

Upper Harbor Terminal Park
Reconnecting Neighborhood & Linking History Through
Memories along a post-industrial river front
In North Minneapolis

THESIS ARCHIVAL NOTE

The following thesis project, entitled (Upper harbor Terminal reconnecting neighborhood & linking history through memories through memories along a post-industrial river front:Upper harbor memory park, was composed over the course of the 2017-2018 academic school year. The Thesis Program, as contained here, was initiated and completed in the fall semester as a part of the LA 563: Programming and Thesis Preparation course. Supplemental material, including the Thesis Boards and the Thesis Presentation documents, were generated in the spring semester as a part of the LA 572: Design Thesis studio. Any inconsistencies between the different documents, in terms of research and design, should be excused per the evolution of the project across the two semesters.

Upper Harbor Terminal Park

Reconnecting Neighborhood And Linking History Through Memories Along A Post-Industrial Riverfront
In North Minneapolis

A Design Thesis Submitted to the
Department of Architecture and Landscape Architecture
of North Dakota State University

By

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In Partial Fulfillment of the Requirements
for the Degree of
Bachelor of Landscape Architecture



Primary Thesis Advisor



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Images

<http://lakestaterealty.com/wp-content/uploads/2016/10/Saint-Anthony-Falls-Circa-1860.jpg>
<http://editions.lib.umn.edu/openrivers/wp-content/uploads/sites/9/2016/10/Metro-Design-Image-of-UHT-e1476909303621-1024x689.jpg>
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The thesis abstract

This thesis examines the potential benefits of having an open public space that can be a downtown amenity for the population of north Minneapolis. Over the coming years the state of Minnesota is experiencing growth due to the increase of new immigrants and birth rates. Minnesota has a growing population and experts say that it is growing at a natural rate. This being said because of the on going growth that Minnesota is developing the need to have open spaces has also increased. This thesis proposal has to do with examining the Upper Harbor Terminal area located in North Minneapolis.

The site is located I-94 and is located two miles from downtown and provides a strong sense of circulation for public transportation, vehicle circulation , and pedestrians and can allow this area to be a destination space. This park will better allow the social cohesion of the city of north Minneapolis and build on the culture that is celebrated throughout the city. The park will act as a social lung and allow areas for cultural gathering and offering seasonal activities for the residents of North Minneapolis.

This park will also combat a series of issues that the area is undergoing such as unemployment, housing blight , existing pollution , and lack of education. The park will be designed to tie in the culture of the city and allow the park to have a better sense of place within the city of North Minneapolis. The ultimate goal is to increase means of employment, provide means of remediation the existing sites pollution, increase awareness of the ecosystem of the Mississippi river, the last goal would be renewing the urban fabric of North Minneapolis.

Thesis Narrative

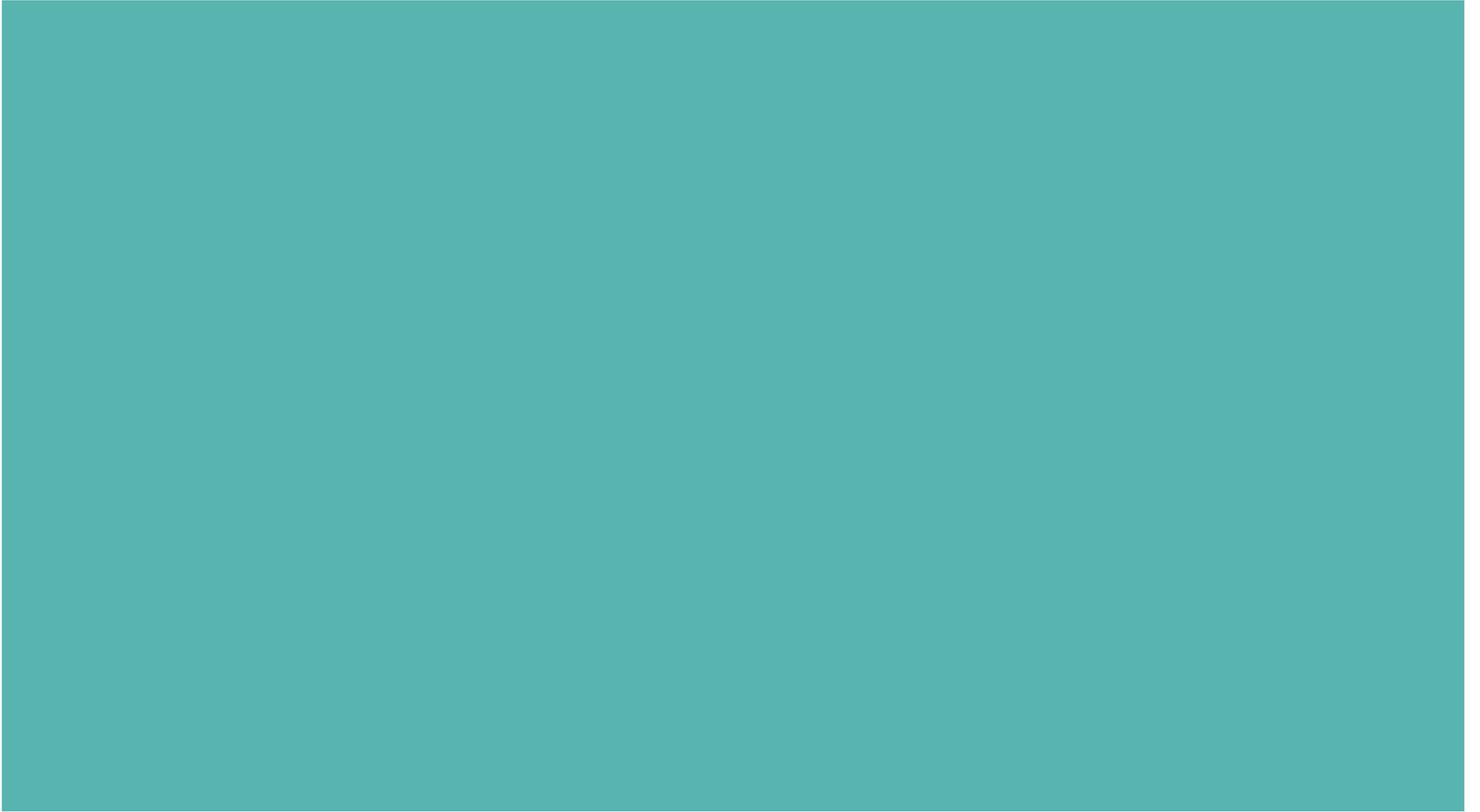
"You can neither lie to a neighborhood park, nor reason with it. "Artist's conceptions" and persuasive renderings can put pictures of life into proposed neighborhood parks or park malls, and verbal rationalizations can conjure up users who ought to appreciate them, but in real life only diverse surroundings have the practical power of inducing a natural, continuing flow of life and use."

"Jane Jacobs, The Death and Life of Great American Cities

Public parks have often been referred to as a place of release for citizens. If we do not have open spaces it ultimately affects our well being and how we connect with other individuals. Parks are not only crucial for a city but are looked at as a social platform not only for interaction between individuals but also gives people the opportunities to better understand cultures that are presented from people in the cities. This is often overlooked but often times is a crucial idea in the design process. This thesis will further examine the benefits of developing an industrial park in the heart of North Minneapolis.

