implemented. This approach to design will incorporate elements of the current situation with new

implementations without removing or erasing older buildings. This will counter the present construction methods and will conclude with the preservation of the architectural identity further enhancing the surrounding context.

With the idea of globalization, and the concepts of identity and palimpsest working together, the next step is to investigate into the type of environment or 'place' that can be created within the given context. 'Sense of place' is an overall concept which covers the relationship that people have and how they interact with the social process and their physical environment. With the creation of a place, it will generate a sense of well-being that is able to influence a person's state and how they will respond to their surroundings. This is important in the layering of new onto old historic structures as it still needs to represent the identity, which can bring people to populate and experience the place. Another approach which incorporates 'sense of place' is critical regionalism which works with natural aspects of the site instead of using tabula rasa to create conditions of placelessness. This becomes tied into sense of place and identity as it is an approach which strives to counter placelessness by tying the architecture with the surrounding geography and cultural context.

The next part of the thesis project analyzes building conservation and the ways how history through its physical environment and recent or past changes can contribute towards the creation of meaning or memories. As historic buildings contribute towards the environment and the identity, old buildings can be used to be built on or added onto to incorporate different layers of materials or history much like palimpsest. Through the understanding of basic building conservation principles, there are several types of methods that need to be explored in order to conserve the historic layering aspect with the integration of new onto old. This leads towards building strategies with existing structures, with conservation in mind to not use a tabula rasa approach on a heritage aspect. In the case of design with an existing structure, strategies which peel away to reveal past historic layers or material quality can be used along with building adjacent to conserve and highlight the past. Once highlighted, the new building juxtaposed with the old will create an identity with layers of palimpsest which will further contribute towards the creation of an environment which becomes a place or destination people will want to experience.

1.2 Identity & Globalization

“Our surroundings which represent the built environment and identity are influenced by architecture. From the wider cultural landscape to the local neighbourhood, historic buildings are what determine the character and appearance of the built environment.” (Cramer & Breitling, 2007, p. 18) International cities are defined by the form and arrangement of their buildings which ensures that a place can remain recognisable over a long time. It is the architecture which creates the identity of a place and consists of the current features and future potential. The importance of continuity in architecture of cities is vital in places where rapid transformations are taking place. This is more common in city centres where land values are higher and cause a large disappearance of old or cheaper buildings to be replaced by new buildings.

In order to understand the problem, the idea of globalization needs to be defined. According to Eldemery, “Globalization is seen as a process of standardization in which a globalized media and consumer culture circulate the globe, creating ‘sameness’ everywhere, thus bringing to light the bland and boring universality in modern projects.” (Eldemery, 2009, p. 347) Although globalization affects many more aspects of city life, the problem focus will be on the effects on architecture. With architecture in mind, “Everywhere everything gets more and more like everything else as the world’s preference structure is relentlessly homogenized.” (Adam, 2008, p. 74) It is important with globalization occurring to make sure cities maintain their identity in their built environment and not turn into cities without meaning.

As there are several pros and cons to many concepts, it is also applicable towards architectural globalization and there are two opposing forces. Eldemery (2009) found that the two opposing forces are:

One seeks to safeguard and promote indigenous architectural traditions and technologies to advocate historical continuity, cultural diversity and preservation of identity. The other force promotes invention and dissemination of new forms using new technologies and material as a response to functional needs. (p. 344)

With two contrasting ideas about how globalization affects architecture, I agree with the first, it is critical to safeguard and promote indigenous architecture to have historical continuity. Having locations

with cultural diversity and a preserved identity of the surrounding context is important for having successful future environments.

Local architecture has a problem with the assimilation of globalization into traditional heritage due to the fast pace of modernization and is recognized between traditional values and imported ideas. What needs to be done is finding a solution which can deal with the new technology trends and to achieve locality and the preservation of the identity of place. Once the aspect of globalization is understood, identity that is lost in certain areas should be restored to blend in with globalized features. "Identity is community and place related and the individuality of community and place are undermined by global homogenisation." (Adam, 2008, p.76) The homogenisation of buildings removes aspects of community and can remove certain aspects of 'place'. Identity defines all of the elements of a whole in an environment, removing what exists and promoting new forms which are uncommon in that area only excels the process of creating sameness. "Identity is the referential sign of a fixed set of customs, practices and meaning, an enduring heritage, a readily identifiable sociological category or a set of shared traits and experiences." (Meltem Yilmaz) Ways to preserve identity are available, and should be applied in order to maintain what exists.

Identity of architecture as Semes (2009) elaborates is a combination of a wide variety of factors which have an effect on a personal scale:

The dialogue of new and old architecture becomes an intersection of memory and invention often more revealing about our cultural assumptions than the production of new designs for contexts relatively untouched by reference to the past. This explains why proposal for new buildings that visibly depart from the character of their historic surroundings often arouse intense feelings: such departures challenge our sense of collective and personal identity, revealing conflicting ideas and values that extend well beyond questions of architectural form. (p. 28)

Rather than challenging the collective and personal identity from new proposals which differ greatly from their surroundings, a place needs to maintain its place identity. The concept of place identity forms the collective sense of cultural identification with a particular building and its design features (Eldemery, 2009, p. 346). It implies that there are essential natural characteristics that identify a place and those elements need to be kept intact. It also considers the setting of buildings and the types of architectural elements used in the design of the site or building which leads towards the next concept. The next

concept is what can tie together the previously significant aspects with the new designs which incorporate the best of both sides.

1.3 Palimpsest

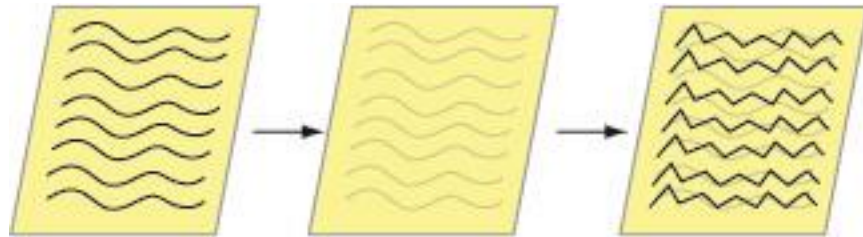


Figure 1.1 Typical Palimpsest Diagram

Palimpsest, as defined by The Oxford English Dictionary is, “A manuscript or piece of writing material on which later writing has been superimposed on erased earlier writing. Something reused or altered but still bearing visible traces of its earlier form.” Palimpsest which works with layering from the past to present can be applied towards architecture as mentioned with place identity. It can be applied in such a way to build upon earlier structures to show the traces of the past while also displaying what is newly implemented. This layering is interesting as it is able to show partially or fully, what was used from the past to be combined with the present. This allows one to work with the previous historical or heritage aspects.

According to Bailey (2007), a palimpsest usually refers to a superimposition of successive activities where material traces are partially destroyed or reworked with traces of multiple overlapping activities from variable periods of time. In the most extreme forms of palimpsest, total erasure of previous information is involved. It can also involve an accumulation of layers which in the end is totally different from the total individual components. The notion of palimpsest is quite complex and are several distinguished categories, of which, three stood out in regards to the field of architecture. The three categories are; true palimpsests, cumulative palimpsest, and spatial palimpsests which will be further elaborated on below.

True Palimpsests

True palimpsests are when all traces of earlier activity have been removed except for the most recent. It is a sequence of deposits in which successive layers of material are superimposed on preceding ones in such a way to remove all or most of the evidence of the preceding materials.

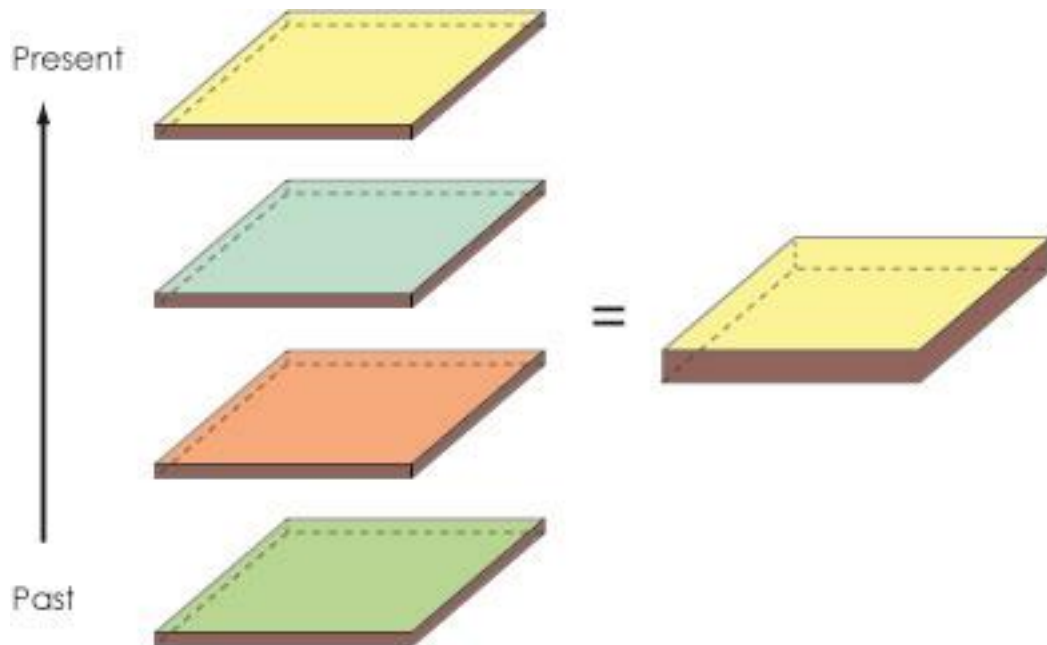


Figure 1.2 True Palimpsest Diagram

Cumulative Palimpsests

Cumulative palimpsest is where successive episodes of activity remain superimposed upon each other without loss of evidence, but are often re-worked and mixed together that is it difficult or impossible to separate them into the original parts.

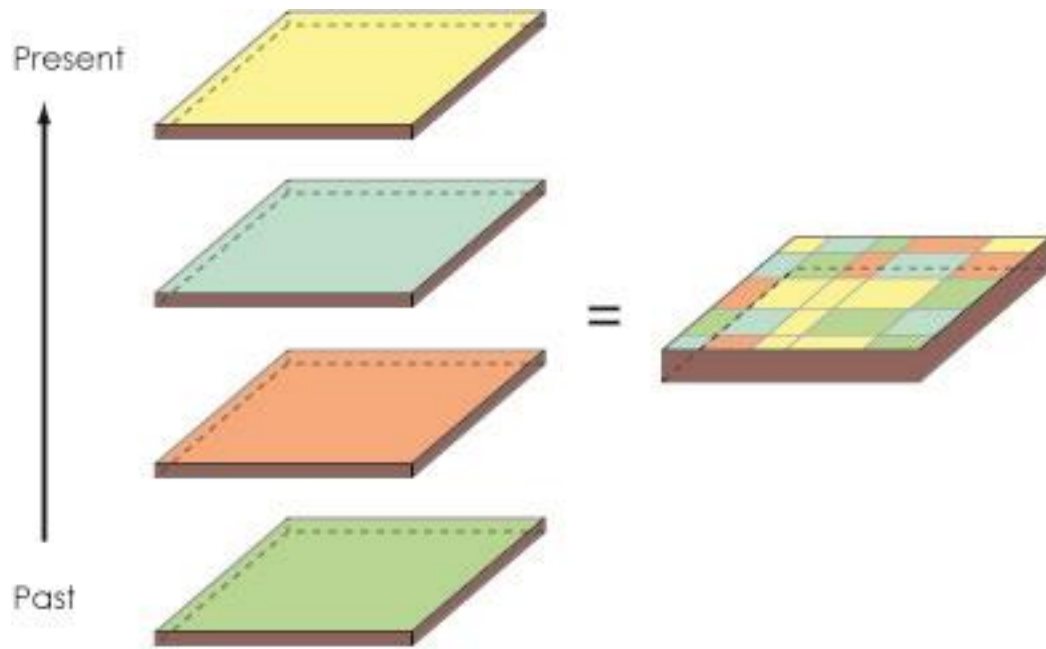


Figure 1.3 Cumulative Palimpsest Diagram

Spatial Palimpsests

Spatial palimpsests are defined as a mixture of occurrences that are spatially segregated but have a temporal relationship which is hard to distinguish from each other. A variant of spatial palimpsest is spatial disaggregation of materials that were once accumulated in the same place to different locations.

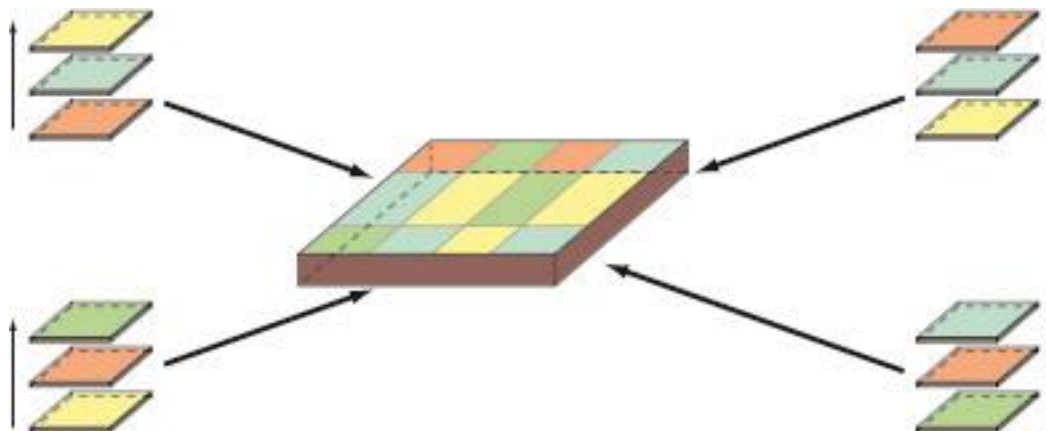


Figure 1.4 Spatial Palimpsest Diagram

Palimpsest can become a strategy through using different variations of such as true, cumulative, or spatial to respond to the previous identity problem. Palimpsest works with identity, a historic or heritage building to show layers of the past as well as new ones. There are many variations on the topic of palimpsest including urban palimpsest which is comprised of three components (Khirfan, 2010): “Urban preservation that balances the symbolic significance of intangible and tangible heritage, contemporary innovative designs, and urban rites and rituals that bind residents and establish continuity from the past” (p. 316). Urban palimpsests carry tangible and coherent traces of previous geometry such as streets, plazas, and buildings as well as symbolic traces on the collective memory. Urban palimpsest is applicable towards the master planning of an entire site with palimpsest through its previous routes of circulation or previously demolished built context.

Palimpsest can also be defined as the succession of meanings acquired by a particular thing as a result of the different uses, contexts of use and associations to which they have been exposed from the original moment towards their current place. This approach to designing will incorporate elements of local with new implementations without the removal and erasure of buildings. This will counter the present construction methods and will conclude with the preservation of the architectural identity further enhancing the surrounding context. Once palimpsest is applied, the next step will be turning something that wasn't used frequently into a 'place' which will draw more attention and provide what was missing.

1.4 Sense of Place

Sense of place covers a wide range of topics in the areas of geography, the characteristic of the place as well as the relationships formed with people. There has been a lot of research and studies done on the topic of sense of place and what has been selected provides more background information and theory on what is of interest. From the discipline of geography, a sense of place is “a compound of a sense of ‘territoriality,’ physical direction, and distance that is very deeply ingrained in the human race” (1965). Sense of place is represented as a faculty of perception and is presumed to be biologically-based, similar to the human senses. Sense of place, similar to the five senses plays a role in sustaining health and well-being, and can often be difficult to communicate or explain. (Eyles & Williams, 2008, p. 17) To add to that, there are some core elements as Eyles & Williams (2008) found which are comprised of belonging, place identity, meaningfulness, place satisfaction and emotional attachment.

All of those core elements are related to social aspects as well as placing an importance on the physical environment which I agree with as being important to a 'place'. From that, it is understood that what makes a sense of place distinct from any other is the relationship which people and the physical environment are able to create. Cheng, Kruger and Daniels (as cited in Eyles & Williams, 2008, p.5) also mention that it becomes tangible, ecological aspects of life are social and mental constructs and are products of physical ecological settings, but are nevertheless strongly rooted in that physical setting. This is the product of the relationship that individuals form with places, what makes them special and somewhere worth going to.

"Place may be said to have 'spirit' or 'personality', but only human beings can have a sense of place" said by Yi-Fu Tuan (as cited in Eyles & Williams, 2008, p. 16), and as such it is subjective depending on the individual. However, there are certain aspects which localities have which can create attractions and create a sense of well-being and wanting to return. As Jackson (as cited in Eyles & Williams, 2008, p. 16) mentions it is the atmosphere of a place and the quality of its environment which can be used to impart a sense of well-being and make people want to return to the place. There are different viewpoints from what Williams (as cited in Eyles et al., 2008, p.18) defines makes up a sense of place. It is such as a faculty or capacity, as cognitions of place, and as the character of place. A sense of place can be measured similarly to having a keen sense such as a keen sense of smell, it also raises knowledge and awareness of place, and lastly is able to create an atmosphere of the place. Sense of place is deeply rooted on the personal level and is aimed at creating what is comfortable for people, which is interconnected with identity and how it relates to them.

Sense of place has increasingly been examined in human geography as an outcome of interconnected psychoanalytic, social and environmental processes, creating and manipulating quite flexible relations with physical place as said by Cosgrove (as cited in Eyles & Williams, 2008, p.18). It is important to examine each aspect in regards to the social, environmental, and physical relationships as each can have an effect on the people who occupy the space. As Steele mentions (as cited in Eyles et al., 2008, p.20), sense of place is said to influence a person's mental state and thus it will affect how a person will respond to a place, which is conveyed through their actions and/or emotions. If identity and sense of place are worked into each other, it will be able to evoke feelings or senses which make the place more successful once integrated with the layers of palimpsest.

A major contribution towards sense of place which I consider useful is Williams & Stewart's (as cited in Eyles & Williams, 2008, p.20) assertion which describes an umbrella concept which covers the topic through relationships people form with places and elements. There are five points which belong under that umbrella concept:

- The emotional bonds that people form with places over time and with familiarity with those places.
- The strongly felt values, meanings, and symbols that are hard to identify or know, especially if one is an "outsider" or unfamiliar with place.
- The valued qualities of a place that even an "insider" may not be consciously aware of until they are threatened or lost.
- The set of place meanings that are actively and continuously constructed and reconstructed with individual minds, shared cultures, and social practices.
- The awareness of the cultural, historical, and spatial context within which meanings, values, and social interactions are formed.

Sense of place results from the interaction between people and components of their environment, they are shaped by the characteristic of the environment.

Sense of place is exclusively place-based, so the properties of the physical environment which inhabit the area contribute towards it. Architecture can work with palimpsest to create an identity that will be able to use people to create zones which form connections between the social and environmental. If some identity is able to be created but the sense of place is not formed, placelessness may occur. Placelessness is when places are stripped of their unique attributes and become more common looking to others places which leads to the place identity becoming lost (Eyles & Williams, 2008, p.22). As placelessness is where place identity and sense of place is lost, a strategy, elaborated by Kenneth Frampton, is 'critical regionalism' which provides a foundation towards a strategy.

1.5 Critical Regionalism

According to Frampton (1983), “The fundamental strategy of Critical Regionalism is to mediate the impact of universal civilization with elements derived indirectly from the peculiarities of a particular place” (p. 21). When designing with that strategy, the inspiration can come from a wide range of things such as the quality of the local light, the tectonics or the site conditions such as topography. This is mainly the maintenance of an expressive density and resonance by providing the user many experiences, the provision of a place-form is essential in critical practice and in an institutional sense is dependent on a clearly defined domain (Frampton, 1983, p. 25). Working with the site conditions and providing a form based on the place, is a step which is useful for creating experiential spaces.

Several architectural proposals have been inclined towards clearing everything that is pre-existing on the site with no regards for the surrounding context. This is not the approach recommended by critical regionalism and it goes against what Frampton states:

Critical regionalism involves a more dialectical relation with nature instead of the abstract, formal traditions of avant-garde architecture. The idea of tabula rasa which involves bulldozing the topography into a flat site creates a condition of placelessness whereas critical regionalism will try to engage the site in a way that will “cultivate” it. (Frampton, 1983, p. 26)

Critical regionalism seeks to complement our visual experience by addressing the range of human perceptions through the tactile and tectonic. Integrating the tactile and tectonic applications into the technical reflect upon the place-form and through that, the architecture will be able to withstand the constant changes from global modernization (Frampton, 1983, p. 29).

Critical regionalism is the approach to architecture that strives to counter the lack of identity and “placelessness”. The goal is to provide an architecture that is modern while also being tied to the surrounding geography and cultural context. The idea of critical regionalism is useful in regards to the problem of globalization and the lack of identity. It counters placelessness which can occur when new buildings are placed without any regards to context. The next areas that should be explored are those of conservation strategies, where in some cases sites have existing conditions or structures to work with and in order to work with the condition, conservation is needed.

1.6 Conservation Strategies

Countering placelessness by incorporating the ideas of palimpsest and working with the context, has led to conservation strategies. History is a one of many aspects of the environment which contribute to identity through the physical traces of the recent or distant past. In some instances, buildings are adapted and built onto to incorporate different layers of unique materials from different times to attach new meanings or memories. This process is vital, as contemporary buildings continue to replace the old even though their life span is not sustainable in a time of environmental consciousness. The use of old buildings can become an important resource if cared for, and with sufficient care they can continue to be used for long periods of time. As historic buildings contribute towards the built environment, they can promote national identity in addition to saving environmental and economic resources.