Chapter 1

typology.introduction.project elements.user client. project goals



Typology

- Post Industrial
- Water Fronts
- Public Park
- Urban Revitalization

Post industrial landscapes have evolved into an important design idea in the landscape architecture profession. As we further remove ourselves from an industrial source of economy our new ideas must accept elements that are harmonies and interrupting. We must fix our mistakes and try to make the history and culture of what makes our city. With this dialogue it will create a better sense of renewal that will carry on with the on-going history. Projects that have created this vision of what a post industrial park would be Gas Work park in Seattle Washington by designer Richard Haag another example would be Landscape Park Duisburg Nord in Duisburg, Germany by Latz + Partners. The idea with this is too better understand what approach that goes into programming a successful post industrial park , but still maintaining to the culture and history of the site.

Introduction

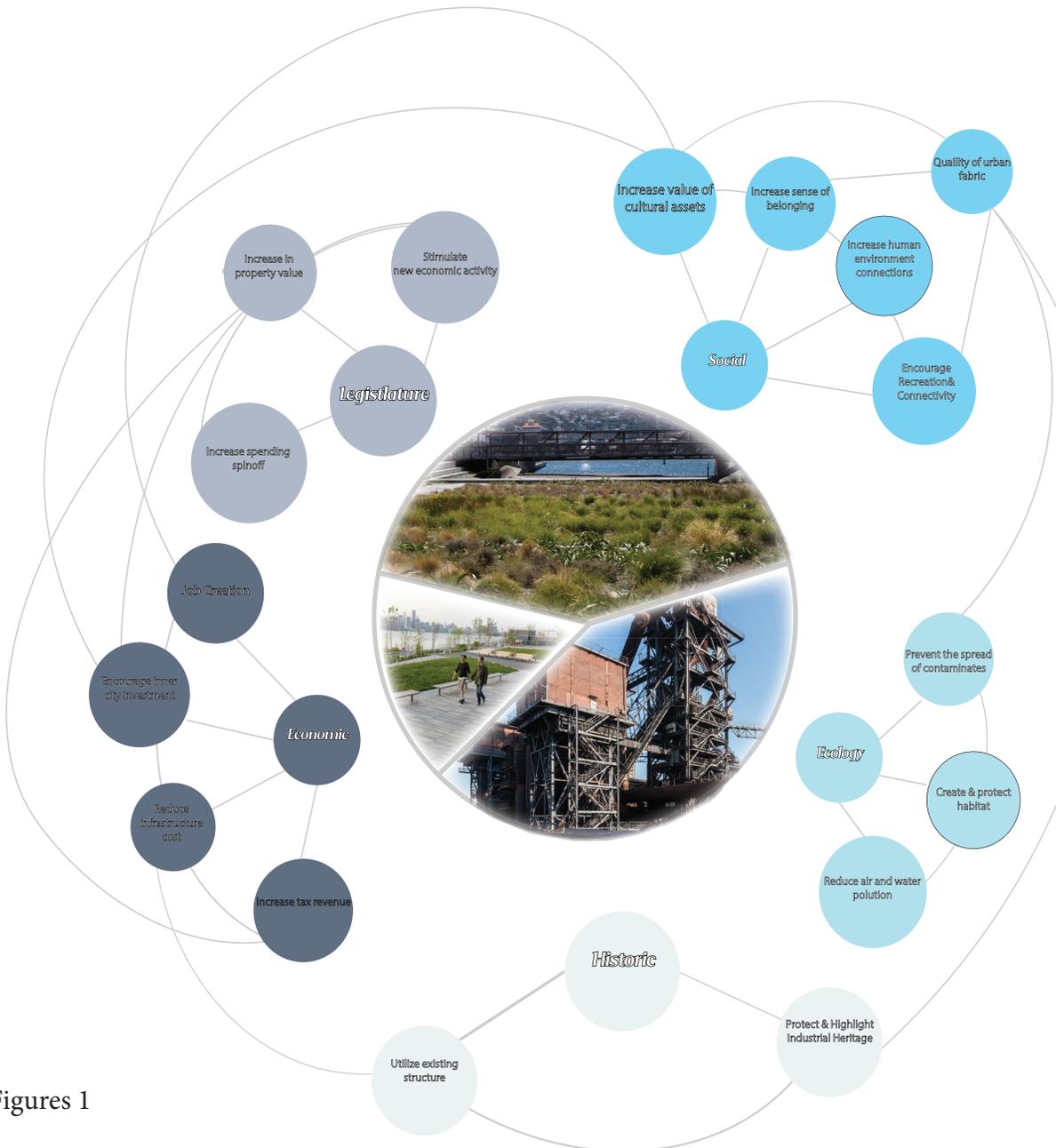
Since the start of the 20th century the riverfront of Minnesota was dominated by mills and agriculture. With these two industries one of the biggest and import mills of them all was St. Anthony flour mill. As these mills gotten larger they often moved upstream in order to expand and grow. Between 1890-1900 Minneapolis became a key part in the lumber industry for the upper Midwest. As the times proceeded one of the many saw mills that came about was Boxy-Delaittre , this saw mill opened its doors at 1869 and at this time Minneapolis was also rapidly developing agriculture prairie towns across the upper Midwest. Around the 1898 there was a fire that ravaged one of the first saw mill on the east side of the St. Anthony Falls the Boxy-Delaittre relocated to farmland (Hotchkiss 1898) and

What is currently called UHT. Years later the saw mill closes its doors in 1869. This not only shaped but also transformed forests into an economic resources and rivers like the Mississippi into successful logging companies and by 1905 theses logging companies slowly closed there doors.

As years passed by UHT opened as a shipping barge after the completion of both lower and upper ST. Anthony locks made this possible. As years went by the shipping barge has been financially insolvent due to the increase of trains and trucks becoming the economical choice of exporting goods. The barge closed its doors by 2014 allowing its 50 plus acres for responsible and possibly more community-engaged enterprises. The closure of the Upper St. Anthony lock followed the next year. As a result, the UHT is being redeveloped once again as a federal "Promise Zone" with both private and public interests guiding its revitalization.

Promise zones or Pz's are federally designated, high poverty communities where Federal Government agencies partner with local organizations and leaders to increase economic activity, improve educational opportunities, and leverage private investment. There are a total of twenty-two urban, rural and tribal PZs across the nation.

Project Elements



Project elements are very important in any project they give your audience the opportunity to connect with your topic. In the graphic on the right hand of the page shows the post-industrial design frame work and what goes into consideration. The bubbles start with social, economic, ecological, historic and legislature from those bubbles are relationships that goes into consideration for what happens for redevelopment. Granted they all have some aspect that relate with each other these were the ones that related to the rest. In the center are my case studies which are Edge park which is located in Brooklyn New York, Waitangi Park which is located in New Zealand, and Landschaftpark which is located in Germany. These case studies all have relationships within each other weather it is relating to the five bubbles or each other they have numerous of similarities that will be shown through the case study section of this book.

The case studies are ranked by storm water management practices, ecological restoration, active program elements, passive program elements, areas of water interaction, Through this the ideas two things occurred the first was the program elements to size of the area. The other was how to make a plan for this post-industrial park

Figures 1

User/Clients

Understanding who the user client is detrimental in understanding of who is the targeting audience for this post-industrial park. Because of the circulation of the site there will be people from the surrounding neighborhood, tourists, and children. This being said there are various users that will come to this site and programmatic elements are important in order to develop the post industrial park even further.

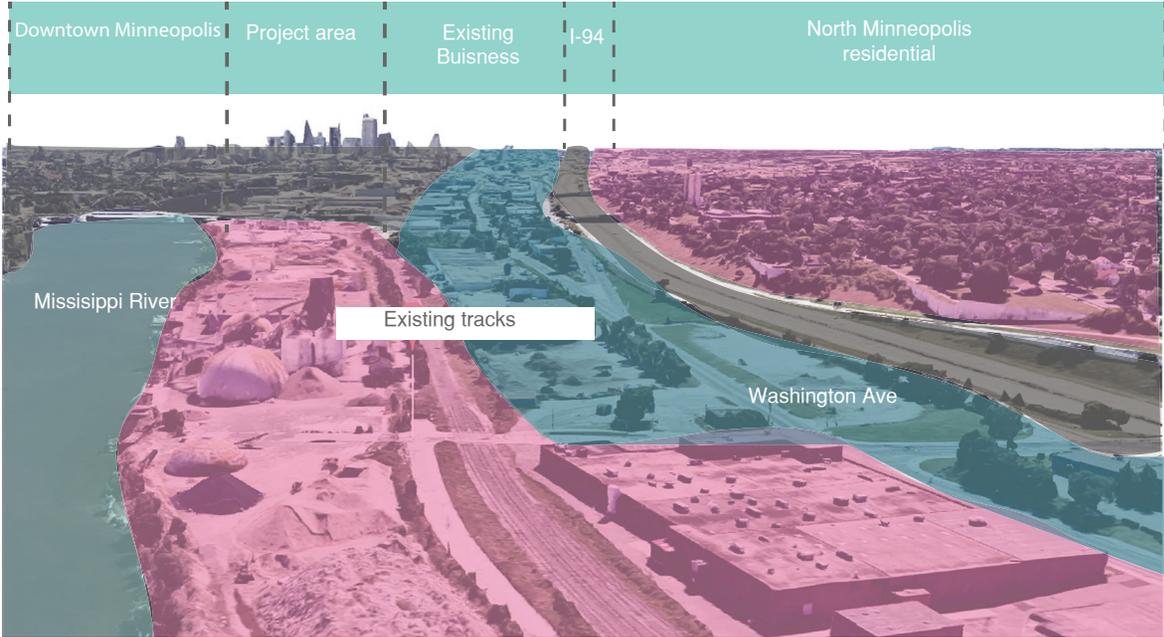
The population of the neighborhoods adjacent to the upper riverfront is highly diverse. The area itself has a strong sense of historic significance to incoming immigrants and because of this the area has developed over time, with the influx of new waves of residents to the city. This has also been consistent with other neighborhoods (with the exception of some areas close to Downtown) have remained largely blue collar with median incomes lower than average.

During 2008, the population has declined slightly. This is in part due to the recession and accompanying foreclosure Crisis, which has disproportionately impacted these neighborhoods, especially on the north side. A number of homes still stand vacant, and home values have declined significantly. Additionally, these areas are primarily low density and like similar areas of the city, declining average household sizes (a national trend) can mean declining population, even if there is no increase in vacancies.

In terms of economic activity, there are related stresses on the residents here. Unemployment rates, which are closely correlated with race, are significantly higher than average. Businesses serving the immediate community are fewer and less successful than some areas of the city. This is an opportunity to better shape the future where people feel that the city is empowering them to do their best.

Site Context

The UHT is located in North Minneapolis on the west bank of the Mississippi River near Dowling Avenue. The terminal occupies 41 acres of riverfront property. Adjacent to this the McKinley neighborhood is adjacent to the North East Industrial Area which is home to the UHT. The adjacent neighborhood to the south is Hawthorne. Both the McKinley and the Hawthorne neighborhoods are bisected by Interstate-94, with residential neighborhood to the west and industrial uses (primarily) to the east. There are no outstanding parks or lakes. There is no public access to the Mississippi River. Other Minneapolis neighborhoods near the UHT are Bottineau, Camden, Near North, Sheridan, St. Anthony West, Columbia, Lind-Bohanon and Marshall Terrace. The site is also located by multiple areas that allow for recreational uses and draws people from these neighborhoods. One of the biggest draws would be the grand rounds which is a system of parks that have been designed by H.S Cleveland and have been a staple in the cities. The other would be the series of bars and areas of arts and theaters that are around the uptown area. This allows for individuals the opportunity to enlighten and provides options for recreational uses.



Project Justification

Project Justification: The reasoning why this should be reviewed is because of how much of an asset that this redevelopment can be. Any UHT redevelopment will require significant up-front investment in preserving core infrastructure and amenities. Ecological, recreational and economic goals can be mutually beneficial linking users from all around the Minneapolis area. It would balance development with river restoration. It would also reconnect and integrate neighborhoods with the river. By providing a unique focal attraction at the river where people can gather and enjoy the river. Restore the river's ecological function. Maximize natural and passive landscapes within open space. Utilize best management practices in stormwater treatment

Goals of the Thesis

Academic Goal

My academic goal is to successfully meet the requirements that are presented to me. I also want to take this time in order to do conductive research in order to understand social and cultural interaction because a majority of these ideas are dynamic components in my thesis. Another aspect of research that I want to understand is the way that proximity of individuals relates to the program of the project into designing it as a successful park.

My other goal is to develop a new but refined means of researching my over arching concepts in order to better understand my project.

Personal Goal

My personal goal is to grow as a student and a designer. I want to take this opportunity in understanding everything that i have learned thus far in order to carry out a successful design thesis. I also want to take this opportunity to explore the journey that this thesis will take in order to understand my own growth.

Because of the topic of my project I also want to take this opportunity to further my knowledge of what makes a successful post-industrial site and how that connects to the social and cultural interaction of the community.

Professional Goal

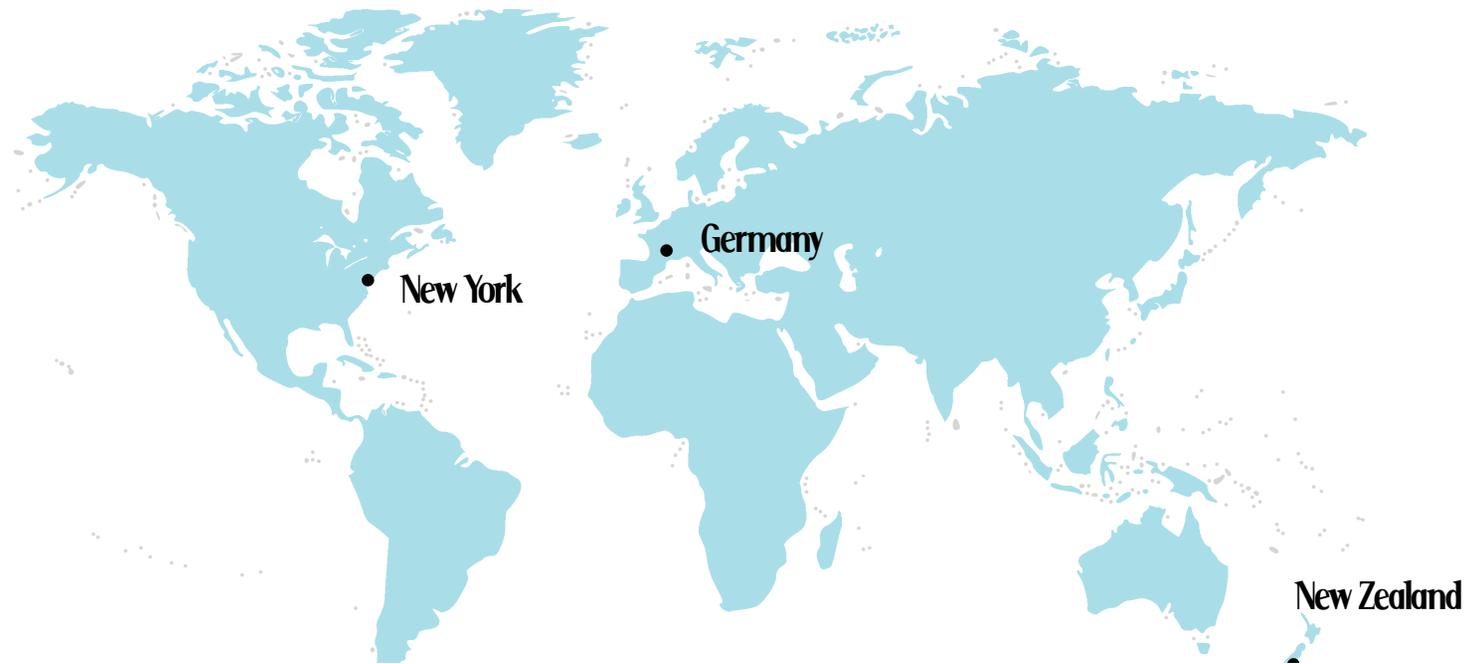
My professional goal is to develop my software skills. I will be using software like Arc Gis in order to collect quantitative data in order to create a successful site analysis. I will be using software like Auto-Cad with a combination of both sketch-up and revit in order to create a 3-D model to better explain my idea for people to understand.