Arendt mentions that conservation is tied to the concept of culture, of Roman origin, it derives from *colere*- “to cultivate, to dwell, to take care, to tend and preserve” – a term that ultimately “indicates an attitude of loving care.” (as cited in, Semes, 2009, p.35). With the extension of that attitude, loving care of the built environments, the idea of a conservation ethic can be justified. Conservation also means the managing and cultivating of something that is alive instead of embalming something that is dead. Cultural resources remain alive when they continue to be used and assume new roles in the ongoing life of the city that surrounds them. The conservation ethic does not mean a ban on change; rather, it means the management of change to avoid unnecessary loss (Semes, 2009, p. 34). With design, it should be done in such a way that it is appropriate for the character of the historic setting that is built and not create something completely different just to stand out and be seen as its own.

Structures with special historic, cultural, or architectural significance enhance the quality of life for the occupants that use or view it. Semes (2009) mentions:

Not only do these buildings and their workmanship represent the lessons of the past and embody precious features of our heritage, they serve as examples of quality for today. Historic conservation is but one aspect of a much larger problem, basically an environmental one, of enhancing-or perhaps developing for the first time-the quality of life for people. (as cited in, Semes, 2009, p.25)

With this, there is the possibility to enhance the space which is occupied, and create a 'sense of place' which will further progress the relationships between the sites. However, when considering historic buildings, there are two viewpoints which have contrasting opinions. The first is that historic buildings are seen as documents of their time, deserving preservation because of their historical significance with little relevance to how buildings and cities are designed today (Semmes, p.29). The other is that cities and buildings ought to be living entities that can grow and accommodate change without losing the character that qualifies for preservation, but provide models for new work in other places and times (Semmes, p.29). I think that the first viewpoint is a more applicable attitude toward certain historic buildings, because it shows their significance and provides more site identity.

With industrial heritage buildings, the main concern is their appearance, since they are not necessarily deemed to be 'attractive' in comparison to other types of buildings. This itself presents a challenge which can be solved with strategies to represent the period of history that is associated with progress and innovation during its time of industry. With success, several industrial regeneration projects have been able to transform into vibrant urban areas which highlight the values of industry.

In regards to all types of heritage or industrial buildings, Orbasli (2008) has a list of basic principles in regards to building conservation which fall under three categories:

Figure 1.5 Basic Principles of Building Conservation (Orbasli, 2008, p. 53)

Understanding	Working with the evidence Understanding the layers Setting and context
Implementation	Appropriate uses Material repairs Tradition and technology Legibility Patina of time
Evaluation	New problems may require new approaches Sustainability Interpretation

Working with the evidence: Conservation should be based on verified evidence and the fabric should not be replaced without firm evidence. Historic aspects should not be falsified as a result of interventions.

Understanding the layers: Further development proposals needs to recognise the building or structure on the site including what existed on or below the site from all the various phases which have occurred.

Setting and context: Most forms of architectural elements are linked to their setting and surrounding landscape whether directly or in a different context. The setting may have undergone changes and will likely change more over time with more changes.

Appropriate uses: New uses of historic buildings should enable continuity and should be appropriate to the fabric and layout of the building and not detract from its significance. It should enhance the architectural or historic value of the site with the accommodated new uses.

Material repairs: The aim of material repairs is to slow the process of decay in the building. There will be a need to replace defects and areas of possible failure but needs to ensure the integrity of the historic building is not threatened with all the work done.

Tradition and technology: Repairs where possible, should be carried out with original building techniques unless new methods have been proven to be effective and not damaging. The different methods or approaches to repair should contribute towards the historic aspects of the building.

Legibility: After safety is dealt with on a historic structure, the next consideration will become the aesthetics. A major concern for conservation is the visual appearance of repair in certain areas in relation to the whole.

Patina of time: As historic building materials decay over time, it is vital to be careful in the cleaning process to slow the rate of decay. Too much of the cleaning and restoration can remove the patina of valuable evidence which is valuable to historic buildings.

New problems may require new approaches: Conservation of certain buildings will need appropriate solutions in consideration of intangible values as well. This is more applicable to industrial heritage where design and material considerations may not have been chosen well for performance at the time.

Sustainability: The idea of conserving and reusing buildings is a sustainable approach when compared to complete renewal or demolition and replacement with something new. Small interventions were common in traditional practices for building repair and should also be applied for the maintenance of building conservation.

Interpretation: It is important when conserving to influence the way the historic buildings are experience through human interaction. It is an integral part of conservation as it is the art of presenting cultural significance of a building to the users or visitors in the community.

Through the understanding of the three phases and the counterparts of building conservation, it is relevant in regards to keeping the identity of the existing conditions and work with layering to create palimpsest. Working with evidence of past, the setting and context, and maintaining an appropriate use relate towards the idea of critical regionalism and identity. Along with making sure the historic building isn't completely destroyed or ruined, it needs to be portrayed properly. Historic buildings can contain different qualities of value to the present and should be made visible to the contemporary public (Cramer & Breitling, 2007, p. 24). Once made public, the identity of the architecture can help determine the character and appearance of environment and further enhance the place.

1.7 Building strategies with existing structures

In regards to exploring different building conservation strategies, there also is a need to explore different ideas which can be applied to a site with an existing structure or building. Since there is an existing structure on the site I have chosen, I completed an exploration of different strategies to view potential possibilities. The following eleven strategies from Lukez (2007) highlight methods that can be applied:

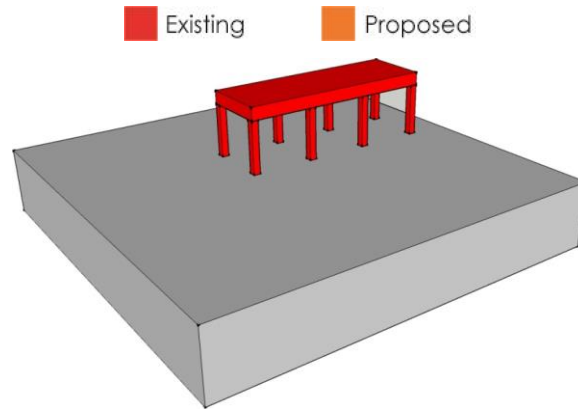


Figure 1.6 Existing condition

Complete Destruction and Rebuilding

This strategy completely eradicates any and all material from the project site within the site boundaries. This type of strategy is useful if all traces of history and existing structures want to be completely erased from the site to allow for something completely new to occupy the site.

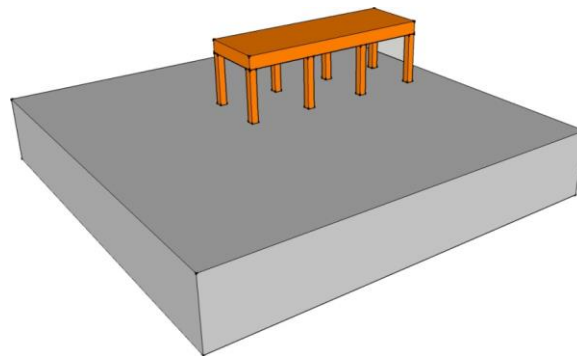


Figure 1.7 Destruction and rebuild strategy

Partial Demolition

Partial demolition is similar to complete destruction where materials are removed from the site but only include certain portions so that evidence of the site's context is still apparent. The main difference between partial and complete is that partial involves renovation rather than reconstruction.

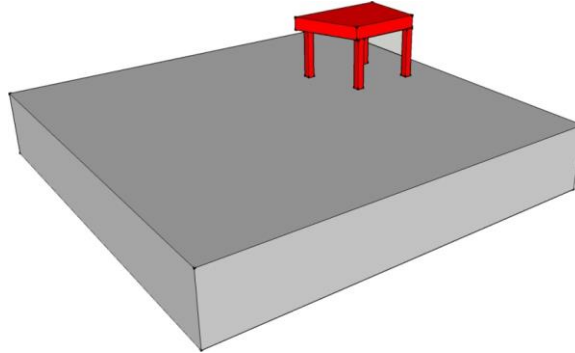


Figure 1.8 Partial demolition strategy

Etching

The idea of etching is to mark the site or structure to leave a trace of past interventions or future intentions. The marking can be from faint removal of materials from their surfaces or having additions to delineate traces. Scrapes and incisions on the site can also represent or mark the site's past and future.

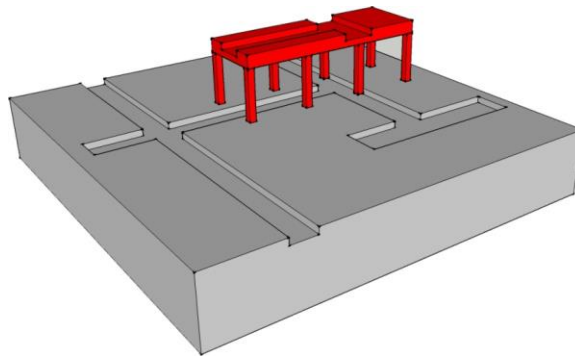


Figure 1.9 Etching strategy

Cutting Through

The act of cutting through is a precise and deliberate cut through the existing context or building without full regard for the integrity of the building, spaces or supporting systems. It can also be a way to liberate, reveal, or explore parts of buildings as well as connect different points or destinations nearby.

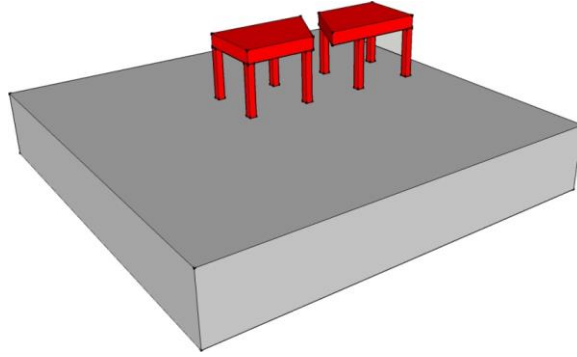


Figure 1.10 Cutting through strategy

Building an Addition

Building an addition works only if there is an existing condition such as a structure where something can be added on top. The addition of material can be outward or upward from the original form, thus creating more usable spaces beyond the original boundaries.

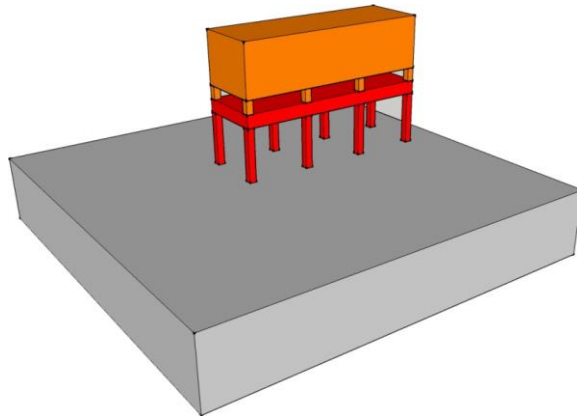


Figure 1.11 Building an addition strategy

Building Infill

Building infill is about filling in or constructing inside a void. It can be about filling gaps between pre-existing buildings or structure and can be important in creating continuity in the environment. There is an involvement of taking advantage of existing spaces rather than creating new areas which rely on new infrastructure.

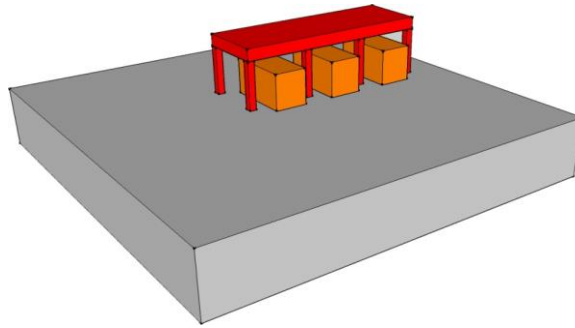


Figure 1.12 Building infill strategy

Excavating Around

The point of excavating through the site is to dig into the earth or under buildings to reveal or expose previous constructions or new foundations. The excavations become defined by their depth and perimeter in a way that new volumes of usable space can be created as well as revealing past histories.

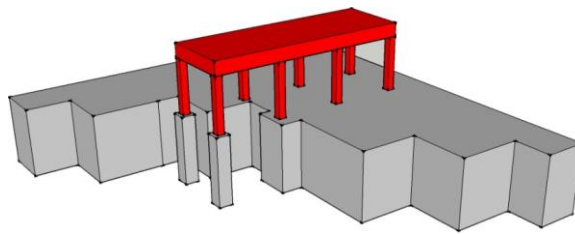


Figure 1.13 Excavating strategy

Wrapping

The concept of wrapping is to sheathe an existing volume or surface in a new skin which can redefine the boundary between the interior and exterior. This is common with old buildings as they are often re-clad in new or different materials as the building components' life span becomes fully used. The depth of the skin does not need to be limited in its dimensions and can become thicker to create habitable zones of space while wrapping existing volumes.

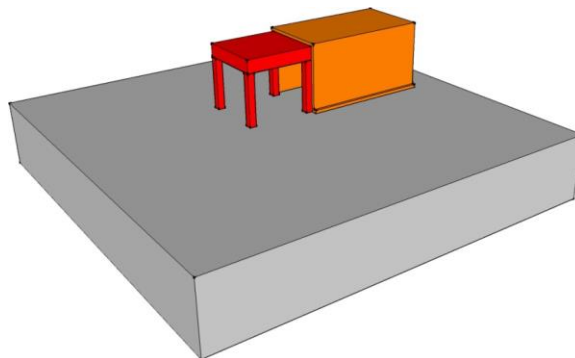


Figure 1.14 Wrapping strategy

Overlaying on Top

The concept of overlaying on top is when an existing structure needs to retain its form and attachment to the ground plane while a new form or system is built over that structure. This overlaying concept shares the air rights with the existing while maintaining the structural integrity of the structure below. Different structures and systems can be overlaid if the scope and complexity of the building or structure expands.

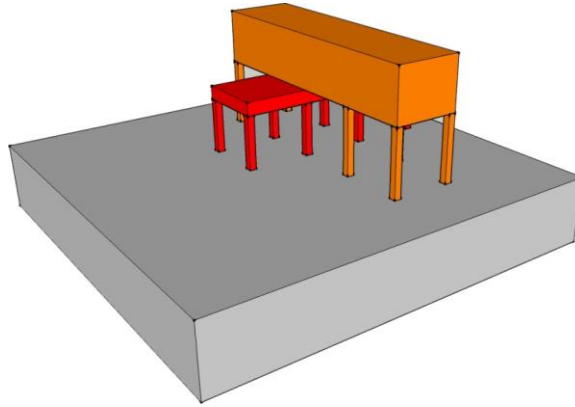


Figure 1.15 Overlaying strategy

Absorption

Absorption is what describes what happens in the space around a building or object when it is encroached upon. This process, accelerated or gradual, can transform the original object into something no longer distinguishable from the rest of the surrounding context. The resulting structure will thus be absorbed into the context and no longer be a separate entity.

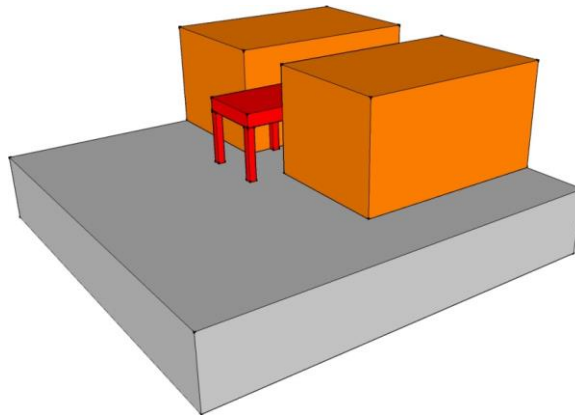


Figure 1.16 Absorption strategy

Enveloping

Enveloping is a more complete form of absorption where the structure is completely enveloped by the surrounding context so that the original structure and new cannot be distinguished from each other. The way to distinguish the different spaces from the original to the enveloping volume is by moving through the spaces.

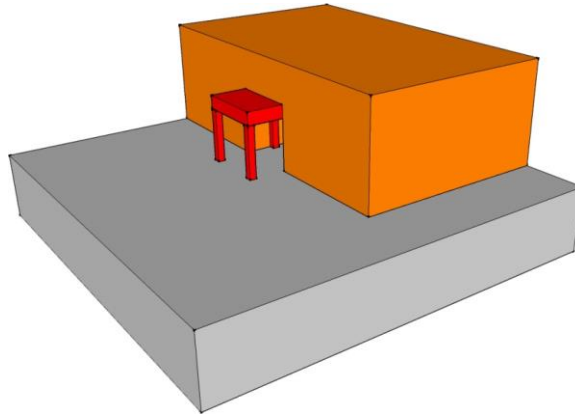


Figure 1.17 Enveloping strategy

After analyzing the following strategies with the existing context, it is easy to see which strategies can or cannot work in regards to identity or palimpsest layering. The first completely goes against any idea of keeping identity or working with site context and happens too often so it must not occur here. Building an addition, infill, wrapping, overlaying, absorption and enveloping all incorporate adding new elements which create new layers to complement the existing. Partial demolition, etching, cutting and excavating are related in a more literal way to palimpsest as the revealing of previous layers can be accomplished with these methods. The main concern now, is to decide which strategies are the most beneficial in regards to creating a place with identity that works with all of the theory of conservation as well.

2.0 Part Two

2.1 Site Context and Analysis

The site location research began by first taking a look at the city of Toronto which, during the second millennium had European settlers. Long before Europeans came to the location of Toronto, it was home to Aboriginal people who utilized it as a shortcut from the lower to upper Great Lakes. Most of the early establishments from the settlers revolved around the water which provides the most amount of layers of history to be worked with which is the base of the site research.

1700s

1720, The French built a more permanent small trading post on the Humber River on the south end.

1750, Fort Rouille began construction and was a modest sized trading post on the Lake Ontario shoreline, east of the Humber River.

1793, Construction of Fort York and the Town of York started to create a defensible harbour and to expand the fur trade.



Figure 2.1 Map of 1700s prior to any lake-filling

Industrial Areas

1800s

Majority of the trade from the city were by boat, which led to the manufacturing facilities being adjacent to the waterfront for easier transportation of supplies and products. By the 1830s and the '40s, the manufacturing facilities hindered the growth on the waterfront for infrastructure.

1850s, A campaign for lake-filling was undertaken to expand the waterfront shore towards the south and continued to do so for over a hundred years.



Figure 2.2 Map of late 1800s

1900s

The manufacturing facilities continued to grow along the waterfront even after the Second World War which made the downtown core an undesirable place to live.

1955, The Gardiner Expressway was built, which effectively cut off the people from the lake.

1970s, An Urban Revolution was changing the world, and cities started to redevelop their waterfronts. They used their projects to attract more residents, more employers, more jobs and more visitors. The Harbourfront Centre, Queen's Quay Terminal and the area around them are the result of one effort to redevelop the area in the early 1970s.



Figure 2.3 Map of early 1900s

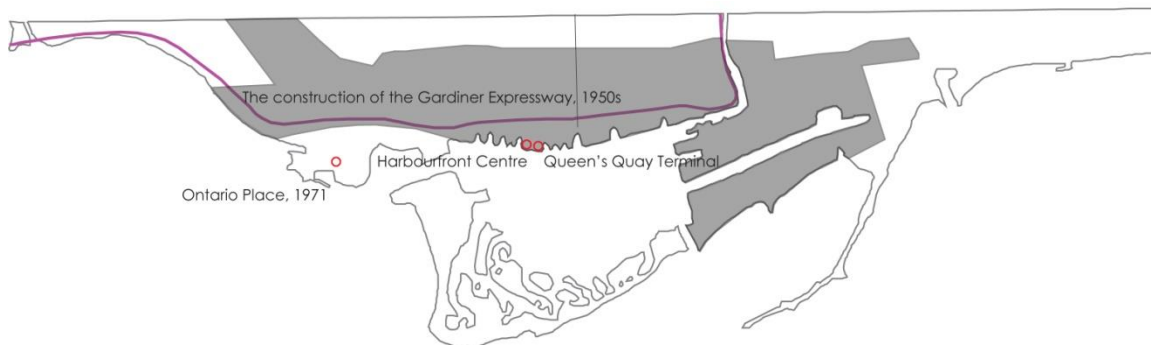


Figure 2.4 Map of late 1900s

2000s

1999, Prime Minister Jean Chrétien, Premier Mike Harris and Mayor Mel Lastman announced the formation of a task force to develop a business plan and make recommendations for developing the waterfront as part of Toronto's bid to host the 2008 Summer Olympics.

November 2001, the three levels of government established Waterfront Toronto to oversee all aspects of the planning and development of Toronto's central waterfront.

In December 2002, the government of Ontario passed the Toronto Waterfront Revitalization Corporation Act.

May 2003, The provincial government enacted the Toronto Waterfront Revitalization Corporation Act.

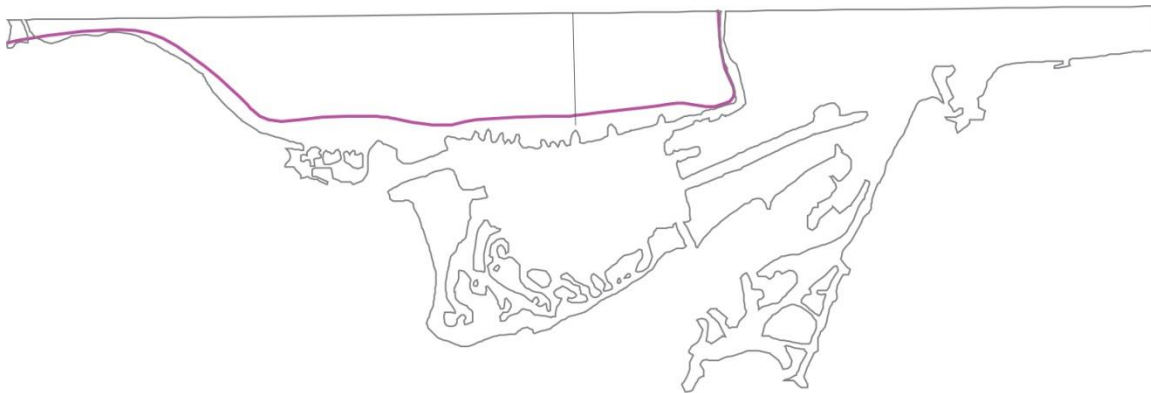


Figure 2.5 Map of year 2013

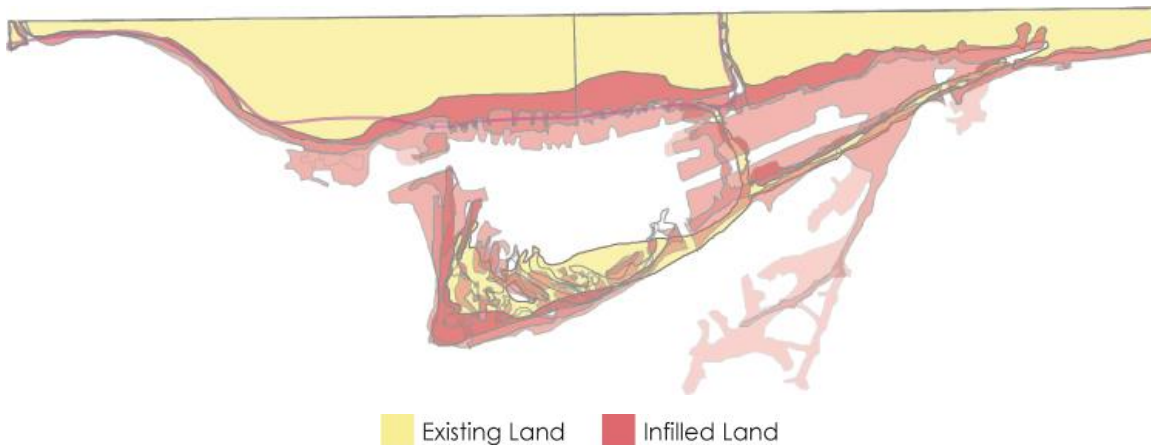


Figure 2.6 Mapping showing the overlapping layers of growth, lighter represents newer

The neighbourhood revitalization rezones the lands to be mixed use developments which feature green roofs, pedestrian-friendly streets, parks and public spaces, residential spaces, schools, and recreational facilities. Through an analysis of Toronto's layers of growth and development, most of the

growth that occurred was a result of the need for more industrial space and expanded the land around the central areas. The marshlands have developed greatly as well, which provides more shoreline and more space to work with. However, from looking at the waterfront development, the revitalization efforts could have started earlier to create a waterfront identity for Toronto instead of mainly keeping it industrial. As the revitalization efforts continue, in time the waterfront will continue to grow and can become an area which differentiates Toronto’s waterfront from other neighbourhoods. Development is occurring in several areas along the waterfront and is shown below in their categories.

Analysis of the Context

Districts of the Waterfront Development

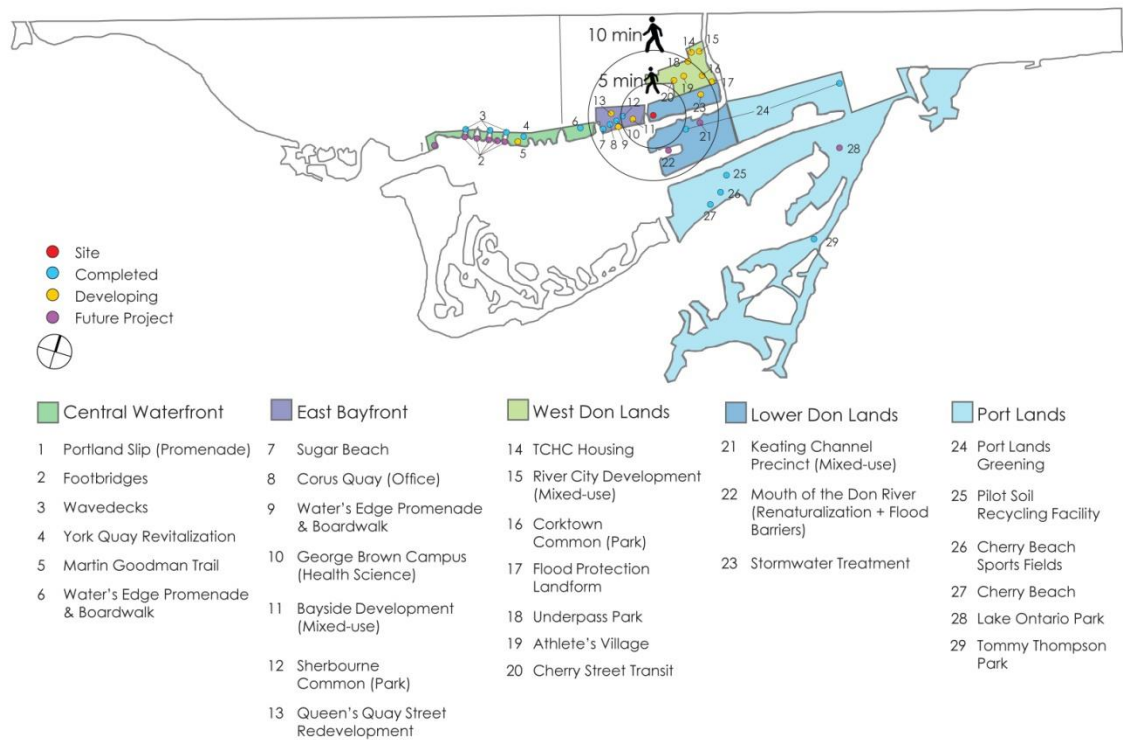


Figure 2.7 Overall map with the future planning of the waterfront

The portions highlighted on the overall image of the waterfront is a part of the waterfront revitalization projects aimed at becoming Toronto’s new “blue edge”. Waterfront Toronto has divided the area into several key project areas to facilitate planning and construction and listed below.

Central Waterfront

As the central waterfront district is the most heavily used part of Toronto's waterfront, it has a large potential to create a new look for the city. The major goal is to link major waterfront destinations, create new public spaces and give the waterfront a grand boulevard. Ultimate goal is to create a powerful world-class identity for the Canadian waterfront.

East Bayfront

The East Bayfront is in close proximity to the downtown of Toronto as well as the developing waterfront and its location will provide the basis to become a significant community. Through redevelopment, it was previously a reminder of Toronto's industrial past, but will soon become filled with residential, retail, commercial developments with parks and public spaces.

West Don Lands

The West Don Lands is a large former industrial land which occupies the land at the original mouth of the Don River. This will utilize the private sector investors to create a sense of identity and place with community anchors that provide green space and recreational opportunities. It will also transform the former industrial land through brown-field remediation to a sustainable mixed-use pedestrian-friendly community.

Lower Don Lands

The Lower Don Lands is another large area of industrial land which runs from East Bayfront to the rail corridor and Ship Channel. The plan is to transform the underutilized industrial area into new sustainable parks and communities as well as the naturalization of the Don River mouth.

Port Lands

The Port Lands is a massive underutilized industrial area which has extensive access to the waterfront and is close to the downtown core. The underutilized areas are man-made and created from infill of the wetlands and will need to be flood protected before it can be fully developed. It is formally and informally used as recreational space as of now and has a large potential for future development.

Through analyzing all of the current or future revitalization efforts, the main efforts have been put into the central districts as they are the closest vicinity to the downtown core. With the current

trends and extrapolation of the given plans, it appears that once the central portion of the waterfront is more or less completed, development will lead towards the east and southeast. There are currently many plans for the central, east bayfront and west don lands, while in order to fully utilize the lower don lands and port lands much more foundational work on the underutilized areas have to be completed. Once the eastern portion becomes more developed as it is mainly industrial lands, it will bring in more people to populate the whole waterfront instead of only the central. This has led to the site selection to be contained within the eastern portion to create an identity along that portion for Toronto.

Site Selection

During the process of site selection, there was a prior attempt at finding a site which was related to the previous town of York located along Yonge Street. However, through more analysis of the waterfront and historic aspects, and looking at what was done with a set of silos on the western portion of the Harbourfront, the eastern portion was selected. The silos were selected to represent the layers of industrial buildings which was a major focus of the waterfront for centuries and works with the concept of palimpsest. The site encounters many aspects of palimpsest as it deals with previously being just water, to landfill, then an industrial site, and now complete erasure except for one structure. This site is a representation of palimpsest within Toronto's waterfront and my proposal is to create another layer of history.

The selected site within the Toronto waterfront is the Victory Soya Mills Silos, located in the Lower Don Lands region. The mill was built to extract and process soybean, linseed, and other vegetable oils and during the time of its closure in 1991, the plant was the largest "crusher" in Canada, handling 540,000 tonnes or more soybeans annually. The site opened in 1946 and had its ownership change from Sunsoy Victory Mills to Proctor & Gamble in 1954 and finally to Central Soya Inc. in 1980. After the closure of the site, the plant became a popular refuge for squatters which eventually led towards demolition and erasure of the majority of the site except for the silos in 1998. The remaining structure on the site has since become registered under the Toronto Inventory of Heritage Properties and under Part IV of the Ontario Heritage Act in 2004. This site was chosen due to the location on an underdeveloped portion of the waterfront due to erasure attempts in the previous decades. There still is a fair amount of industrial buildings located to the south and east and through the implementation of a new design that is incorporated with the old, it can act as a starting point for future industrial building

redevelopment. The silos on the waterfront have a great potential to become a place or destination with the heritage aspect and ties in very well with the researched concepts.



Figure 2.8 Silo image from a site visit



Figure 2.9 Panoramic of the surrounding from the south west corner of the silos

Surrounding Neighbourhoods

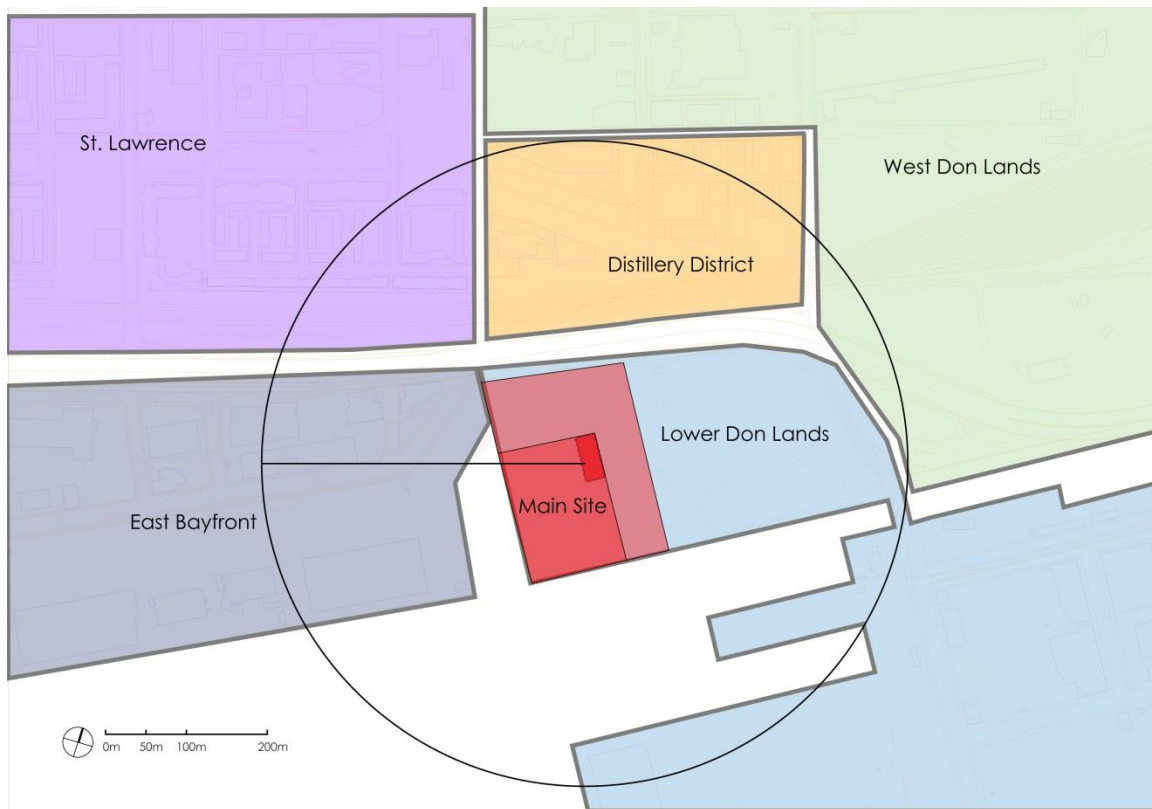


Figure 2.10 Map showing the surrounding neighbourhoods

Through the selection of the site, the next aspect involves the analysis of the surrounding neighbourhoods to investigate what the site can provide in regards to the context. Once analyzing the surrounding neighbourhoods and their architectural make-up will the selection process of a building type is easier to make.

St. Lawrence

Majority of the buildings in that neighborhood consist of apartment buildings as well as old industrial buildings which have been converted into lofts or commercial space.

East Bayfront

It is currently undergoing transformation which will transform the previously industrial area into an area which will feature residential units, employment space, retail and entertainment.

Distillery District

This district contains a variety of stores with unique boutiques, art galleries, restaurants, cafes and stores. It has a “creative focus” with studio spaces for artists as well as a theater. There are plans to develop condominiums, offices and retail spaces around the district.

West Don Lands

This large site is being transformed from industrial lands to a sustainable, mixed-use community with residential units, employment and commercial space, an elementary school and child-care centres.

Lower Don Lands

It is being converted from underutilized industrial areas into new sustainable parks and communities.

Building Type Analysis



Figure 2.11 Map highlighting the surrounding building types



Figure 2.12 Map highlighting the nearby land use

Through looking at the neighbourhoods surrounding buildings, a generalization was made on the types of programs nearby that will be proposed as well as what exists. A majority of the developed areas are retail, residential, commercial, educational, cultural, and service oriented while the planned areas are facing transformations from industrial. From that, there would be a need to incorporate a program which is more engaging for the community which can act as a meeting place for people of all ages and be encouraged to learn. There are four possible building types which could fit on the site and they are a cultural centre, a museum, a community centre or a library. A cultural centre is an organization, building or complex that promotes culture and arts. Cultural centres can be neighborhood community arts organizations, private facilities, government-sponsored, or activist-run. A museum is an institution that cares for a collection of artifacts and other objects of scientific, artistic, cultural or historic importance and makes them available for the viewing by the public through exhibits. Community centres are public locations where members of a community tend to gather for group activities, social support, public information, and other purposes. The library is a space with an organized collection of resources and information which can be made accessible to a large community

of people for reference or borrowing. They often provide areas for studying, common areas for groups or collaborating as well as different areas for different age groups.

Of the four possible buildings, the cultural centre and community centre are beneficial towards the community but lack certain elements which can be useful to all ages. The museum is ideal as well, however it would be too literal a representation of the idea of palimpsest and identity. The final selected choice is a library as it provides multiple programmatic uses, flexible spaces and a main program that is representative towards the idea of palimpsest without being too literal. The following diagram shows the site as well as a 10 minute walking radius to show nearby libraries which are essential to strong neighbourhoods. As there is only a minor branch in the St. Lawrence neighbourhood, having a larger more central library on the waterfront edge can provide what is needed for the community and create an identity and sense of place.

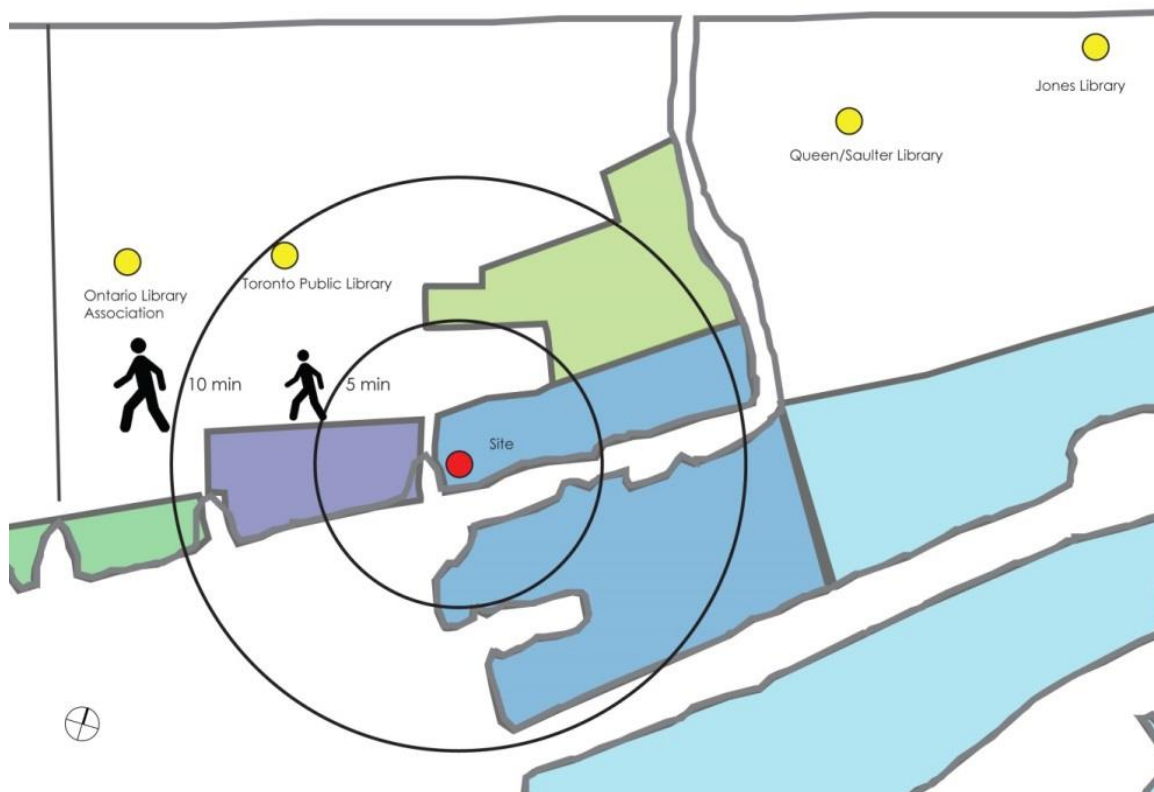


Figure 2.13 Map highlighting the nearby libraries within a 10 minute walking radius

2.2 The Philosophy of the Library

What is a Library?

A library provides a core educational and cultural component within communities, plays a role in the active learning and ongoing development for people of all ages. The books in the library are a way to keep knowledge preserved throughout history and through that aspect as well as the evolution of the library, it represents palimpsest. The library type building has evolved over a long period of time and still, the book is a main part of the library, bringing up past layers as well as the progression of knowledge. The library, as A. Markus adds is “also an ‘archetype’ and ‘prototype’ for the storing of knowledge and a progenitor of an amazing range of architectural forms” (as cited in, Worpole, 2013, p. 32).

As Worpole (2013) states, “the core function of a library is to provide access to books and information from a wide range of different types of media in an environment which manages and keeps everything in order” (p.88). The library originally consisted of the lending library, the reference library and the reading room with separate areas for children, meeting rooms, galleries, cafes or exhibition spaces coming in later. Nowadays with current designs, the programme has remained similar but has now incorporated a large emphasis on flexibility in its spaces. The library is one of the oldest and most distinctive architectural types in history which were not only storehouses of books but were attached to museums and meeting places and acts as cultural centres in cities.

The new public library types are unique cultural institutes in local communities in that they are places which promote public discussions through a large range of media. The library is becoming a central meeting-place in the town or city and is becoming as important as the historic ideal of the library as a collection of books for the purpose of individual study (Worpole, 2013, p.54). Although a meeting place, the most common uses for people in libraries are borrowing a book, research, children’s activities, borrowing music, films or computer games, using a computer, accessing information on jobs, health, etc., taking advantage of a quiet place to study. These more common uses have changed or evolved over the course of several centuries to provide more than just borrowing a book or research.

The Evolution of the Library

The library has continued to evolve from the traditional library to the more contemporary modern library with drastic changes. This is also mentioned by Mattern,

Libraries continue to be relevant – vital – public institutions. And this vitality is now encoded in new physical forms. Unlike their turn-of-the-twentieth-century and mid-century predecessors, today's libraries do not fit a mould. In fact, many of them don't even 'look like libraries'. In rejecting an obligation to conform to an architectural type, today's public libraries are free to choose shapes and styles that speak to the cities and populations they serve. (as cited in, Worpole, p. 13)

From that, it explains how current contemporary libraries take upon any form they like and can be represented in new ways. However their main purpose still remains the same, as a public institution which can be a vital part of a community or city and should be remembered when having the design implemented in a site. The following charts show a comparison in both the daylight and ventilation of old and new libraries as well as the comparisons between the traditional and modern library.

Figure 2.14 Edward's Comparison Chart of Old and New Libraries Daylight and Ventilation

Time Period	Daylight	Ventilation
18 th Century	Natural light, shallow plan	Natural ventilation, perimeter windows
19 th Century	Natural light, roof-lit deep plan	Natural ventilation, perimeter & roof cross-ventilation
20 th Century	Artificial light, deep plan	Air conditioning & mechanical ventilation
21 st Century	Natural light, roof-lit, light-shelves	Natural ventilation, mixed-mode, solar chimneys

(as cited in, Worpole, 2013, p. 14)

Figure 2.15 Comparison Chart of the Traditional and Modern Library

Traditional Library Architecture	Modern Library Architecture
Neo-Classical pattern-book	Modern free-style
Imposing steps and entrance halls	Good disability access
Domes and rotunda	Atria and ground-floor cafes

Galleries and mezzanines	Escalators & lifts
Clerestory light	Atrium light
Restricted access to books	Open access to books & other materials
Bookshelves requiring ladders	Bookshelves at human scale
Temple of knowledge	The 'living room in the city'
Institutional furniture	Domestic or 'club' furniture
Stand-alone service	Shared space with other services
Hierarchical design & circulation	Open-plan design & circulation
Canonical stock-holding	Contemporary cultural market-place
Individual study carrels (cubicles)	Seminar rooms and computer suites
Defensive space	Networked space
Librarians as knowledge custodian	Librarians as knowledge navigators
The rule of silence	A culture of mutual respect

(Worpole, 2013, p. 14)

In modern urban conditions the spaces constructed by public libraries are becoming more as public settings. Modern libraries devote much more space to different amenities and non-book related uses not only because of a reduction in book stock, but also because more spaces are needed for IT centres, classrooms, cafes, exhibition spaces and others. In addition to the new spaces, the plans become more open and often occupy several floors linked by elevators or escalators with an atrium to bring in adequate amounts of natural lighting. Modern libraries are attracting a much younger population as well as changing how the staff works by the removal of the reception desks into information kiosks which are more open to interaction.