The other aspect of this is to develop my design aesthetics in order to follow the principles of timeless design and with this understand how to achieve successful problem solving techniques. The last aspect is to assess problems in the community and shed some light for people around the area.

Chapter 2

A plan for proceeding, design methodology, and documentation





Figures 2

How to proceed

The best way to understand how methods of my case study relates to my UHT site one must compare in different ways. The reason why this is important is because this way there can be a way for us to understand how these post industrial parks are successful and how they can be important spaces for the community. In the following pages the case studies are broken down to features the first is look at basic knowledge about that case study and then breaking down key features of the site. The next portion looks at how that case study relates to the site and also what are some possibilities that can happen in Upper Harbor Terminal. There are also graphics that give a visual representation of the comparison between the case study and the site .

Design Methodology

My approach to this design methodology is by using combined research methods of interpretive and evaluating research to address problems that are existing in my site. This will allow me to understand how to design for post industrial parks and how it can be an assets for the community of UHT. By looking at successful programming and methods of why these post industrial spaces are successful I can then look at the information that I have learned and then apply these common themes into my project.

Design documentation



Design Documentation

My design process will be documented through a variety of different methods. The first method is by sketching. I believe that this is a very important part of the design process because it allows me to work on ideas at a faster rate. This will also be paired with written words in order to get a better sense of what I was thinking at that time. This will help me articulate my ideas and how to move on with this. Another aspect of design documentation that will be in this project will be a series of infographics, tables, and charts. It is very important to make these correlations between research and design. This will allow people to get the concept of design and how to translate these ideas in an organic way. Another way that I want to use is to make models and methods of components of physical models to understand the proposed changes in the site. This thesis will embark on these components of design documentation (Narrative, Sketches, Photos, Supporting Graphics, Physical model).

Schedule

Week 1 will be used to work on research and Collect base materials such as various scales of plans.

Week 2 has a deadline for producing base materials which will be used as a transition point into conducting an analysis and creating a vision for the project.

Week 3 will hold two reviews days to go over the Analysis and vision.

Week 4 -6 Will be producing a master plan which may consist of numerous conceptual designs to get the finish plan.

Week 7 the master plan will be due.

Week 8 will focus in on the small attributes of the site such as details.

Week 9 will be review days to go over the site plan and details that were made the week before.

Week 10 will be the first of thesis proposals.

Week 11 will be creating 3D models of the project, as well as starting to look into the model that will be presented with my thesis project.

Week 12-13 Will be finalizing the 3D models, preparing for rendering. Continuing work on the model as well, and looking into board design.

Week 14 the digital material is due, this will be the time to finish up renderings, boards, and models.

Week 15 is when physical presentations will be due, will require plotting and setting up the project to be displayed.

Week 16 is the week of verbal presentations.

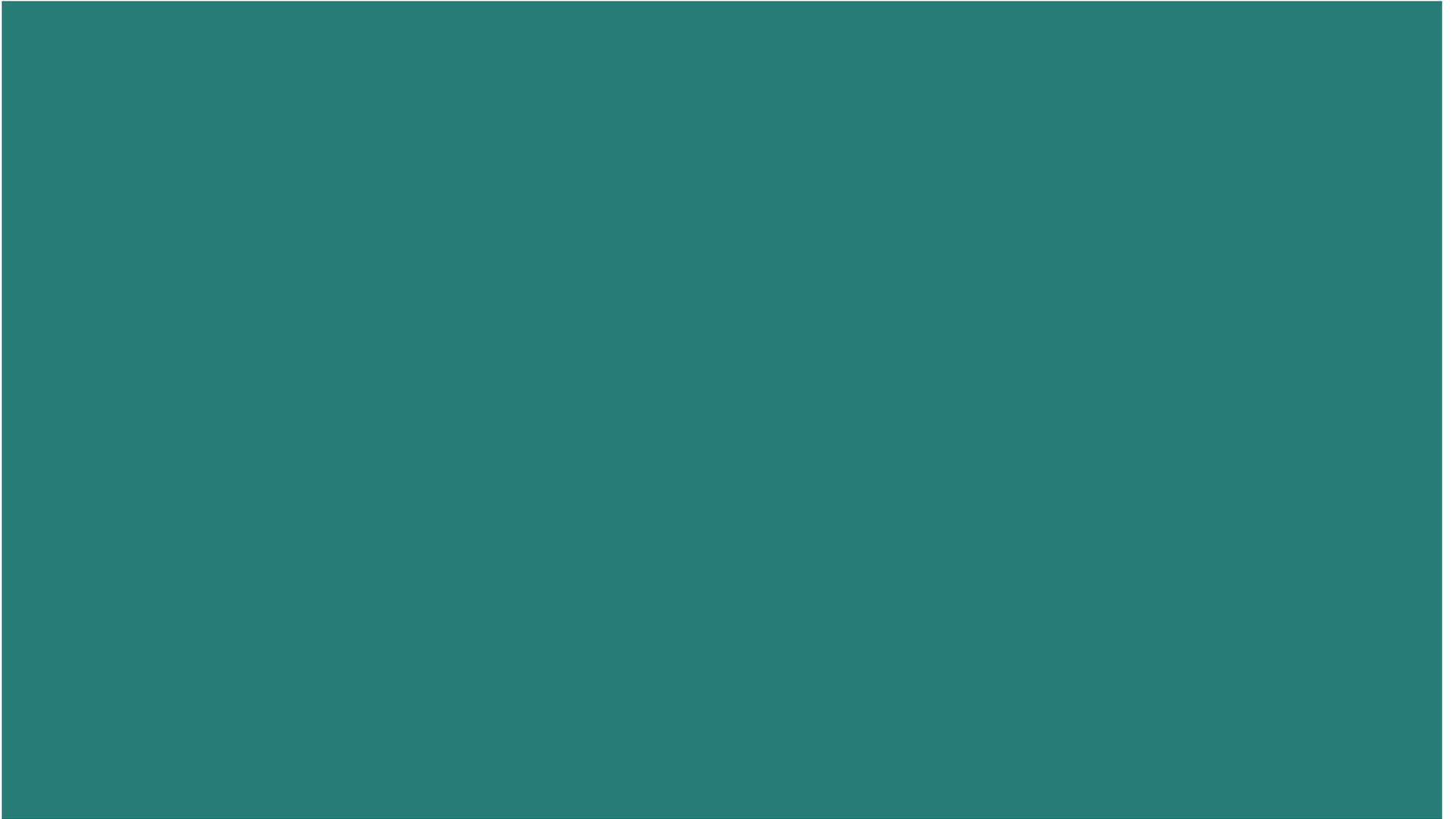
Week 17 is finishing up documentation

Chapter 3

Literature Review



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Literature Review cont.