Planning and Design of Libraries

Contemporary Library Architecture

Today, libraries are as much about creating places where people meet, read, and discuss and explore ideas, as they are about the collection and administration of books in an ordered form. The idea of the modern public library as a 'living room in the city' is becoming a vital feature of modern urban culture, and architects need to respond to this change of role and adapt to recreate. In general, libraries

have a clear civic edge over the increase of art galleries and museums from urban regeneration because they provide a much richer range of public spaces than the other forms of cultural provision (Worpole, 2013, p. 4). They provide an aspect of community for all age groups whereas art galleries or museums tend to only draw in certain demographics which limit its social impact. Where other programs fail in regeneration, libraries succeed as Christine Fyfe says due to several key elements:

Maximising natural light, providing a welcoming and warm ambience with the seriousness of the library, creating vistas and visual interest and intimacy with nooks and crannies, replicating the aesthetics and proportions of the existing building to create a seamless space, designing a place that is a pleasure to be in for long periods of time, providing clarity and coherence of layout leading to ease of use. (as cited in, Worpole, 2013, p. 61)

Through the explanation of certain key elements which make a library successful, it should be known to look into other important aspects which can affect the program. Through Seme's book on contemporary library architecture, there are nine important aspects to the design which in some categories have changed the overall use of the library.

Important Aspects in the Design (Worpole, 2013, p.91)

Incorporate ways to implement technology

In the newer libraries, computer access and use is integrated with the book stock instead of becoming two separate entities. The influx of new technology has played a large role in the student population as well as the adult community leading to an increase in the need for individual or group study spaces as well as computer terminals.

New media formats

With easier access towards new types of media, libraries try to encourage users to spend more time in them resulting in the need to provide areas to enjoy the resources. As the collection spaces no longer accommodate only books, stations which provide methods to access new media formats are needed to provide more amenities towards the users.

Excellent use of circulation and signage

In several existing libraries, there is a poor use of signage and visual references which can lead to trouble with navigating through the library's various programmatic elements. Newer libraries need to have a bold and easy to understand signage system which works with the floor plan and overall layout.

Cafes for coffee

The public population of today tend to get attracted towards public amenities such as a café or coffee shop which becomes a meeting place or destination for the users. The café needs to be able to provide the necessary space to become an important aspect that is integrated into the library.

Performance spaces

With the increase of public readings, book promotions, and story-telling for children, the library has become a more popular location as a performance space for live events. Libraries nowadays feel the need to offer book-related meeting spaces or live event areas which requires flexible spaces with the shelving or an auditorium.

Meeting rooms

Libraries now can provide rooms which can become potential sources of income if rented out for seminars, conferences or interviews, and become more study spaces if not in use. This allows the newer libraries to be flexible and act as a small conference center or seminar and meeting venue to increase the public use.

Back of house functions

The library staff members need their own rest-rooms and places for breaks with basic kitchen equipment and places to sit. This is important in neighbourhoods which don't have much cafes or shops within walking radius of the library. If necessary, there should be a separate entrance for the staff members; vehicular access is also needed to the service areas of the building.

Outdoor functions

Although libraries contain their books indoors, green spaces surrounding the building can provide community aspects as well as social ones. It can provide outdoor areas or seating for the other programmatic elements of the library such as the café or outdoor working or studying if it is viable.

Children's & young people spaces

The use of libraries for children has always remained high while its popularity has increased as meeting or study places for young people and students. They should aim to provide areas for each range

of age groups and if necessary, provide more domestic atmospheres when compared to the rest of the library.

Through knowing the planning and design aspects of a library, it is important to incorporate what is needed in contemporary libraries. With the incorporation of each key design feature as well as key elements to create the right spaces the library can become through the correct uses of context and site, a library can become a successful 'place' to create identity. With the implementation of palimpsest integrated throughout the project, it will further enhance the identity of a possible cultural centre that includes a sense of place.

2.3 Precedents

Through taking a look at several theories, the history of Toronto, and the changes in the library, the analysis of several case studies was needed to see what can be learned from several types of projects. The precedents were divided into four categories, palimpsest, silo-reuse, Victory Soya Mills, and library precedents. Each four category was chosen to investigate ways that some concepts or theories were applied in architecture, while others looked at possible approaches done towards similar or the same site conditions and the last looked at successful programmatic elements.

Palimpsest Precedents

Sayamaike Historical Museum by Tadao Ando

Located in Osaka, Japan, Completed in 2001

Introduction of case study

The Sayamaike Historical Museum is located on the edge of a reservoir which was converted into a flood control dam dating back the seventh century. The purpose of the museum is to house the relics found on the site as well as to inform visitors of Japanese water engineering from the past. It is divided into eight zones which showcase different elements of the Sayamaike Pond dating back to the 7th century showing the layers of history and material used throughout the engineering phases. The key feature in the museum is located in a triple height exhibition hall which houses a 62 by 15.4 meter wall that was excavated from the old dam.



Figure 2.16 Overall view of the Sayamaike Historical Museum (Galinsky, 2013)

Significance

The significance of this case study is based on how the museum is used to introduce the history of water control, irrigation and reclamation that was used from the ancient times. The main feature itself allows the occupants to view and understand the layers of engineering that was done through a succession of builders over 13 centuries. The materiality used for the construction also attempts to create a subtle presence on the landscape by using rough cut granite stone, working with the surrounding context to not create a sense of placelessness.



Figure 2.17 The main exhibit, layers from north bank of dam (Galinsky, 2013)



Figure 2.18 Image showing the subtle connection of material with the landscape (Arcspace, 2013)

What was Learned

This museum shows how the idea of palimpsest can be applied in an architectural building based on a historically significant site. It is a more literal approach to the layering concept of palimpsest by exhibiting a slice of the engineering work done for the old dam which shows its own layers.

Prado Museum Extension by Rafael Moneo

Located in Madrid, Spain, Completed in 2002

Introduction of case study

The Prado Museum Extension includes a new entrance hall, temporary exhibition galleries, and the inclusion of a restored Cloister. The new addition created more than 22,000 square metres of surface area along with a reorganization of the collection and facilities to be more ordered and spacious. The cloister which was rebuilt in the 17th century is adjacent to the monastery of San Jeronimo el Real and through the restoration and being incorporated into the museum, became a key element. It has regained its significance as an interior architectural element within a building as well as regaining its essential meaning and significance from what it once was.



Figure 2.19 View of the Prado Museum Extension adjacent to the monastery (Arcspace, 2013)

Significance

The significance of this extension is how from both the interior and exterior the old cloister and existing church can be combined with a new extension to create a visual link. For the exterior, special attention was placed where the edge conditions meet for the extension and church leaving a simple facade of brick, glass and stone to not have too much of a contrast. The cloister is used metaphorically as a lantern to illuminate the building as it receives daylight from a skylight and channels it through a light well to the exhibits below. It becomes more than just a restored cloister as it is a reference to the past, and a testimony towards what was being built at the time.



Figure 2.20 Interior view of the restored cloister becoming a part of the exhibit (Arcspace, 2013)

Analysis of layering

Adjacent to the monastery of San Jeronimo el Real, there were originally two cloisters built in the 16th century for religious use, and then one was destroyed in the mid-1800s. The second cloister had Renaissance origins and became replaced a century later by a Baroque cloister which survived until present day. Through the 19th and 20th century, the cloister and monastery underwent changes and alterations leaving only the skeleton of the structure standing. From that point, the cloister became the primary aspect of the museum extension and became analyzed for restoration due to decades of deterioration. The whole structure was dismantled; each stone was moved to restoration studios to be cleaned and repaired prior to being rebuilt on site all over again. Through all the stages of the cloister's history, it was able to be restored and rebuilt in its original position, housed in a new structure to remind the viewers of its history and the integration that was made possible.



Figure 2.21 Image of the previous cloister before restoration (Museo Nacional del Prado, 2013)

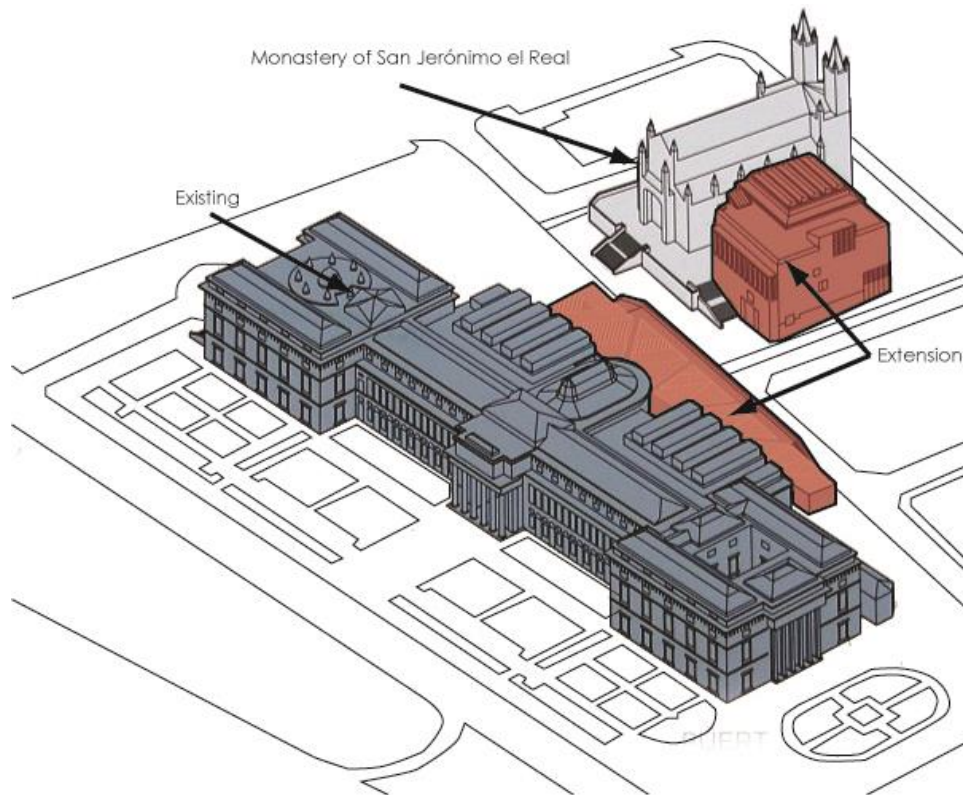


Figure 2.22 Diagram of current layout and additions (Arcspace, 2013)

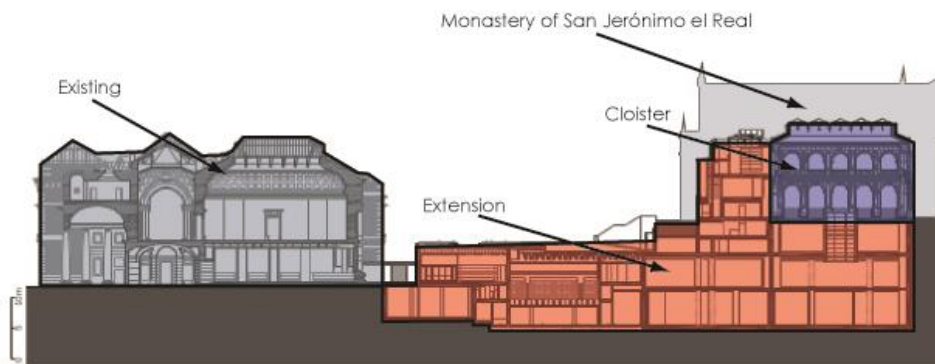


Figure 2.23 Diagram of existing, extension and restored parts (Arcspace, 2013)

What was Learned

From this precedent, there was a strong idea of palimpsest working with the cloister, which represented several more layers of history, and the new contemporary addition. The idea of palimpsest in architecture can be applied similar to this extension, by bringing in an old aspect to new to reveal past layers, similar to the previous precedent. However in most cases with reuse of old historic structures, restoration process must be completed in order to make those portions suitable for future use. The

cloister was able to give back architectural meaning and significance it once had from the time it was connected to the monastery and provide a new identity for the location.

Silo Re-use Precedents

Frosilos by MVRDV

Located in Copenhagen, Denmark, Completed in 2005

Introduction of case study

Throughout many areas of Europe, there are old non-functional harbour areas which have excellent views and proximity to the water and city-centres. In most cases there are warehouses which become converted into residential units while this project took a different approach and used two existing silos. The design, instead of building the apartments on the interior, projected the floors to the outside fully utilizing the silo's shape. Instead of being crowded into a silo, views and flexibility is achieved on the exterior while also providing a large lobby space and core throughout the silos.



Figure 2.24 Image of the silos before the project completion (MVRDV, 2013)



Figure 2.25 Overall view of the Frosilos (MVRDV, 2013)

Significance

The significance of this precedent is the method of use for the existing industrial silos. There were certain structural limitations with the silos as big openings needed for windows would be hard to accomplish without affecting the silo's integrity. It was easier although still quite complicated to do openings for doors as the opportunities were limited to certain areas. Although working on the exterior misses some key opportunities with the interior, it provides a great aspect within the core, the vast emptiness.



Figure 2.26 Picture of the silo centre illustrating the emptiness and circulation (MVRDV, 2013)

What was Learned

Through the analysis of this silo re-use precedent, it shows that although the silo structures look very sturdy, there are many limitations in the types of openings allowed in the walls. Other than the structural limitations, it shows that there is a great possibility to re-use silos, as the selected site for the thesis project is also along a Harbourfront with potential for excellent views. Although the diameter of a grain silo differs from the ones used for this project, it is possible to build on the interior or exterior of the silo in this scenario which is why further analysis of other precedents need to be done on different silo types.

Quaker Square Inn at University of Akron

Hotel renovation completed in 1980

Introduction of case study

The Quaker Square silos were built in 1932, it consisted of 36 120 feet tall silos that contained bushels of grain before its production was halted in 1970 in Akron. The facility became repurposed starting in the year 1973 and the silos were eventually converted into a Hilton Hotel in 1980 and later became Crowne Plaza hotel which became known for 196 round rooms. It remained as a hotel until the year 2007 where the University of Akron bought the complex with plans to turn the hotel into student housing. It left approximately half the hotel rooms available while renovations took place and has recently closed the hotel due to plans on entirely converting the rooms.



Figure 2.27 Overall view of the Crowne Plaza hotel (Combs' Trip, 2013)

Significance

The significance of this precedent is the similarity of the silo towards the Victory Soya Mills silos. Both silo complexes contain 36 silos and the main difference between both is the produce that was stored inside, grain compared to soybeans. The significance of the silo-turned hotel renovation is the way how the silos were cut into, and transformed into a hotel as shown in the floor plan below. Even though the silos are very structural and require a lot of work to create openings, it is possible to accomplish and create several different uses within.



Figure 2.28 Typical floor plan of the hotel's silo rooms (Combs' Trip, 2013)

What was Learned

Much like the selected site in Toronto, the location of the student residence is within a complex that was used to process and store grain. The difference from these silos to the ones used in Frosilos is the amount of penetrations allowed which did not affect the structural integrity. As grain silos are built with extremely thick walls for safety reasons, it is safe to cut out large portions on the interior for circulation paths or on the exterior for window openings. This removes certain limitations that were assumed from analyzing the previous case study and opens up many more possibilities instead of being restrained from only working on the exterior or interior. The concept of palimpsest is involved through the reuse of the industrial silo conversion into a place of residence and mixed use.



Figure 2.29 Picture of the lobby integrated into the silos (Combs', 2013)

Victory Soya Mills Silo Precedents

Panam Proposal "Tkaronto"

Introduction of case study

This Pan Am games award pavilion is based from the Iroquois word tkaronto which means "place where trees stand at the water" which eventually stood for meeting place. The concept is creating a meeting place with trees which are represented by a pavilion to become an interesting place for people to relax or be entertained. Their main concept is the idea of connection with the use of the existing silos as it can be visually connected from several areas around the city and waterfront. The proposed structure located on top of the silos is a bar which creates a taller icon which will attract people to come and create a new meeting place along the waterfront even after the games.



Figure 2.30 Render of the Tkaronto project (Panam, 2013)

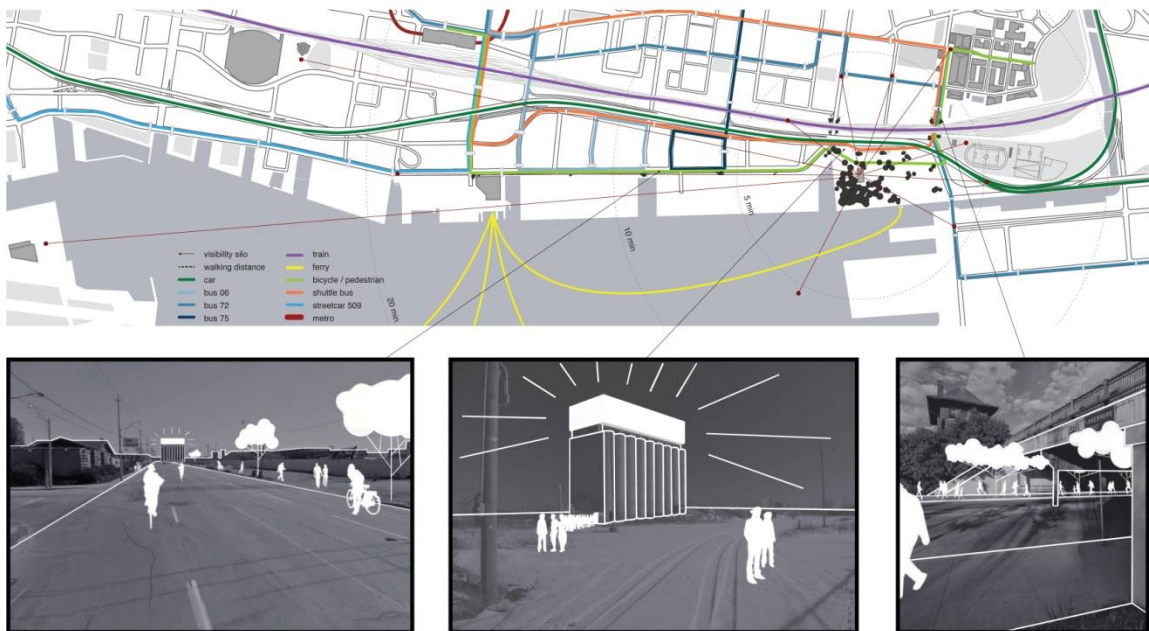


Figure 2.31 Diagram of planning and connections made for visibility (Panam, 2013)

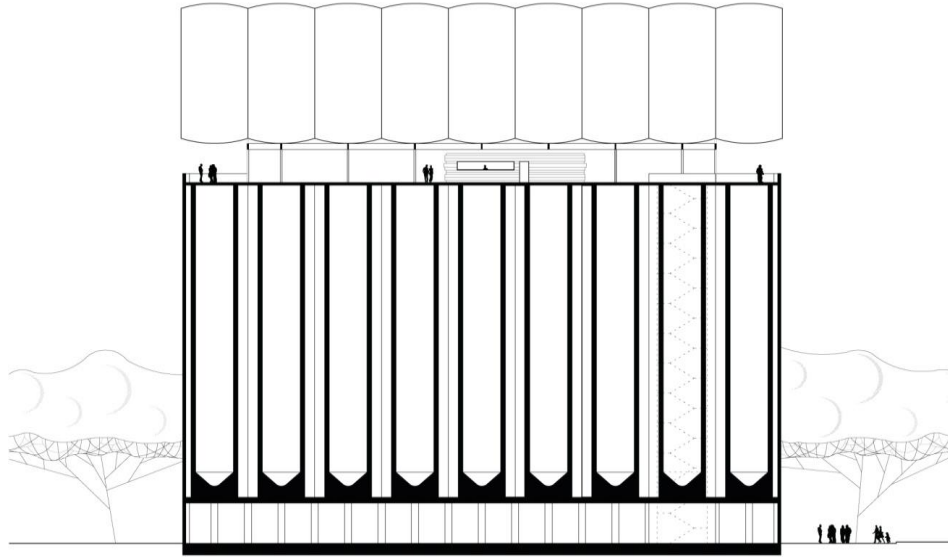


Figure 2.32 Sectional drawing through the silos and bar (Panam, 2013)

Panam Proposal [RE]Connect

Introduction of case study

This proposal for the Pan Am games aims to reconnect Toronto's link with the waterfront with possible activities that could enrich urban life. The idea is to construct a threshold between each of the districts surrounding the Victory Soya Mills silos and create a node to become a natural gathering space. The proposal includes an outdoor cinema projected on the side of the silos, several pools and interactive fountains, multi-use parks, children areas, and plaza spaces that can hold community events.



Figure 2.33 Render of the [RE]Connect project (Panam, 2013)

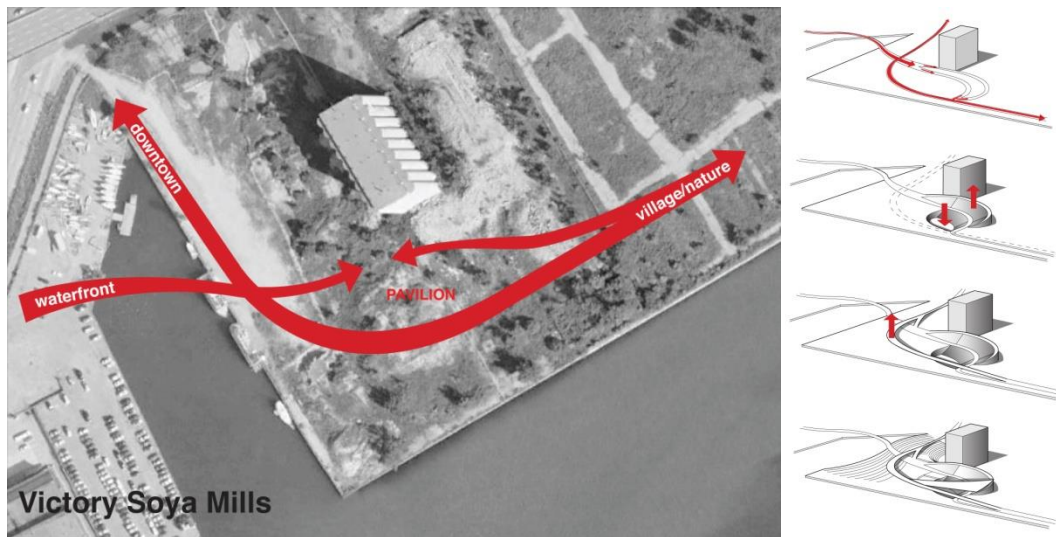


Figure 2.34 Diagram of connections to context and resulting form (Panam, 2013)

Significance from Both

Both proposals for the games, focused on using the Victory Soya Mills silos as well as its surrounding landscape. Their purpose for using the towering structure was both related to the idea of connections and linking the waterfront back with Toronto's centre and the athlete's village. Both proposals also wanted to create communal areas or natural meeting places, which want to also provide something back for the surrounding community of Toronto and create a new identity there. From analyzing the two ideas, it is clear that working with such a large site along the waterfront, there is a need to design for not only the site, but also to provide for the nearby context.

Library Precedents

Vancouver Central Public Library by Moshe Safdie

Located in Vancouver, British Columbia, Completed in 1995

Introduction of case study

Located in the centre of the Library Square of Vancouver, is the central public library which is designed as a public space with a civic identity. The seven-story library is confined in a rectangular box which contains all the collection items as well as services and is surrounded by an elliptical colonnaded wall. The two forms are connected by bridges under naturally lit light wells which lead towards reading

and study areas. The surrounding elliptical structure is clad in a sandstone-colored precast concrete and is not extremely tall which creates a greater connection to the surrounding context.



Figure 2.35 Overall view of the Vancouver Central Library (Safdie Architects, 2013)

Significance

The glass covered concourse between the library and the elliptical exterior create new spaces for the library which increase pedestrian flow and make a livelier environment at the ground level. The exterior façade resembles the coliseum in Rome which was a gathering place many centuries ago and that idea of a place where many people would go is translated through the architecture. There are layers associated with the structure of the building, the first being a pedestrian friendly environment surrounded by activity which eventually leads towards the library building.

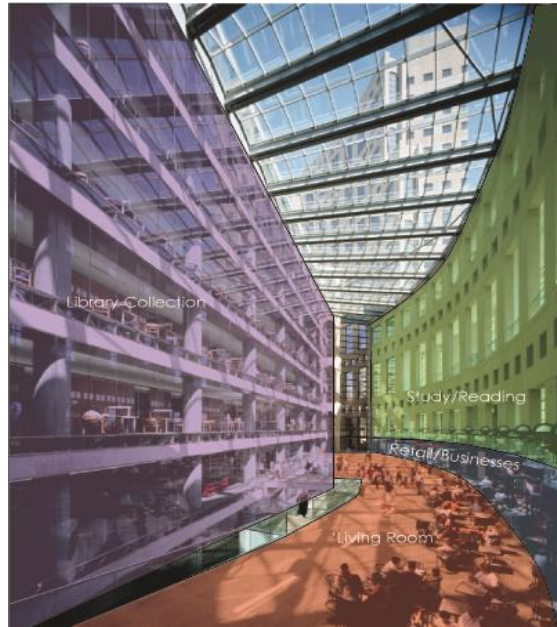


Figure 2.36 Diagram of all the different elements at ground level (Safdie Architects, 2013)



Figure 2.37 Multiple layers in the library, books, public spaces and study spaces (Safdie Architects, 2013)

What was Learned

In the case of this library, there is a large emphasis on creating the ground level plane and having it connect with the people at the human scale. As the building is a central public library, it needs the social aspect of bringing people towards the institution to become what the present type of library needs to be.



Figure 2.38 Concept sketch of study spaces and pedestrian experience (Safdie Architects, 2013)

Seattle Central Library by OMA + LMN

Located in Seattle, Washington, Completed in 2004

Introduction of case study

The Seattle Central Library is a new and unique library which is comprised of new program relations which enhance the public space around knowledge. The library isn't only used to house books, but it became an information hub which has all forms of media which are presented equally and legibly. A major portion of the library is the book spiral which continues the classification system through a continuous four stories of book shelving to allow users to look through the entire collection without needing to travel elsewhere.



Figure 2.39 Overall view of the Seattle Central Library (ArchDaily, 2013)

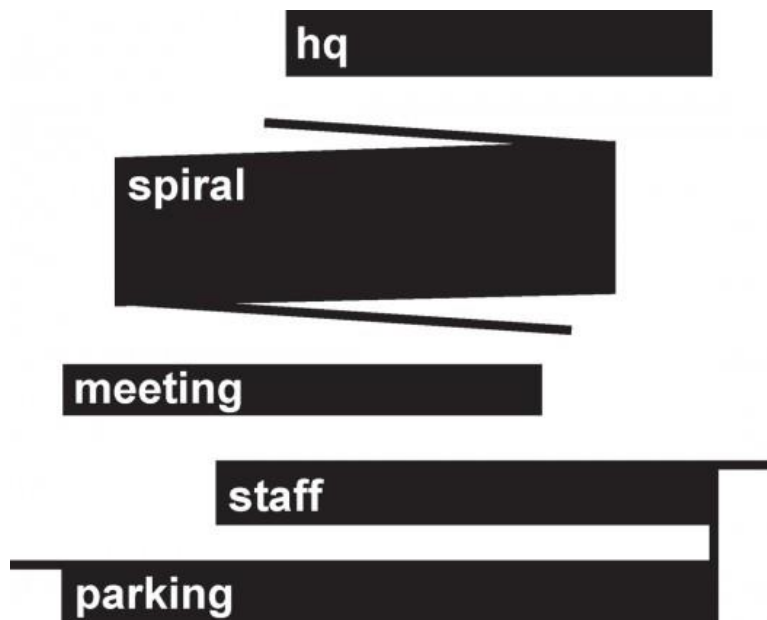


Figure 2.40 Diagram of the stacking of the major program elements (ArchDaily, 2013)

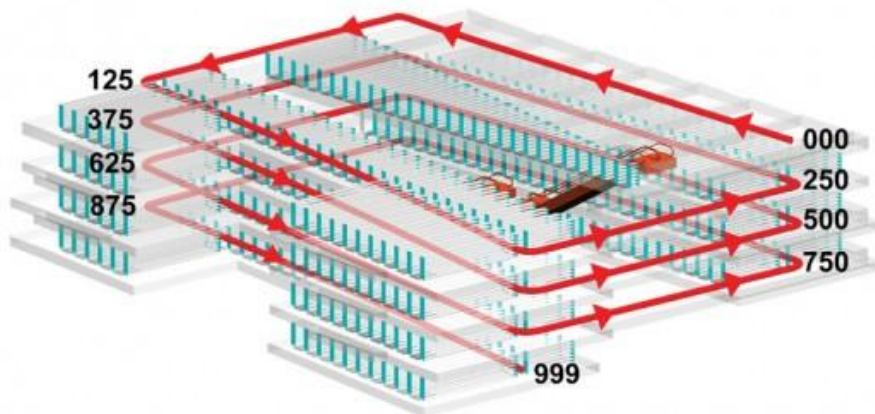


Figure 2.41 Diagram of the book spiral, creating continuity in the book collection (ArchDaily, 2013)

Significance

There is a great deal of flexibility in this contemporary library which essentially has each floor becoming generic and allowing for any type of activity to occur there. The program spaces are gathered together to create programmatic clusters to be architecturally defined and differentiated from the other. The spaces separate the building into places of work, interaction and play while the places in between are for the librarians to organize. The form of the building is also the result of form following function rather than a set structure imposing the functions inside.

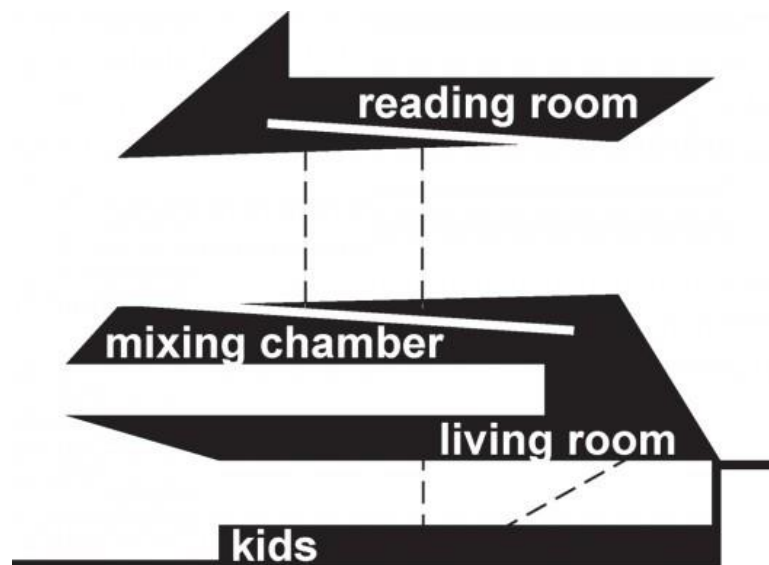


Figure 2.42 Programmatic diagram showing a different approach to the floor plans (ArchDaily, 2013)

What was Learned

In comparison to the old traditional library floor plans which are flat and organized floor by floor, a spiral for circulation allows for a more flexible approach to growth in different genres of books. The library is aimed at making it inviting towards the public with the arrival of the digital age, and aims to counter the old traditional library. It utilizes several public spaces and areas to bring the population into the building, the building provided the 'living room' aspect which is essential.

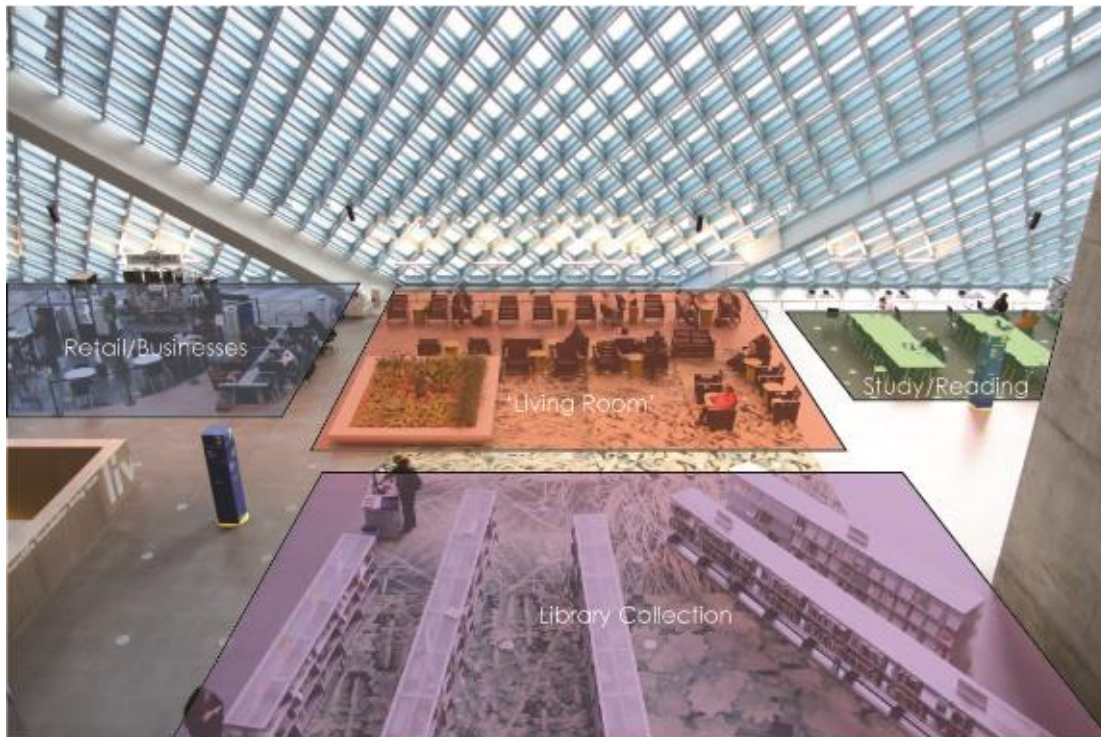


Figure 2.43 Living room aspect of the library picture (ArchDaily, 2013)

2.3 How to Apply Ideas from Precedents

After analyzing each precedent project and understanding the project as well as the significance and learning from the successes will the project continue to move forward. The next step in this thesis project begins to look at how the theory, the analysis and design can all be integrated together to create a cohesive project. Through the analysis of the case studies, specifically for silos, the main uses that are derived from the cylindrical forms are mainly for a residential purpose. The shape of the cylinders, if large enough make for a good use of the space as a hotel or residence, however it requires lots of cutting through the wall and creating additional levels within. The plan is to re-utilize the silos in a less destructive way, and to keep as much of the existing structure in place as a reminder of the past.

3.0 Part Three

3.1 Proposal

What is provided is a rather barren site located on the waterfront which has layers of history dating back to the industrial era of Toronto with remaining silos. With the existing site condition, it is important to completely utilize the silo structures to their full potential to recreate a place with identity through palimpsest. The proposed program, through the previous site and surrounding context analysis has led to the proposed implementation of a library building. This library will provide the necessary community and educational aspects in an area which is currently undergoing revitalization. Once the area becomes more fully developed, there will be a larger influx of people in this portion of Toronto's waterfront and certain amenities are lacking that the library building can provide. Through the incorporation of the silos, and layers of Toronto's waterfront history, palimpsest will be a key concept which will be conveyed through the design to create a place with identity through palimpsest.



Figure 3.1 Site Map

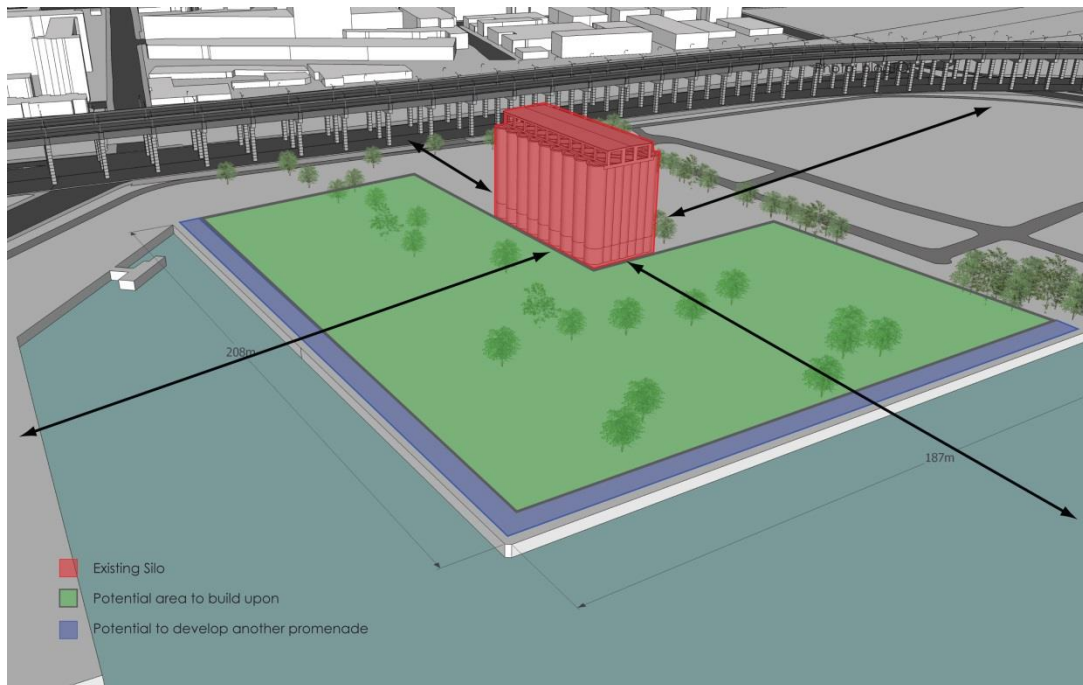


Figure 3.2 Diagram of site and possible areas to work

3.2 Key Ideas

With the notion of palimpsest, I wanted to re-create a communal building which worked with the silos in a less intrusive manner in comparison to cutting apart and turning it into a residence. The key idea was to turn the silos into a book archive and storage space. This archive not only becomes a useful way to reuse the silos, but also ties into the contemporary library and the history revolving around books.

There are several similarities within palimpsest, archives, and contemporary libraries. This layering of the library history and the manner of the stored material work well with the concept of palimpsest as there are many evolutionary processes. The library is categorized into five stages that originated as the ancient library which stored ancient texts or other literary forms and was used to collect all of the world's knowledge; they functioned as archives. The next era is the middle ages where books and manuscripts were chosen for religious values and were stored within monasteries. The next time period is the renaissance where an interest in Greek and Roman texts led to their survival through the copying and storage by nobles in private libraries. Libraries eventually became institutionalized and

innovative in regards to classification and cataloging as well as functional. This leaves libraries in present day which are more accessible, public, digitized, as well as becoming more communal buildings. In regards to the history of books, there was a progression from clay tablets, to papyrus scrolls, to manuscripts, to books, and now to e-books. It is important to apply this type of layering towards the notion of palimpsest as the evolving contemporary library works with the progression of knowledge through its material.

3.3 Program

With the idea of turning the silos into an archive, an exploration was done into the City of Toronto's Archive development plan to see if the archives needed expanding. A ten year strategic plan for the city (2011) was found:

The vision is to place the Toronto Archives as one of the key landmarks for showcasing the City's documentary heritage. This will be achieved through capital improvements and the development of programming strategies that will generate a more vibrant urban experience. (p. 1)

There are three time periods with the first covering two years in the past, the medium term for the present day and the longer-term for 2016 until 2020. The area of focus is the long term plan which, aims to provide a period of growth for additional programs and services by the Archives and potential consideration of physical expansion in response to anticipated new demands from increasing Archive users (Toronto, 2011, p. 4). As the Toronto archives are projected to run out of space in the near future, a potential use for the silos would be a site for an expansion of storage facilities for the city. The silos are solid in nature with no natural light being able to penetrate the exterior for interior illumination. The dense concrete will be able to protect any historic documents from sunlight and unforeseen circumstances to become fully purposed with its new use. The plan of making the Toronto Archives as a landmark for the city's heritage works well with the re-use of an old heritage building with no further use as of currently.

Programmatic Elements

As the program selected is to be a library in conjunction with an archive for the city, the library needs to connect with the archives in a way that maintains a certain level of privacy. For the library's program, in order to work with the new trends in contemporary libraries, a large emphasis needs to be made on using flexible spaces as well as incorporating areas for technology and for all age groups. The library's program will be divided into four separate categories, public space, communal areas, collection spaces, and back of house functions. The program for the archives will be located within the silos and consists mainly of the archival space, work areas and back of house functions. As archival spaces need to be in controlled environments, access is encouraged but needs to be separated into its own zone next to the public spaces.

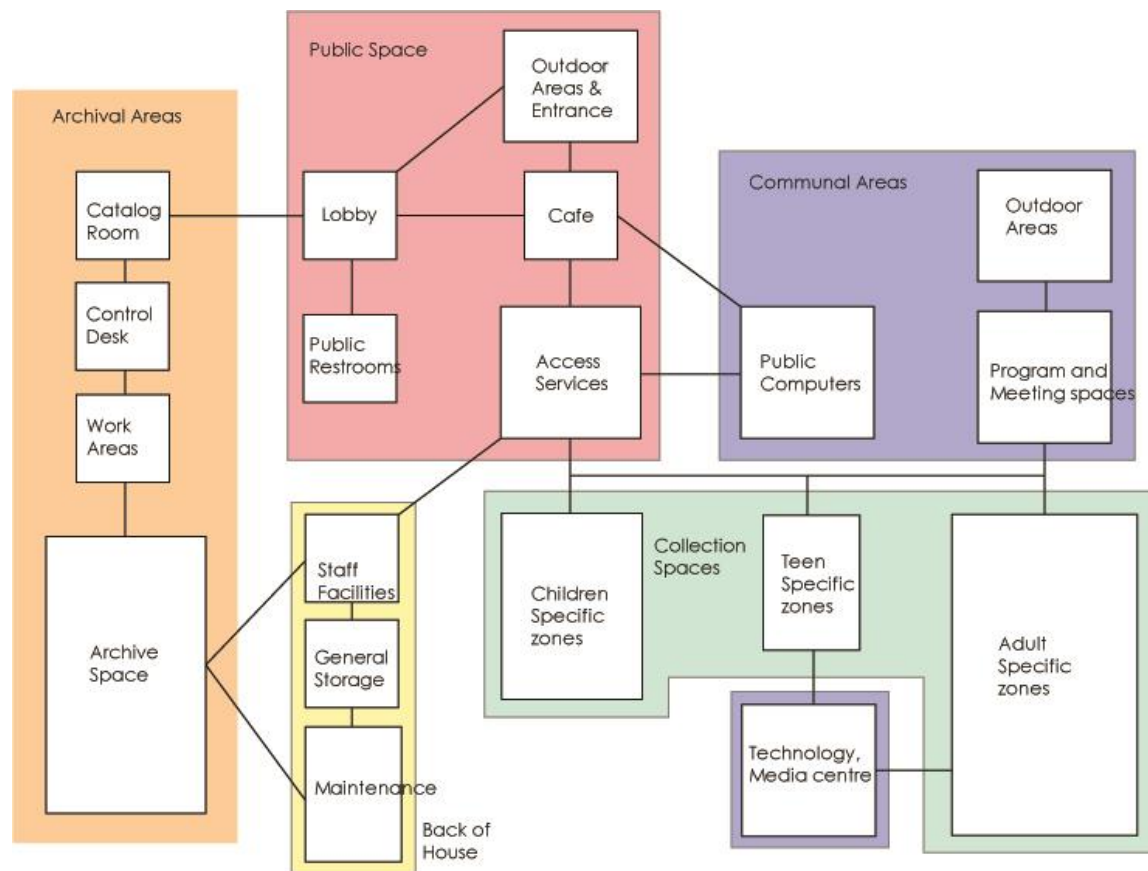


Figure 3.3 Diagram of Relationships

3.4 Design Approach

Through analyzing the building strategies with existing structures in the previous chapter, I felt that utilizing etching, excavating, building infill, and absorption works best with palimpsest in regards to the silos. Etching can be used in conjunction with the previous plan of the soya mill silo plant to help master plan the proposed site with previous building locations or routes of circulation. Excavating can be utilized to dig into the earth to reveal or expose the construction, create new volumes of space and work with the lake filling layers from the past. Building infill in the silos will provide the opportunity for programmatic uses throughout the silos on any level, similar to what was seen in the Quaker Square Inn precedent. Absorption with the silos will allow for the implementation of new construction methods working with the older elements to portray the idea of palimpsest and identity.