“The answer was no; the bridge had been built only to service the Ellis Island restoration project and was not intended to invade the Circle Line Ferry’s passenger market. However the public clamor for access.” (Citation)

In the book *Rethinking Urban Parks Public Space and Cultural Diversity* by Setha Low, Dana Tablin, and Suzanne Scheld it goes into many projects in great detail and talks about how they relate to urban parks. Within this book it has numbers that can quantify behavior patterns, cultural values, park access and many more results. The aspects that I want to introduce is cultural values, park access, economics, historical background, and social context. The list of research that is not going into my book is the studies of Urban Parks chapters: History and Prospect Park chapters: Diversity at risk. With this book I want to evaluate ideas and belief in what goes into planning a post industrial site that can be an asset for the community. My idea is that post industrial sites that becomes redeveloped should be thought about improving the area by improving the economy around the proposed site. I also think that the area should be an area that allows for multiple groups in order for people to understand cultural history through social interaction. The other aspect that I want to introduce is the idea of improving the environment and with this providing ways for people to understand the environment better through education.

"The answer was no; the bridge had been built only to service the Ellis Island restoration project and was not intended to invade the Circle Line Ferry's passenger market. However the public clamor for access." (Urban Parks 68) This quote was talking about the Ellis Island bridge proposal and in this proposal to be built in full view of Liberty State Park's Bay front promenade because of this bridge people were concerned that they would not be secured walking towards Ellis island. After realizing that this could be possibility the people then pushed for congressional appropriation for the bridge to allow limited vehicular and unrestricted pedestrian access to Ellis Island. The bridge itself is currently off limits for public use but remains in use for official business. Within this project it breaks down what as designers are call to do which is to design within the needs for the people and allow what can be changed for the future. The study focus was on "constituency groups" and these are people who have shared cultural beliefs and values and with this people are likely to be affected in the say way. From this people were then interviews asked how the felt about Battery Park and Liberty Park that was being overshadowed by this bridge and other aspects to improve the park. The feedback was interesting because people did not only respond because the impact of the proposed bridge and access of alternatives routes, but because of the positive and negative attitudes about the possibilities of these parks. and with this feedback, designer got a better response on what the public believes they need for this site(include4.3). Regardless of cultural or educational back ground the general public would not be able to voice about access alternatives to changes on Ellis Island, Battery Park, and Liberty Park. This finding suggests that the environmental assessment and planning process can be enhanced by asking the local population.

Literature Review cont.

This allows for people that use the space an opportunity to have a voice and install that sense of cultural value throughout the space(s). Installing that sense of cultural value allows for individuals to get on a deeper mean have a sense of place and this can relate to have access to different needs.

The other aspect that I want to introduce is the aspect of historical background within a space. I would like to introduce is the idea of symbolic cultural expressions and cultural representation because this allows park managers to understand numerous things about groups of people. The first and most important thing to understand about parks is that they are not neutral spaces, they have the most complex histories and having an observation of the symbolic expressions of diverse cultural group deeply corresponds to the parks contemporary, history and social climate. If this is done, then we can see how this very park has changed over time. There are numerous expressions of cultural pride in the form of many ways that people can express themselves weather it means of claiming spaces where people think are important to them or putting flags around the neighborhoods. This outlines the idea that these individuals are deeply connected with the site that they are creating a process of developing and protecting. Public parks are meant to be looked at as a resource meant to be used by all members in society. Having this sense of knowledge of cultural expressions as indicators of group or an individual s sense of belonging is a powerful thing to evoke and continues to strive over time. Knowledge of cultural expressions can inform managers of groups that are being further removed from the park due to conflicts with each other. This knowledge is important because with this you can design with this knowledge that one can use to develop diversity and equality and preventing cultural conflict.

Finally allowing for this knowledge allows for people to understand the rules of the park, what behavior is appropriate and how to culturally express themselves then people apprehend this cultural knowledge of visiting groups. With this idea of having parks that introduce the historical background by introducing the idea of cultural expression allows for sustaining the cultural dynamics of urban societies.

Literature Review cont.

“The more successful a city mingles everyday diversity of use and users in its everyday street the more successfully casually and economically it the people thereby enliven and support well located parks that can thus give back grace and delight to their neighborhoods instead of vacuity.” (citation).

The other aspect that I want to introduce in the paper is the sense of economics in a park. This is often a touchy subject because usually park designers are trying to sell their designs in order to start with the begin phases of the design. The question is how will this park make money to sustain itself in the future. One of the many things that can act as economic benefit for the park is having vendors in order to rent a space. This becomes a method for people to come try different foods and for vendors to benefit from this. The other aspect that a park can cause economic benefit is by incorporating private and intimate events that people can come and gather. This would allow for people the opportunity to be immersed in the site and enjoy the culture of the site. The park can also be paid upon entrance and this can further increase the revenue of the park and allow for it to pay for itself. This is often asked by officials to see if there is some sort of plan in order to plan for the future, but the possibilities are not limited there are numerous ways to develop income through the park. The quote that I want to use is from the author Jane Jacobs from the book title the Death and life of American cities.

"the more successful a city mingles everyday diversity of use and users in its everyday street the more successfully casually and economically it the people thereby enliven and support well located parks that can thus give back grace and delight to their neighborhoods instead of vacuity."(Life and Death of Great American Cities Jane Jacobs). This quote is very important because one of biggest takeaways from park design is having the patience to see if that area is appropriate of having this park to be an asset. Jane Jacobs also talks about how poor park planning and design can greatly affect the area and turn that park into a space that no one goes to. Both areas the park and the neighborhood have to work as a cohesive unite in order for that park to flourish. I believe this quote helps further my case on how a park can relate to multiple things due to their relationship. The other aspect is thinking about the surrounding areas because if one fulfills the needs that majority needs then they will have more time to have a leisurely life where they can enjoy the benefits of this park. When our basic needs are not met then we have a harder time finding time to relax and continue with life.

Literature Review cont.

Allowing for neighborhoods to redevelop existing infrastructure like roads and sidewalks goes a long way because it adds value to the neighborhood and it means that there will be more access to the park which would further make it a destination park. These concepts are important into the design because this allows more a collaborative design with the people that are living by the area.

With all of these values I have understood what goes into park design and how to correlate these ideas with the principles of post industrial designs. With both books Rethinking Urban Parks and Life and death of great American Cities I have learned what it means for a park to have cultural values, park access, economics, historical background, and a strong sense of social context .with these ideas that post industrial sites that becomes redeveloped should be thought about improving the area by improving the economy around the proposed site. I also think that the area should be an area that allows for multiple groups in order for people to understand cultural history through social interaction. The other aspect that I want to introduce is the idea of improving the environment and with this providing ways for people to understand the environment better through education. I want to take what I have learned from my literature review and replicate this into my project and further prove my theories of what makes a successful post industrial park.

Literature Review cont.