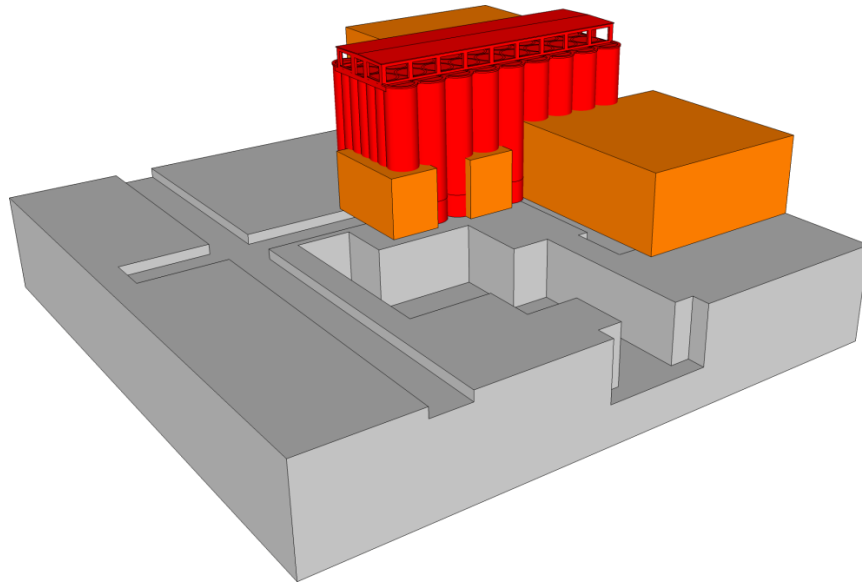


Figure 3.4 Diagram of possible building strategy working with the silos

With the implementation of the building strategies to inform the massing, others such as juxtaposing a new form against the existing with an atrium connection is planned. The idea is to utilize palimpsest and bring parts of the past into the current design to create a new contemporary library building to be a 'living room' or communal building for this part of the city. Weaving together the building addition with silos will be done through a selected process of lightly touching to create a juxtaposition of different geometries that connect and use elements of both entities to create new spaces. The program will branch out from the silo archives into different zones such as non-library

zones, study spaces, book storage, and then public areas being the most open. There will be a major route of circulation which acts as a 'main street' through the building which is a public communal area where people can walk through or take advantage of the services provided within.

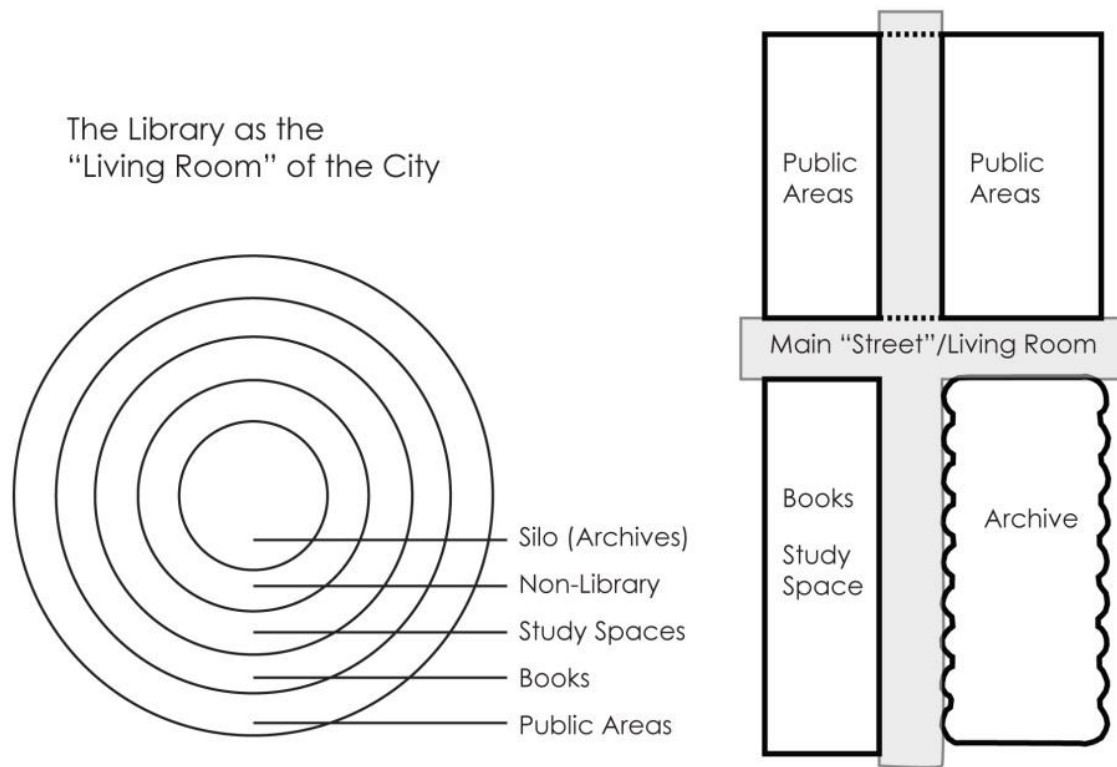


Figure 3.5 Diagram of design concept

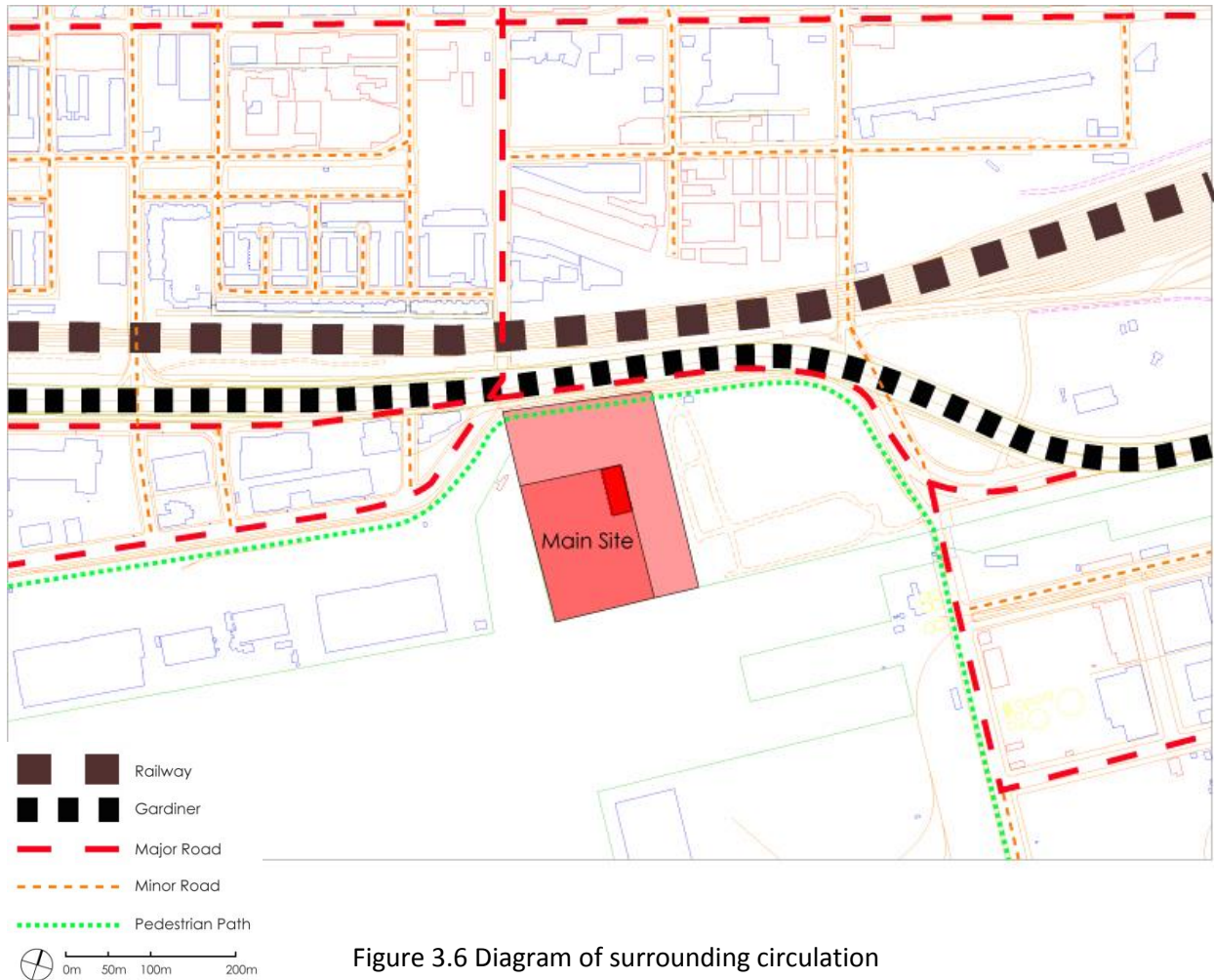


Figure 3.6 Diagram of surrounding circulation

Through analyzing the methods of circulation around the site, there are several major roads and a pedestrian path which provides easy access towards the site. However there is nothing that is currently on the large site to mark out any preferable routes for circulation as everything was previously erased. In order to bring up layers of palimpsest, the historical parts needed to be brought up to be analyzed and diagrammed to see how the large site can be planned in accordance to the silos.

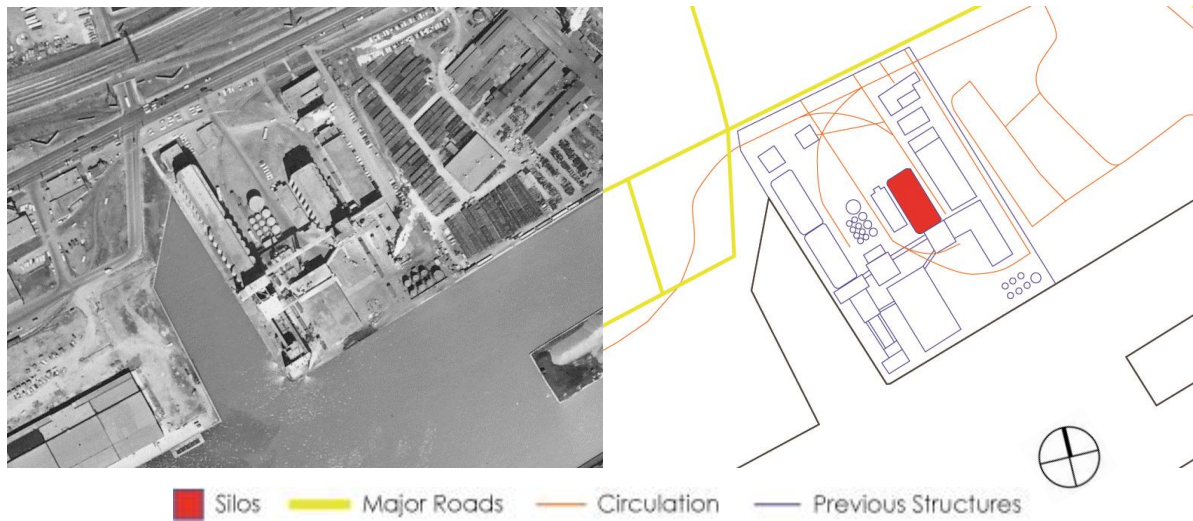


Figure 3.7 Image and diagram of site in 1954 depicting structure and circulation

3.5 Masterplan

An investigation into the previous plan from its industrial phase was done. A deconstruction of the 1950s site was completed in order to analyze what was previously there as the current conditions are quite bare. The plan is to use the overall massing and circulation routes of the historic site and reutilize the form and layout for the design proposal.

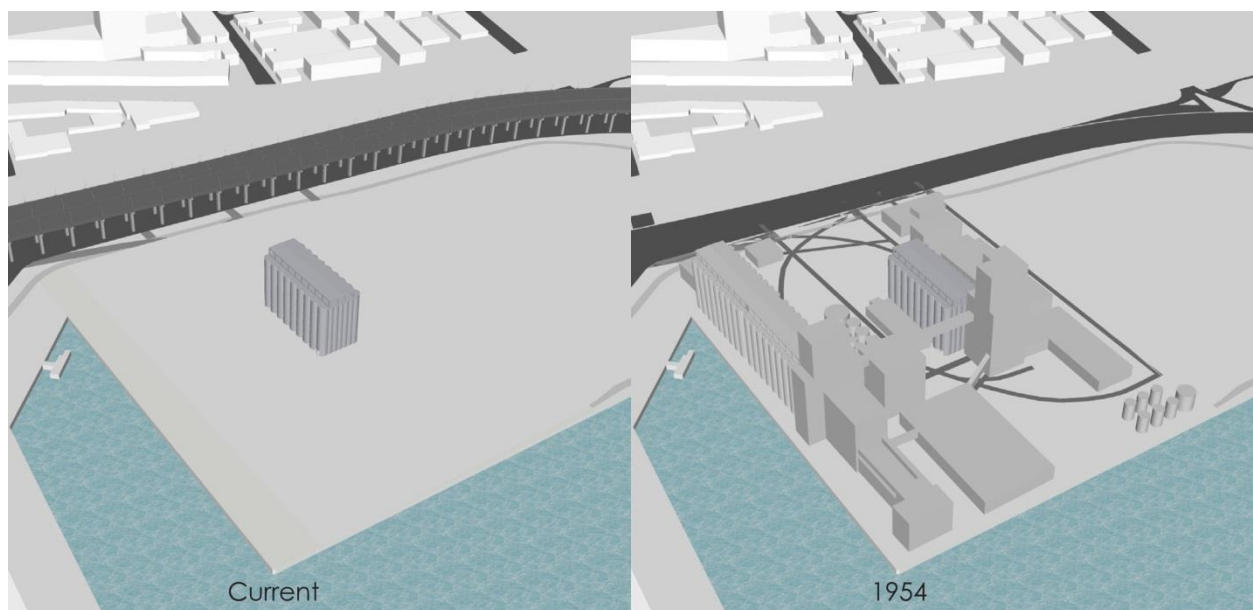


Figure 3.8 Diagrammatic site model of present day and 1954

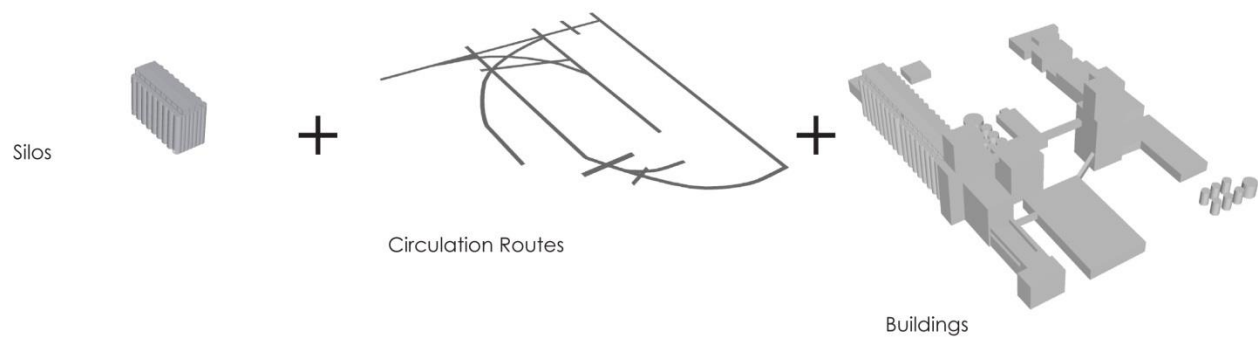


Figure 3.9 Deconstruction of the silos, circulation, and buildings

In Figure 3.9, a deconstruction of the silos, circulation and previous buildings is shown to see what portions should be kept and brought through as palimpsest. As there are many major elements to consider for the palimpsest of the masterplan, an understanding of what is currently missing from the silos and how they work needs to be explored. The diagram below explains the process of the storage process within silos up to the extraction of produce. Grain is brought to the facility through motorized transportation, then brought up in an elevator system onto a conveyer belt to distribute into each of the silos. When removing the grain, the bottom opens up and the pressure from the top pushes it out onto a conveyer system, which then gets carried into containers to be brought away.

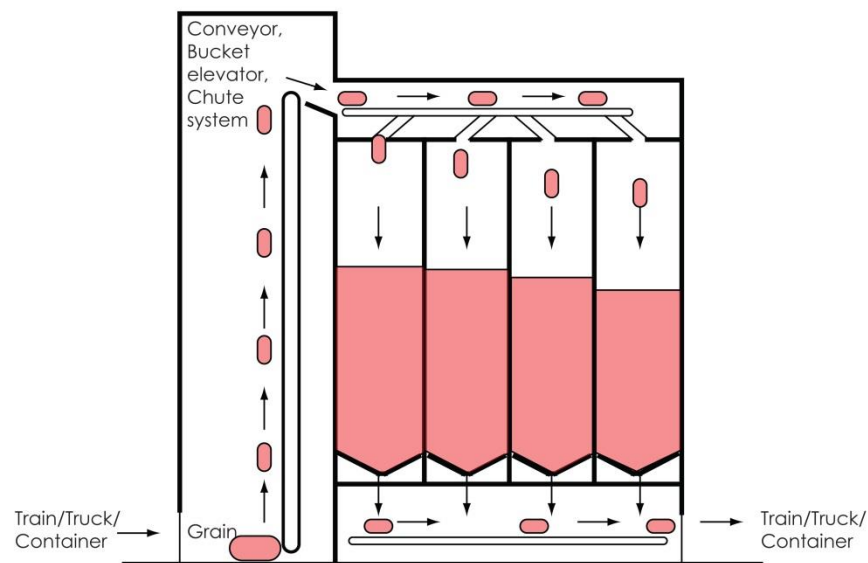


Figure 3.10 Explanation of how silos work

In the planning process, as I was reutilizing the previous plan, certain elements are kept while some were removed mainly based on functionality. A majority of the site is reused to create new programs, and create a sense of the past. The elements that aren't recreated are shown in the figure below which consist of several small silos, the conveyor systems as well as one grain elevator building due to obstruction of views and no functional purpose. For the silos, I left what is most distinctive of silos as well as what was the most functional and iconic image.

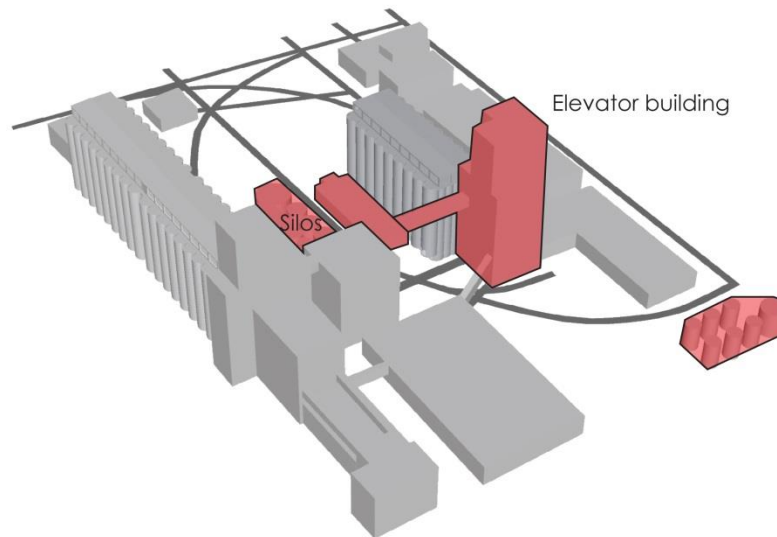


Figure 3.11 Removed elements from the masterplan

For the design, it was broken down into several different elements. To further use the etching strategy stated earlier, the proposed circulation routes will be similar to that from 1954 to show what was once there before on the site. In regards to what elements of the past are being removed or kept, each part was analyzed and evaluated if they would play a vital part in the overall plan. Some portions were removed for functional purposes in order to make circulation flow better or provide better views. This works with the true palimpsest concept as some traces were completely removed and only showing the most recent layer, the proposed plan. Other areas were changed from clusters of miniature silos into a larger form for functional purposes as a residential building or park. For the buildings on site, rather than have the exact same footprints for the surrounding masterplan, the building heights will be kept the same while the footprint will be similar to create an abstraction from the past rather than a duplicate. The abstraction of some elements is the result of cumulative palimpsest, with the new plan representing the old being combined with the new. The re-use of the circulation routes created a zone

set for cultural purposes which provided site boundaries for the library building with an approximate area of 6600m².

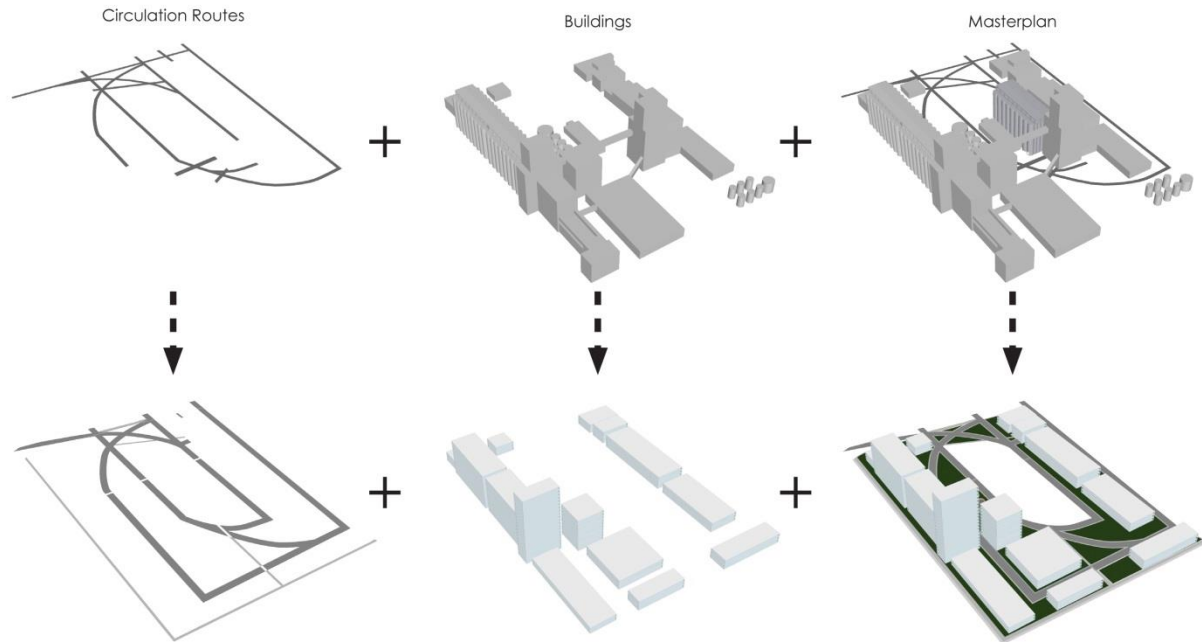


Figure 3.12 Extraction and application of palimpsest

The above figure shows the difference between the 1954 site elements consisting of the circulation routes, buildings, and overall masterplan to my proposal. The circulation is derived from the past etching into the ground from continued use over several years and re-created through using traces of the past and extending or removing certain portions. The building massing is derived from the elements that were chosen to be kept; it was based off of a hierarchy of functionality. Elements were removed if better functional purposes were found, if there were no suitable program uses, or if it obstructed vistas or views. The others were kept and abstracted if building programs could be placed within, if it helped to create a sense of the previous place or if it can be repurposed.

The diagram below uses the traces of the circulation to create site boundaries for the proposed library and archive facility. Within the site boundaries in the historic plan, what existed before are the grain elevator and another facility to the west. A true palimpsest is used here to completely remove those two portions as not everything from the past needs to be abstracted for functionality as the

library structure may need more space to work with. The overall form is created using the site boundaries as well as different layers of stacking to superimpose the new forms on top of the old traces.

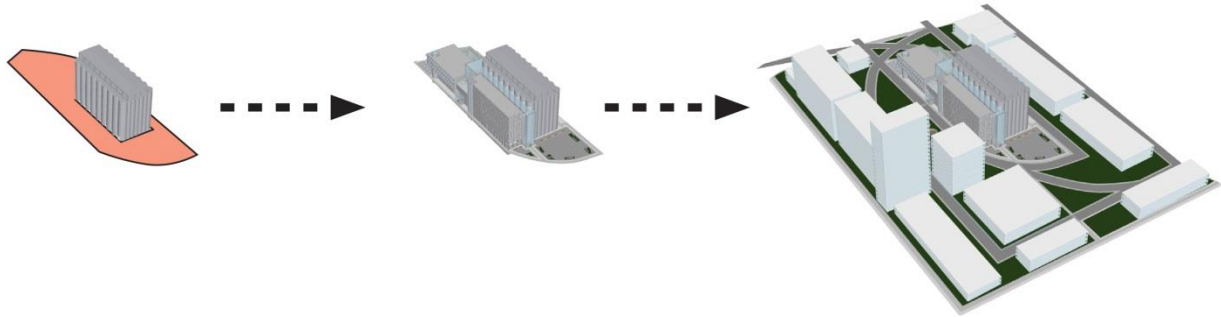


Figure 3.13 Creation of site boundaries for Library

For all of the buildings on site, they will be used to create the community aspect which will then feed the cultural component which is the silo archives and library. They will consist of several mixed use buildings for retail and services, residential, recreational, commercial, parking, as well as a marina. The diagram below shows the ways to approach the site from Lake Shore Boulevard and travel along the given routes within. The entrances into the site are the first, third and fourth entry from the left which provide access to different areas of the site with the main exit being the second. The previous circulation routes are the main routes of travel and allow for circling around to stay within the complex. There is a parking structure north east of the library complex as well as a handicap area at the north close to the main entrance. The 'streets' continue throughout the library building as well and act as an axis to connect the whole site.

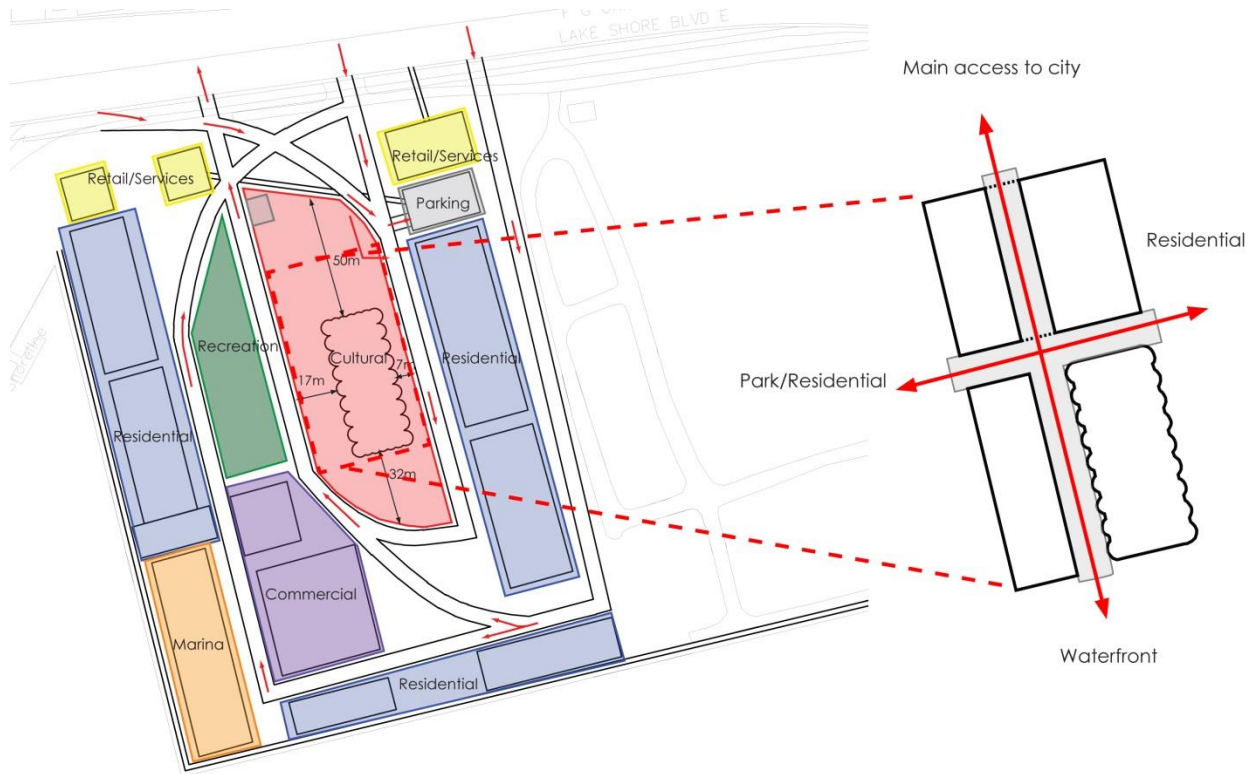


Figure 3.14 Street Planning Diagram

With the notion of palimpsest not every aspect of the previous site was kept so several aspects of the geometry involved in the massing will resemble the silos. Some examples of the ways to incorporate the silos are shown in the diagram below which are literal representations, extractions, and etchings. Starting from the top right is the park layout which is situated within an area which had 12 low storage silos in the previous site. Instead of re-creating the silos for a park, their footprint was kept and etched into the ground to provide outdoor seating as a way to remember what used to be there. There are also several cylindrical elements on the exterior for the elevators and experiential zone to continue the silo language. Several of the interior study areas are modeled after the interior silo elements as well to bring memories into the library. Another element that carries on from the silos are the balconies opposite the silos which create different voids and reflect upon the dimensions for zones of study.

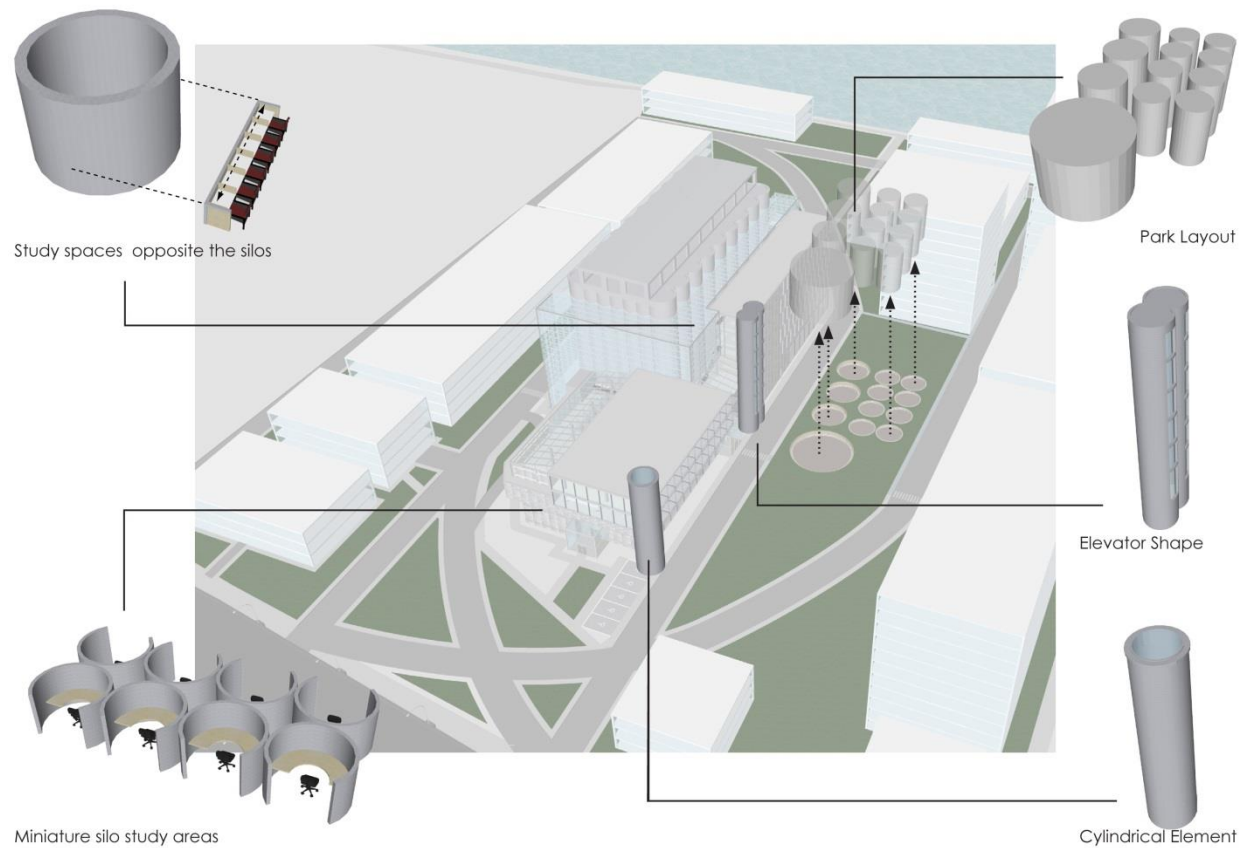


Figure 3.15 Incorporation of silos and palimpsest into the design

Another aspect of a removal within the project is in the storage silos that utilize a subtraction of the opening hatch for a functional purpose for the archive. Figure 3.16 shows the removal of the opening area is removed in some areas of the silo to show both the old layers of the silo as well as a new plan for some of the aspects.

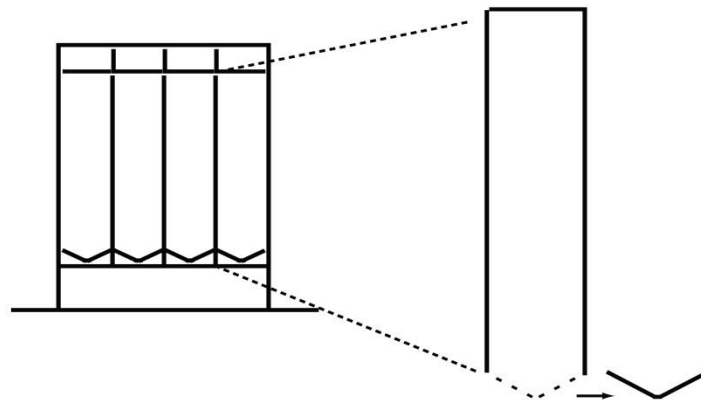


Figure 3.16 Removal of cones within silo

3.6 Overall Design

The overall design of the building proposal will have a floor area of 14,000 square meters including the spaces within the silos. For an approximate size comparison, it is roughly 15% in size of the Robarts Library, or slightly more than 1/3 of the Toronto Reference Library. For the ground floor, there is the major axis mentioned earlier which provides a way for people to cross through the building as well as creating different zones. There is a grand staircase in the middle which is adjacent to the silos to provide a sensory experience for anyone who ascends the stairs. The north-east is the children section of the library with a collection of books, small reading areas and an open area to sit on the floor. Opposite the children area is the café which can be a place to sit and relax while watching over your child or to grab something quick while on the go. The main counter for access services for the library is next to the path intersection to provide a clear line of sight for anyone who enters from one of the four entrances. The space to the south is available for rent as a gallery. The silos have little perforations inside to try and maintain the silos in their true form as much as possible and contain a catalogue room as well as the access desk for archival purposes.

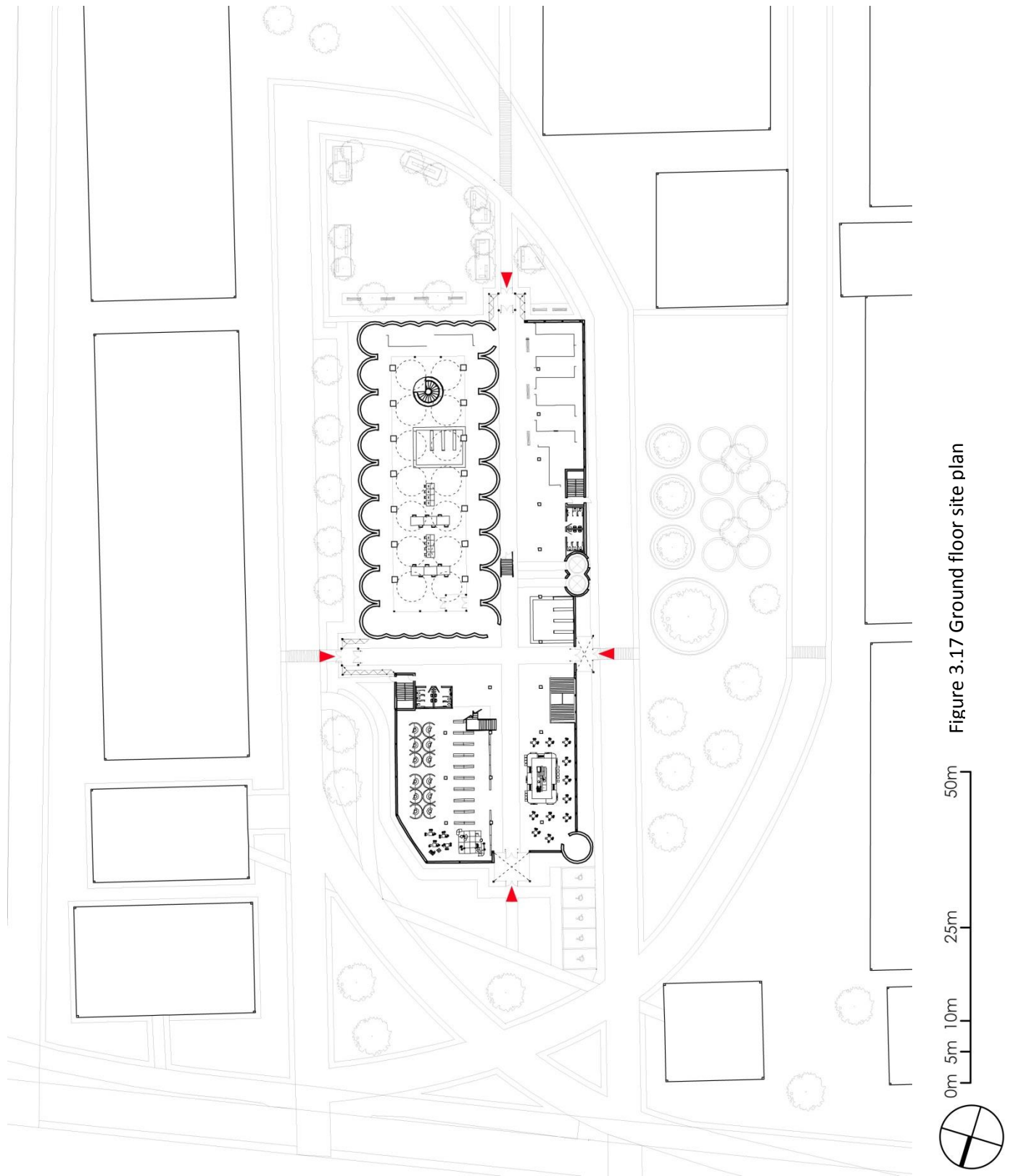


Figure 3.17 Ground floor site plan

For the other floors, there are a total of seven floors including the basement which is comprised of an auditorium, several staff facilities, mechanical and maintenance, as well as reading and work zones for archive specific material. From the second floor up until the sixth floor, there are portions of the adult specific zones of books as well as study spaces within the balconies opposite the silos. The second floor also has the teen specific zone to the north in a more secluded area for a bit more privacy as well as a public computer lab. The third floor's main feature is the technology and media zone to cater towards the teaching of new technologies in relation to libraries and their medium and more meeting spaces within miniature silos. The fourth floor has another main feature of the new contemporary libraries which is the 'living room'. The 'living room' is an area where people can come by and read in a more comfortable setting with sofas and more natural light to access magazines and newspapers.