The direction with my thesis research premise and with the research that I have undergone with is what makes a successful neighborhood park I have come to terms with what I think designing a post industrial site means. The thing that people fail to realize is that when designing for post industrial sites we need to understand why that industrial site has failed. Daniel Bell popularized the term post-industrial society through his book *The Coming of Post-Industrial Society*. In his book he talks about the valuation of knowledge and how this will affect economic employment patterns for the coming years. He asserts employment will grow faster in the tertiary (and quaternary) sector relative to employment in the primary and secondary sector and that the tertiary (and quaternary) sectors will take precedence in the economy. This will continue to occur such that the "impact of the expert" will expand and power will be monopolized by knowledge. As tertiary and quaternary sector positions are essentially knowledge-oriented, this will result in a restructuring of education, at least in its nuances. The "new power of the expert" consequently gives rise to the growing role of universities and research institutes in post-industrial societies.

Post-industrial societies themselves become oriented around these places that can produce both knowledge and production of experts as their new focus. Consequently, the greatest benefactors in the post-industrial society are young urban professionals. As a newly educated, and politicized generation more impassioned by liberalism, social justice, and environmentalism the shift of power into their hands, as a result of their knowledge endowments, is often viewed as a good thing. The need of knowledge in post-industrial societies results in a general increase in expertise through the economy and throughout society. This effect is supplemented by the aforementioned movement of power into the hands of young educated people concerned with social and environmental justice.

Literature Review cont.

With this idea in our heads we have a rough understanding of what a post-industrial society is and what changes that are going to happen. Not only that but post-industrial sites are a reflection of what happens to societies that are directly around them. Some draw backs that we have dealt with when shifting from an industry that is completely based of farming to one that is based on industry and production. This affects the population, the economy, and also the behavior of the people. The environmental disadvantages are by far; the biggest negative effect of the industrialization is on the environment. Because many companies that participate in industrialization are typically not forced to pay damages for the environmental harm they cause, they tend to impose a major negative externalize on human society in the form of deforestation, extinction of species, widespread pollution and excessive waste. The other aspect is Financial Disadvantages. Financially, industrialization results in major separation between the rich and poor due to a division of labor and capital. Those who own capital tend to accumulate excessive profits derived from their economic activities, resulting in high disparity of income and wealth. The other aspect is that Industrialization typically leads to the migration of workers to cities, automation and repetitive tasks. Due to these factors, factory workers tend to lose their individuality, have limited job satisfaction and feel alienated. The last has to do with rapid urbanization typically leads to general deterioration of workers' quality of life and many other problems for society, such as crime, stress and psychological disorders. Long working hours usually lead to poor nutrition and consumption of quick and low-quality foods, resulting in increased incidences of diseases such as diabetes, heart attack and stroke.

With all these factories it shows use the evils of an economy based of industry it makes you think of ways to combat these issues in these sites that have remnants of these sites. not always financial economic.

Literature Review cont.

There are currently over 500 industrial sites that are currently intact. A common theme with post industrial parks is, Industrial Heritage: the past in the future of the city written by Loures (2008). In his paper he emphasis the importance and the intrinsic value of the postindustrial heritage which has to be protected and highlighted. This will form opportunities to develop a new multi-functional landscape. When redeveloping Post-industrial areas, it is important to relies that these Landscapes represent multiple layers of time and cultural activity. The historical values of these landscapes do not end in the eighteenth century, they are still being generated. These more recent layers can be as valuable as the ones back in time. S. Niederhagemann gives more detailed information about the conservation and rehabilitation of the industrial heritage in his paper: Preservation of industrial heritage. The importance of protecting the industrial heritage. In addition, he explains how hard it can be to preserve these industrial heritages. It contains special challenges, which are regularly faced with a huge extent of work. An example is the removal of hazardous substances, which also is not always financial economic.

Literature Review cont.

With these ideas that I have learned The things that I want to incorporate into my thesis project is by unifying what my case studies have shown through my research. The first project that I want to introduce that does a very good example of showcasing the beauty of post-industrial design is Landschaftspark. The reason why I want to highlight this project out of the other ones in my project is because Landschaftspark has spaces where it regenerates the land, allows for different ages and groups interact due to the program elements on site, and also celebrate the post-industrial heritage by allowing people to come and explore the remnants of what the site was before officials decided to make it a park. Landschaftspark has not only made steps into understanding the people that live around the area but also ecology that is in the area

Introducing how my site compares to this is interesting because at some point in Minnesota history Upper Harbor Terminal become a space that has been transformed from harvesting timber to a shipping barge to an area that has existing material that are often laid out to rust. In redeveloping this site some things need to be established the first thing is how the site connects with the existing neighborhood. The answer is that it does not have anything to draw people in to the space. The other aspect is to take care of the existing contaminates and stopping them from spreading of contaminates. The contaminates that are currently on the site are the existing coal piles and also the salt piles. This causes problems because this ends up affecting the water table and affecting the river and so on. The next step is addressing the existing structures that are on the site the site has a series of grain elevators and warehouses. This provides an opportunity to create some sort of interaction like the ones in landschaftspark this is very important because it allows for the embrace of industrial heritage.

Edge Park



Design by: W-Architecture

Location: Brooklyn, New York

Completed: March 2011



Located in Brooklyn, New York there is a waterfront called The Williamsburg waterfront. This waterfront has been dominated by industry and its relics for over a century making it largely off limits to the public. New zoning is changing the public interface with the water's edge by increasing density and emphasizing waterfront access. The Edge park seeks to bring people to the river and link the ecosystem with the fabric of the community. As landscape architect for both the new residential towers and the public waterfront park, there were challenges of ensuring that the towers act not as symbolic fences blocking public access and views of the East River and Manhattan but as gateways to the river with corridors providing visual connection to the iconic skyline.

Figures 4



Figures 4



Figures 5



Figures 6

Key features if the park design:

- Encourages users to interact with the water ecosystem and allows the surrounding population with signage so that they can learn about the river
- Uses permeable pavers to collect storm water and also the area was planted with native fauna so that the site has a better sense of place
- Surrounded by multiple transit nodes allowing people to access the site
- Surrounded by multiple mixed use buildings to encourage a live, work, play atmosphere
- Allows for economic relief by allowing private spaces for the public to rent and host events

Figures 7



The plan unites both sides of the river by using the piers to re-orient views across especially toward the Empire State Building. The design emphasizes the harmony of forces at the water edge and encourages public use. Here, the city grid and the river's ecosystem converge, mingle, and clash: the road turns into a pedestrian green way, a garage is surmounted with a sloping lawns. The piers reach gently into the water from deep within the park and stone riverbank contrasts with concrete bulkhead. This blurring of the boundaries between land and water extends the waterfront benefits inland to the community. The synthesis and separation of private and public space, and architecture and ecology required a complex series of collaborations with community groups, the developer, the city government, and engineers. This former industrial site is now 50% permeable, planted with many native species and part of the LEED Silver rating for the project.



Conclusion

The information coming from this case study is how a public open space can directly impact a communities well being. Because of the location of the site it provides the public an area where they can see the Manhattan skyline. This allows people the opportunity to observe and learn from what inspires them from looking at the skyline. This case study also shows the use of private and public spaces . The synthesis of the space does really well with working with the existing architecture and ties in to the natural ecology by tying a board walk to allow a better connection with the ecology. This project also does a very good job of being a destination space it features a series of bike lanes and bus routes for the public to have multiple ways of off arriving to the site.