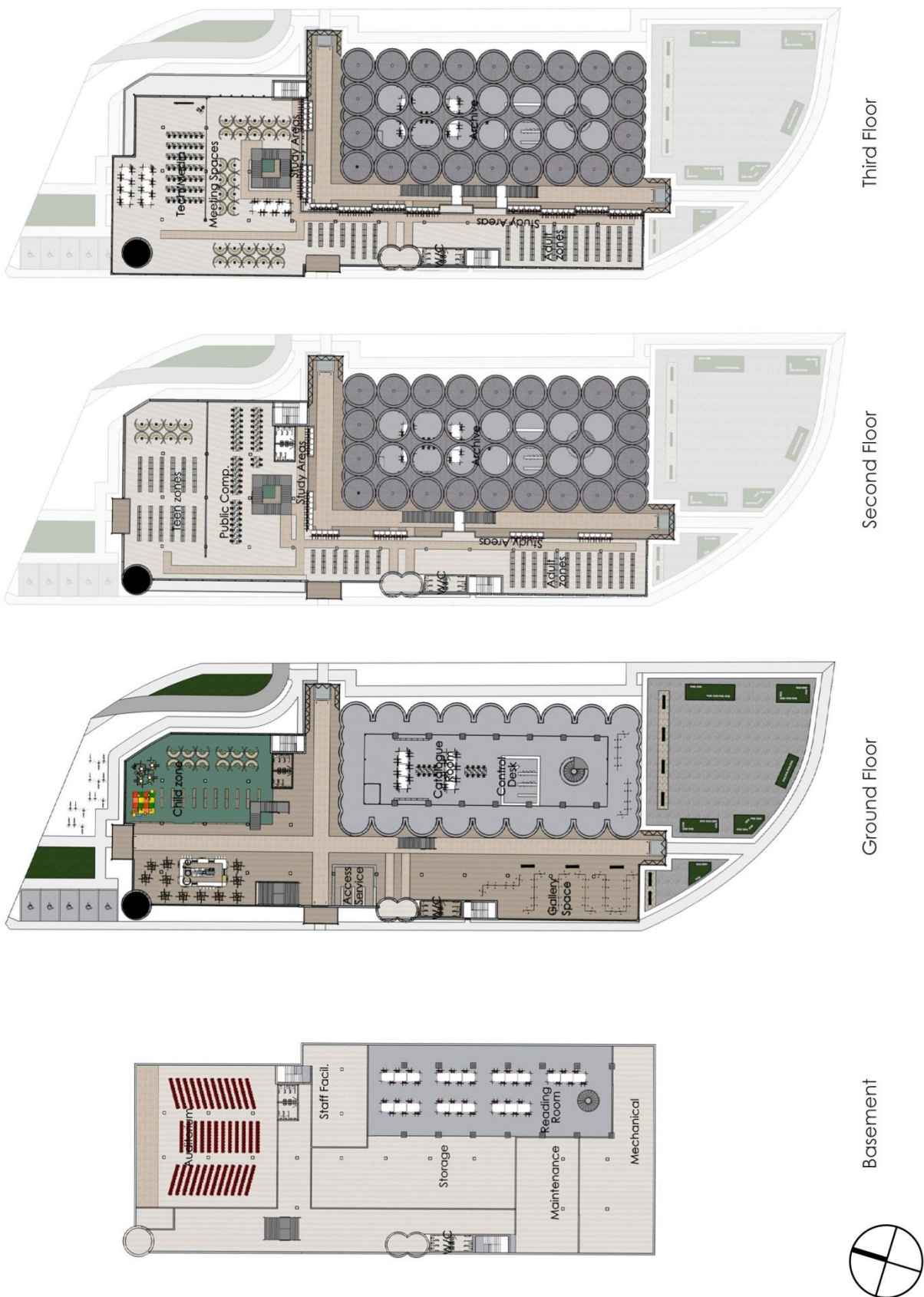


Figure 3.18 Basement to third floor plans

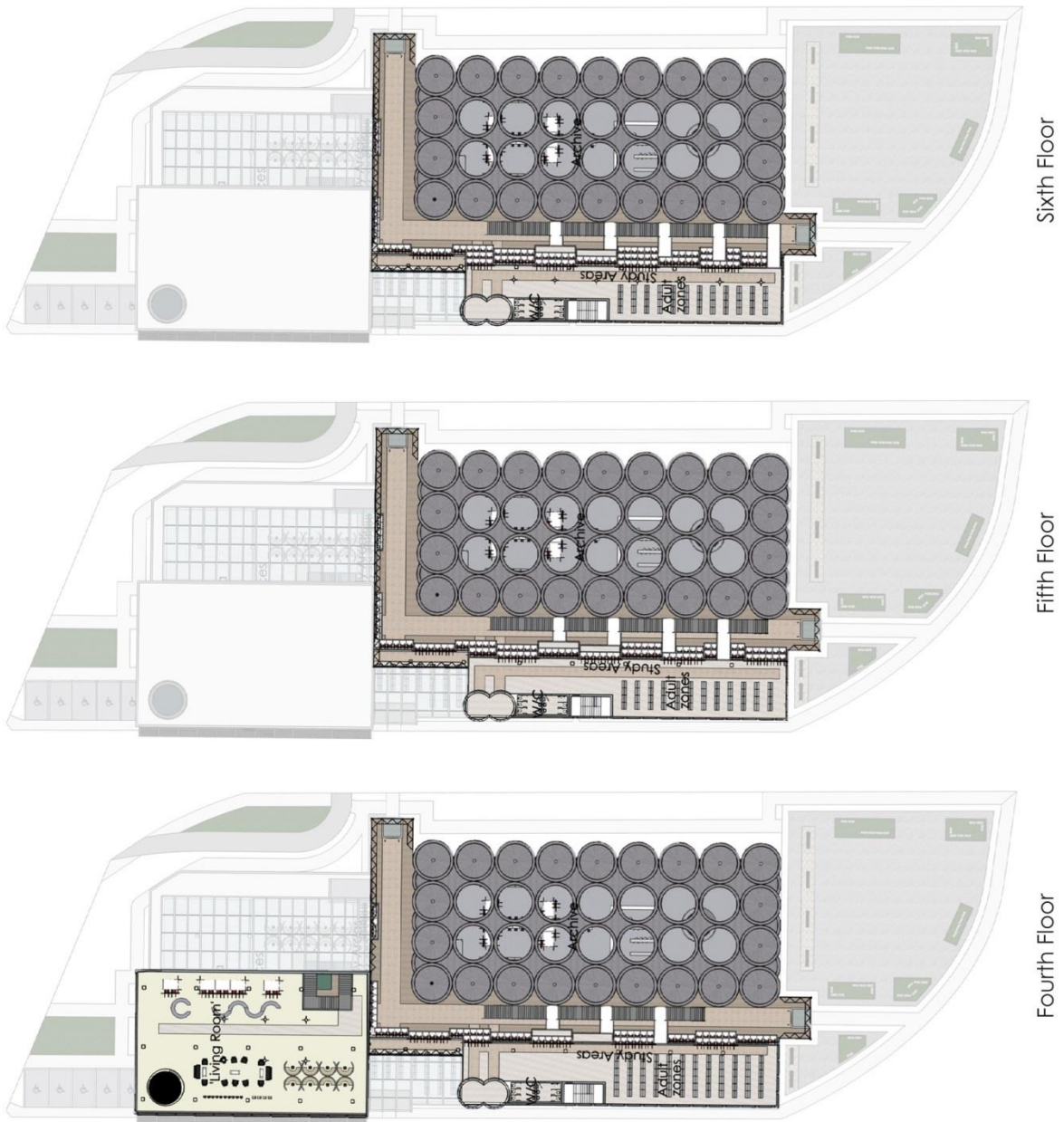


Figure 3.19 Fourth to sixth floor plans

The next four drawings below will be section cuts through the building looking at each portion to display the major programmatic and architectural elements. The first, A-A, cuts through the north south axis, looking to the east, showing the scale of the building in relation to the silos. The building does not overwhelm the silos and leaves a portion untouched in terms of verticality. B-B cuts through in the north south axis as well but looks to the west highlighting the grand stairway which provides that sensory experience for users to walk alongside and interact. C-C cuts through in the east west axis and looks north to most of the public facilities as well as another stairway that serves the north portion of the building. The last section, D-D, cuts through in the east west axis and looks to the south and cuts through the silos to show how the archival storage units are stacked and can be expanded.

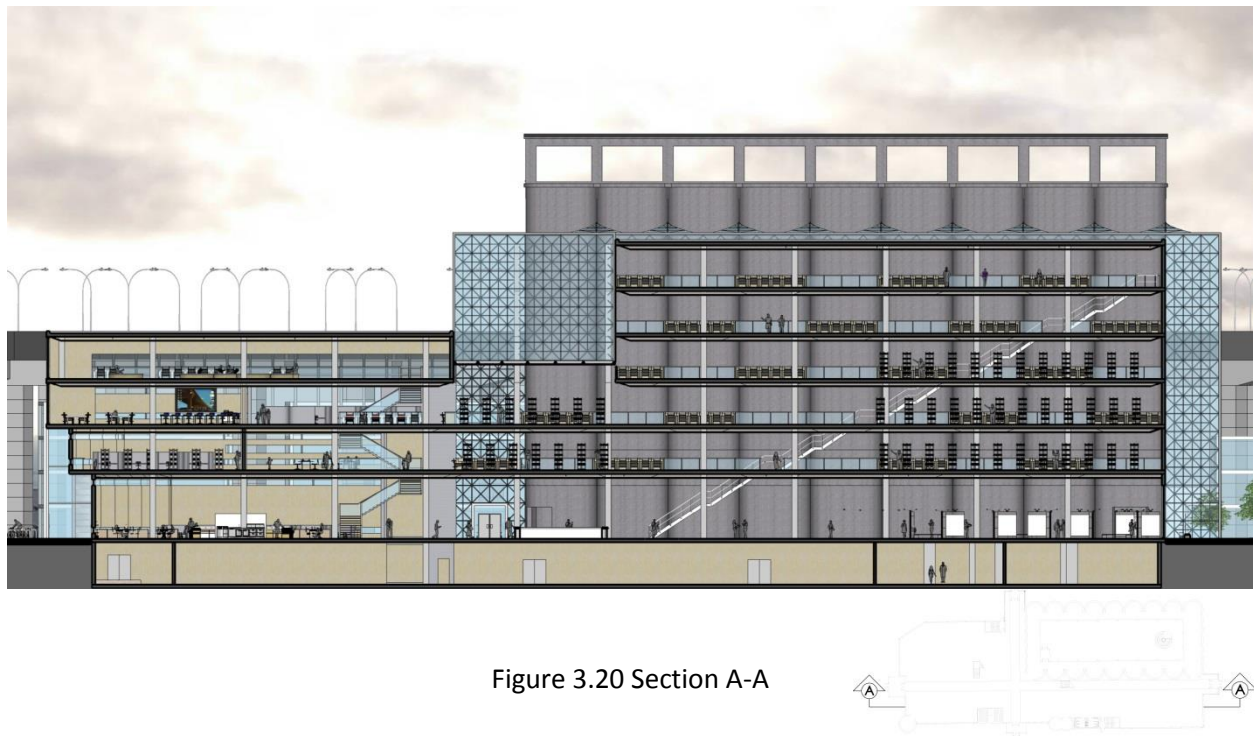




Figure 3.21 Section B-B

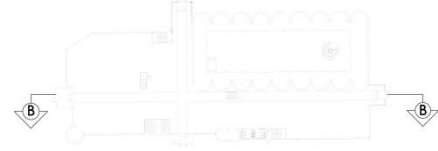


Figure 3.22 Section C-C

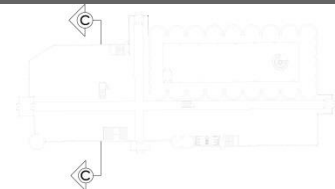




Figure 3.23 Section D-D

3.7 Silo Uses

As there are 36 silos in the complex, the archival areas will only occupy the middle 14 for the start of the archives but may expand to the outer rings if the space is needed. As people will not be expected to be retrieving the archive material themselves, there is an automated system which travels through the silo to collect, and then return with the material to the access desk. As archive material is mainly restricted, a ladder is provided solely for maintenance access. The main storage method are boxes which will be used to store archive material such as maps, photos, permits, and any kind of records which create a more complete view of Toronto's history. As the system is automated, a robotic arm will travel along the rails, and retrieve the archive material from within one of the many floors in the silos. There will be a few mechanisms used which has several points of rotation and flexion to grab the box for retrieval.

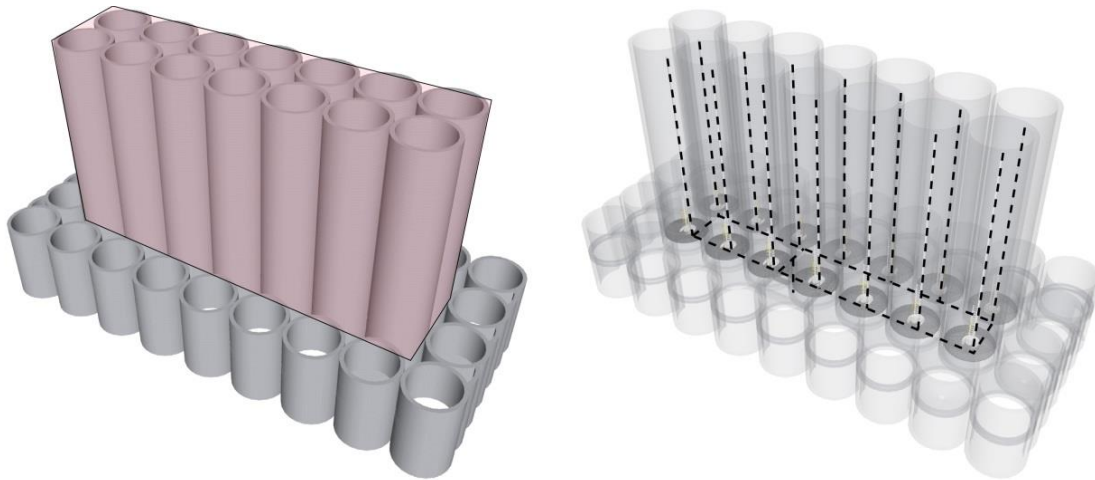


Figure 3.24 Selected silos and archival material retrieval system

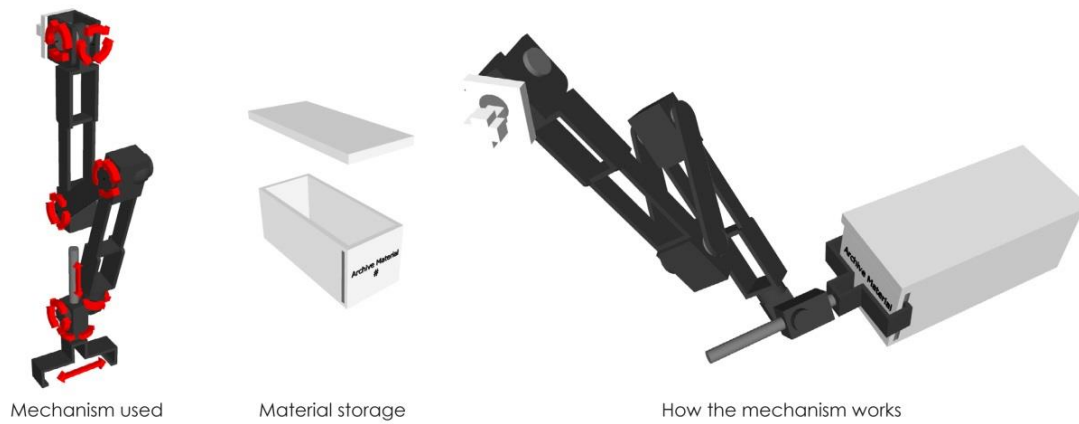


Figure 3.25 Mechanism and storage

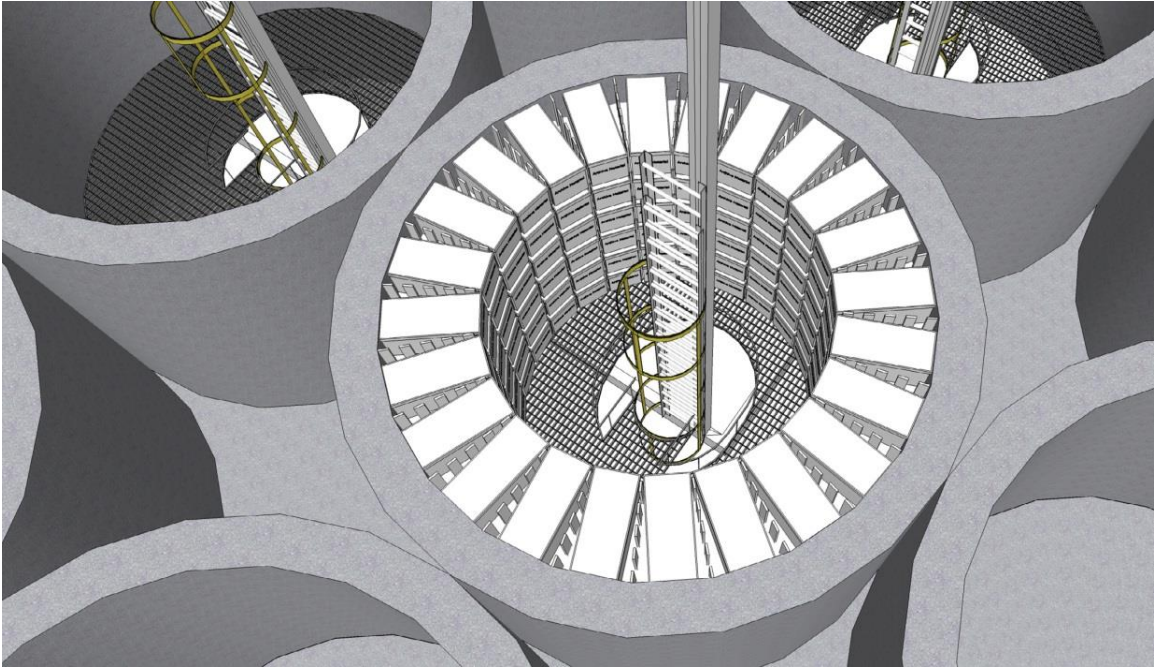


Figure 3.26 Silo compartment storage

The way that the retrieval system works, is through accessing a computer to select the required archive box which then tells the robotic arm to travel along the rail towards its destination. Upon reaching the location it will grab the box and carry it down through the opening and bring it to the access desk to be given to the person who requested it. The material will then be kept within the silo area to be viewed for work and then placed back into the box and returned to the access desk.

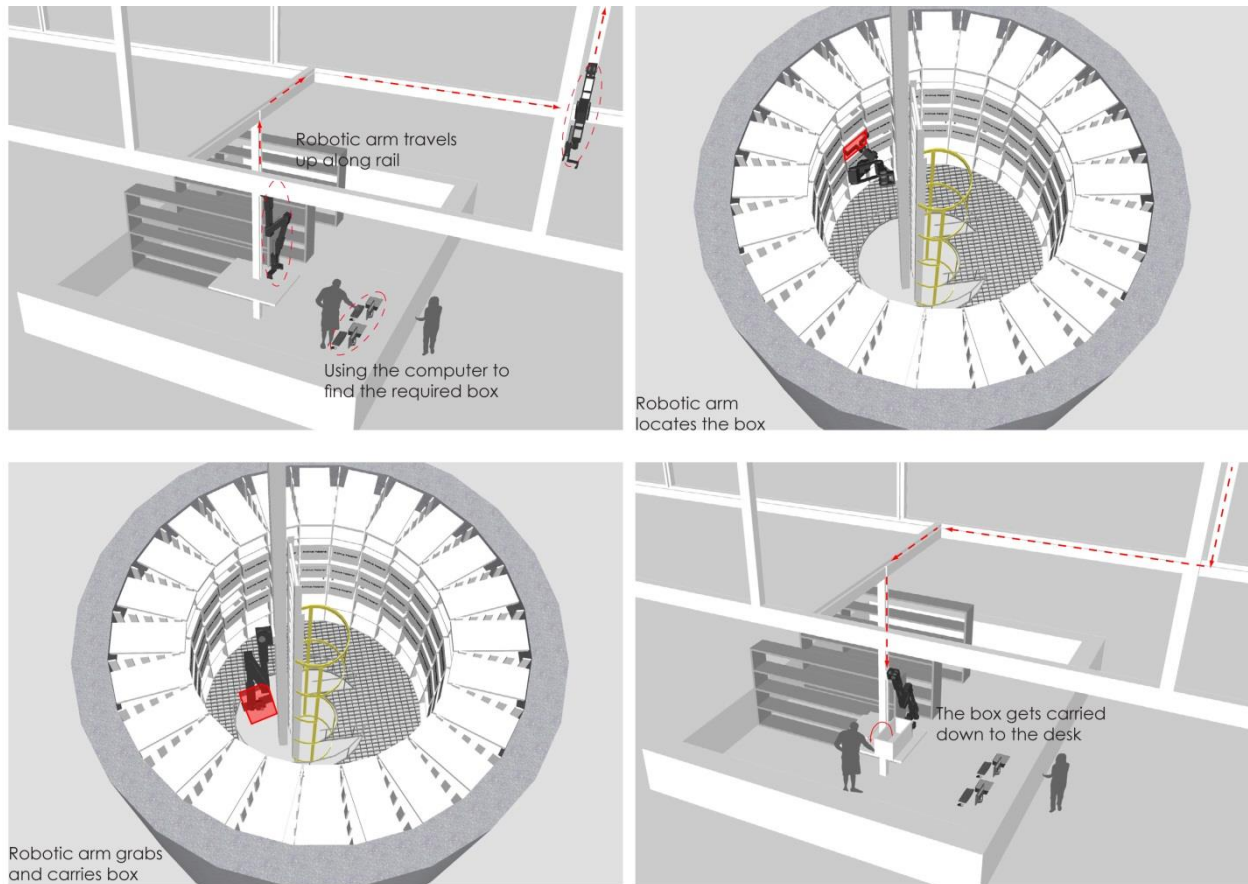


Figure 3.27 Process of retrieval

3.8 Perspectives

As the library and silos are large in scale, exterior perspectives are provided to show a visualization of the silos and building addition as well as the surrounding masterplan. The first perspective is from the north on top of the Gardiner expressway looking south. The silos are visible from a few different angles to showcase its importance within Toronto's history. As some pedestrians will visit the library by public transportation, the view from the west is how the approach will be with more views towards the openness of the public facilities. The last view is from the south which is near the waterfront. A majority of the south and east side of the silos were not covered with the library to allow the silos to be shown as their true form.

Exteriors



Figure 3.28 View from the north on the Gardiner



Figure 3.29 View from the west



Figure 3.30 View from the south

For the interior spaces within the library, the goal was to create a 'sense of place', belonging and communal aspects. Figure 3.31 is from within the children zone of the library, showing the café adjacent as well as the views to the park outside. Figure 3.32 is located at the cross section of the main street axis in the library, showing the grand staircase next to the silos, and one of two entrances to the archives. Figure 3.33 is a view from the top of the grand staircase illustrating the study spaces opposite the silo between the book stacks as well as the opening up of the atrium. The second and third interiors highlight an important aspect of the design, which is the staircase. The staircase and its adjacency to the silos create an experience for the users to walk along the silos as it rises and touch as well as feel the height and scale. The study spaces opposite the silos also add a different opportunity to view the structure when viewers need a visual break from their books and look up.

Figure 3.34 is from within the 'living room' which provides the communal gathering space for those who wish to use it. Figure 3.35 is from within the silo archive space with the computers provided for the catalogue, the access desk and the rail system directly above.



Figure 3.31 Child zone within the library



Figure 3.32 Main 'street' within library



Figure 3.33 View from the top floor



Figure 3.34 View from within the 'living room'



Figure 3.35 View from within the silo archives

4.0 Speculation

The goal of this thesis project was to explore the potential of using an old structure on an existing site and utilizing the historical layering aspects to give new purpose. As the concept of palimpsest worked with the land, a 'sense of place' was created in order to provide communal aspects for the city and make use of prime waterfront land. Through the completion of the thesis project, the creation of a 'place' can be done with the application of the palimpsest concept to enrich the historic as well as the communal aspects. If the concepts are implemented correctly, any other type of architectural application can be applied to counter the effects of unnecessarily clearing what can be reused or repurposed.

I feel that through the completion of this thesis project, I have managed to create a sense of place with the palimpsest theories. Rather than use the silos in a way that leaves it untouched, I wanted to try a different program which has not been implemented or suggested that works well with the given conditions. I have learned a lot through the completion of this thesis, and will be able to think from a different perspective in regards to the re-use of old structures instead of removal. This approach can be applied to future projects I work on which can help preserve identities of certain areas in a different way.

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