Similarities with UHT

- UHT like Edge park is by major transit routes that allows it to be a destination area
- UHT can offer a lot of ways to interact with the water and surrounding ecology.
- The site also offers areas where private and public events that can happen in the park. This then opens an idea that this UHT can be a place to provide an economic source
- UHT is an expanding urban corridor that allows them

Waitangi Park



Design by: Wraight Athfield Landscapes

Location: New Zealand

Completed: 2006



A former brown-field site, Waitangi Park redefines the concept of urban park within the Wellington coastal context. It displays innovations across a wide spectrum, from design and engineering to sustainability and interpretation. The park offers a multitude of recreational possibilities. It is structured around five key initiatives: the activity zone; the promenades; the cultural and historical overlays; the field and a programmed of highly integrated environmental infrastructure.

Figures 8



Figures 9



Figures 10



Figures 11

Key features if the park design:

- A high level of mixed recreational uses for a diverse range of users;
- Sophisticated and effective environmentally sustainable design focuses on Water Sensitive Urban Design;
- Connectivity to the urban framework within which the waterfront site is positioned; and
- Amplification of the park's physical components by woven narratives pertinent to the Wellington region, referencing both the natural and cultural heritage of the site. Sustainability features incorporated into Waitangi Park include:
 - Water conservation (daylighting and cleaning of Waitangi Stream, collection and treatment of storm-water, harvesting of storm-water for irrigation);
 - Quality improvement of urban storm water runoff (no net increase of pollution in natural water systems);

Figures 12



The interpretation of cultural narrative and site history are central to the design concept and are woven throughout the park's detailing and spatial composition. This approach, fully integrating site interpretation into the built form, is possibly most evident in the realization of the Waitangi Stream and the Graving Dock. Both of these are major components of the site's Water Sensitive infrastructure and clear acknowledgments of the site's historical past and its significance to local of The Tenth Trust.

Waitangi Park created a benchmark for sustainable landscape design in the Wellington Region. The park's environmentally sustainable design and the water sensitive urban design strategy not only contribute to improve water quality but also add to the visual appeal of the park generating a unique character for the place. Sustainability features incorporated into Waitangi histories are central to the design concept and include a waharoa and pou carved by local artists. Other interpretive elements include the graving dock, the powhiri mound and the waka landing areas. Since its opening, Waitangi Park has hosted numerous traveling exhibitions, performances and events and provided a valuable public outdoor arena for Wellington to showcase the arts. Arts based activity is also integral to the daily life of the park through the constantly changing aerosol art on specially installed screens that stand alongside the skate park



Conclusion

The site has been designed with a strong cultural narrative that has not only been woven through the parks detail but also adds to the spirit of the city. Not only does its design with culture in mind but also designs with native plants to add to the ecology but also adds to the parks sustainability and improvements to the water quality. Using this as a case study I used this as a project that would be used as a catalysis in order to understand what ways that were used in this project to better showcase a cultural narrative. This case study also shows how to do successful programming in order to accommodate for the people living around the site.

Taking this into consideration some ideas of how I can use this in my project would be by using research methods in order to better understand the population demographic to create programmatic elements that can reflect the site. The other considerations from this case study is looking at ways that the public can have space where they can showcase their culture to people that are not familiar to it. This also looks at ways to add to the local fauna of the site. This concept is very important because instead of having this project completely covered by hardscape Waitangi park has a balance between hardscape and softscape allowing to have a better sense of comfortability for the users of the site.





Figures 13

Similarities with Site

- The area itself has a rich bio diversity
- Has a strong sense of culture that is shown through out the city allowing to create a cultural narrative
- Has a rich sense o urban connectivity that relates to the site
- Allows areas for mixed ages of people to come together and also interact with each other to develop a stronger sense of community
- The site itself utilizes the usage of the harbor and creates a space that people can then learn about the past in order to better the future

Landschaftspark Duisburg-Nord



Design by: Peter Latz, Latz+Partner
Location: Germany

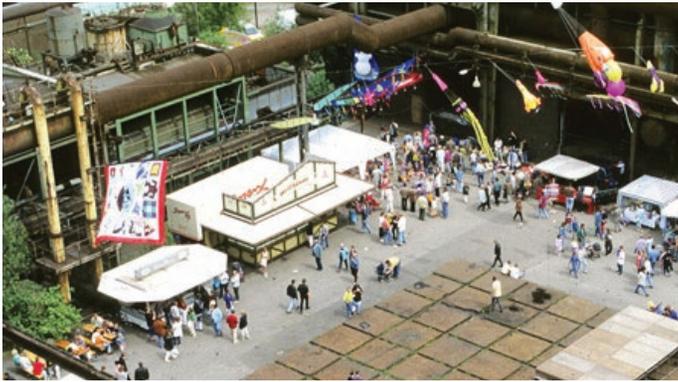
Completed: 2000



Figures 14

Duisburg is a city in the Ruhr basin, one of Germany's most densely populated areas due to heavy industrial growth which took place from the mid-nineteenth century. The river Emscher runs through the Ruhr region and has two million inhabitants who live in 17 cities. It is known for the landmarks which bear witness to its important industrial past: mines and iron and steel works which are largely disused, and a road and rail network which crosses the region, next to the river Emscher which was channeled to provide a sewage collector.

The former iron and steel works, Thyssen-Hochofenwerk Meiderich, located between Duisburg's Meiderich and Hamborn districts, was an example of the establishment of heavy industry in the Emscher area. Its facilities covered a surface area of 200 ha. and comprised a mining and coke-producing zone, the iron and steel works, cement tanks for materials as well as an extensive network of industrial railways. When the old Thyssen plant stopped production for good, in the mid-eighties, the site it had occupied, which was closed off and unknown to most of the residents in the surrounding area, revealed high levels of land and water pollution. In spite of this, the lack of activity had fostered spontaneous ecological renewal which gave encouraging prospects for new uses of the zone.



Figures 15



Figures 16



Figures 17

Key features if the park design:

- Sophisticated and effective environmentally sustainable design focuses on phytoremediation
- Connectivity to the urban framework by using existing building remnants by where the park is located
- Incorporates spaces for individual and group meetings with people
- Quality improvement of urban storm water runoff (no net increase of pollution in natural water systems);



Figures 18

The site of the park comprises a surface fragmented by motorways, roads, railway lines, walls and industrial facilities where it is impossible to recognize an original landscape. For this reason, the intervention sought basically to recover a landscape shaped by former manufacturing industries and to open it up to new uses. The planning of the park had to anticipate the full complexity of elements featured on the site of the old iron and steel works and to work with all of them in order to create a public space with the main character of a public space. First of all, the difficult conditions of the site, due to pollution caused by industrial activity, were taken into account, as was the need to integrate ecological capacities in terms of the vegetation and fauna growing spontaneously on the site of the old Thyssen plant. At the same time, it was decided not to demolish the industrial facilities of the factory -this would have been unavailable for financial reasons- and to appraise it as a historic landmark. The demands of the residents associations were also taken into account; they presented a number of options of a cultural and recreational nature.



Conclusion

The reasoning for choosing this site was primarily for two reasonings. The first reason is the site is an brownfield site .This is important because there was a series of existing elements that were on the site before the loss of demand in steel development thus shifting the economy of the area . The other reasons in why this site was chosen was because of the methods that were used to re-remediate the site.Types of remediation include

- thermal desorption.
- Excavation or dredging.
- Surfactant enhanced aquifer remediation (SEAR)
- Pump and treat.
- Solidification and stabilization.
- In situ oxidation.
- Soil vapor extraction.
- Nanoremediation

These two ideas are very important in how post industrial sites are designed in the future. Instead in some designs removing what is on the site currently and then recycling the parts. This uses them as a way to tell a story the story of what was here allowing for the people that were around the proximity of the site.





Similarities with Site

- Once an industrial site containing multiple contaminants effecting the ongoing ecology of the site
- Has a diverse population of people to take in account with and also design for.
- Both sites have an expanding urban population making it a reason to promote park spaces
- Has various ways of transportation allowing it to be a destination area
- Still has remnants of industrial roots and allows it to have strong sense of the past history
- Has a strong proximity with surrounding parks around the area making it a strong park system

Figures 19

Results From Case Studies

The case studies are ranked by storm water management practices, ecological restoration, active program elements, passive program elements, areas of water interaction, and size. Through this the ideas two things occurred the first was the program elements to size of the area. The other was how to make a plan for this post-industrial park to connect with the rest of the grand round and think of it becoming a park system through the Minneapolis area. Out of the case studies Landschaftspark was the case study that was ranked number one because of efforts to preserve their existing structure and also restoring the site by nearly removing contaminates and regenerating the wetlands. The next park that was ranked was Waitangi Park and this was number two because it touched on a number of ecological features like repairing 30% of wetlands in the park. Another aspect was because it had a numerous aspects of program elements for all ages. The last was Edge Park and this was ranked last, but none the less it had some key value which did not let it become under looked like having private and public spaces and capitalizing on interaction with the piers. Because of this ranking system this helped me element program elements that would not qualify depending on draw and also neighborhood interests.



Waitangi Park



Results

The site has been designed with a strong cultural narrative that has not only been woven through the parks detail but also adds to the spirit of the city. Not only does is design with culture in mind but also designs with native plants to add to the ecology but also adds to the parks sustainability and improvements to the water quality. Using this as a case study I used this as a project that would be used as a catalysis in order to understand what ways that were used in this project to better showcase a cultural narrative. This case study also shows how to do successful programming in order to accommodated for the people living around the site.



Edge Park



Figures 20

ark

Results

The information coming from this case study is how a public open space can directly impact a communities well being. Because of the location of the site it provides the public an area where they can see the Manhattan skyline. This allows people the opportunity to observe and learn from what inspires them from looking at the skyline. This case study also shows the use of private and public spaces . The synthesis of the space does really well with working with the existing architecture and ties in to the natural ecology by tying a board walk to allow a better connection with the ecology. This project also does a very good job of being a destination space it features a series of bike lanes and bus routes for the public to have multiple ways of off arriving to the site.

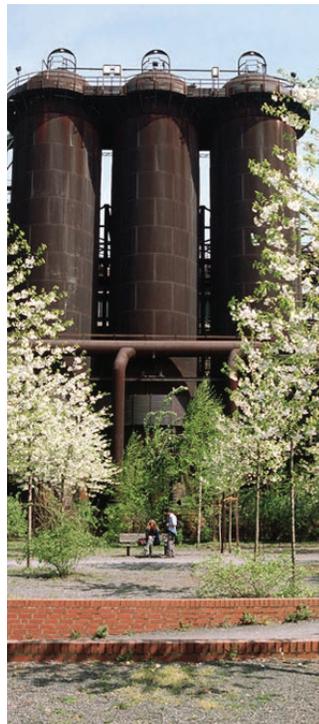


Landschaftspark

Results

The reasoning for choosing this site was primarily for two reasonings. The first reason is the site is an old steel site this is important because there was a series of existing elements that were on the site before the loss of demand in steel development. The other reasons in why this site was chosen was because of the methods that were used to re-mediate the site.

These tow ideas are very important in how post industrial sites are designed in the future. Instead in some designs removing what is on the site currently and then recycling the parts. This uses them as a way to tell a story the story of what was here allowing for the people that were around the proximity of the site. The other reason was because the addition of plantings that were shown in these images. Adding plats that have dense root systems so they can draw out contaminate on the site produce flowers.



Site Analysis





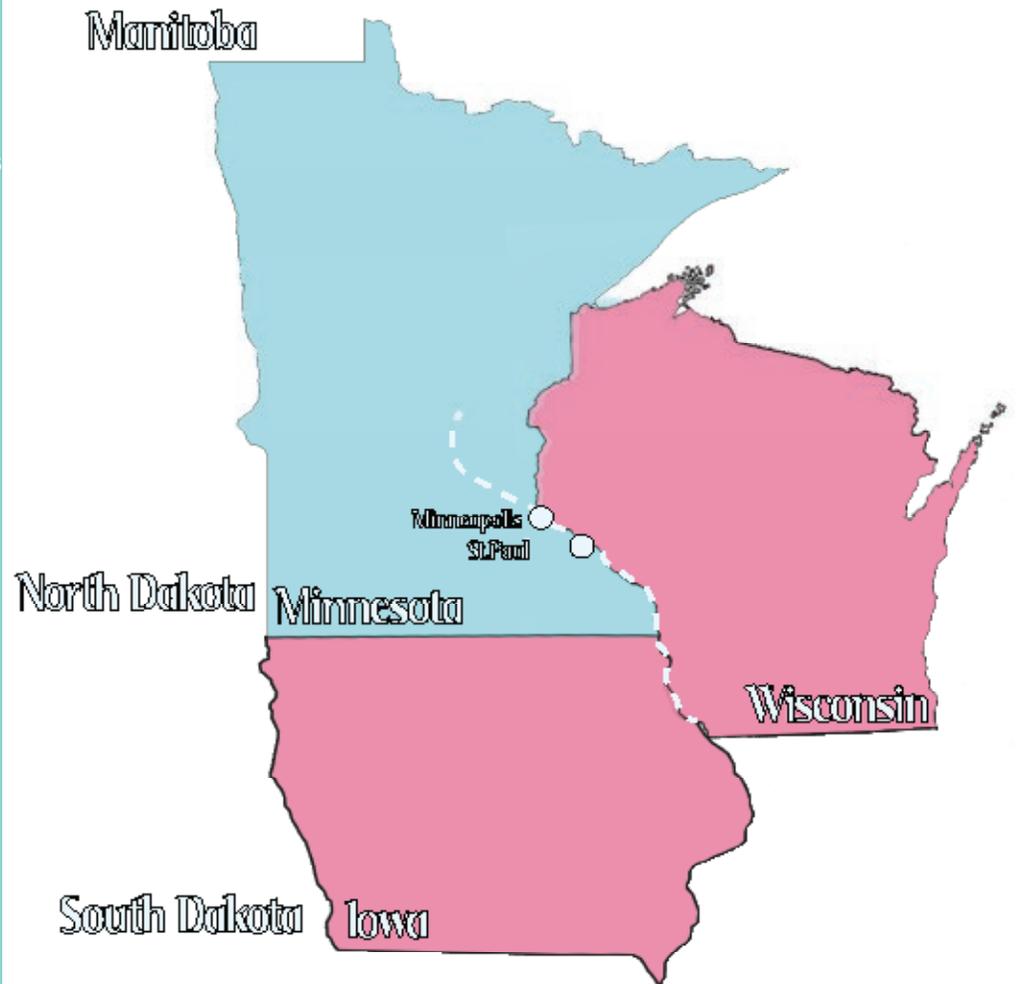
Figures 21

Site background

The Upper Harbor Terminal (UHT) is a 48-acre industrial property located approximately 2 miles from downtown Minneapolis along the west bank of the Mississippi River, between Lowry Avenue N. and the Camden Bridge in North Minneapolis. The site has linear features and stretches almost one-mile-long along the Upper Mississippi, located between the shoreline on the east and Interstate 94 on the west.

The site has access to Interstate 94 at Dowling Avenue N. and a direct connection to downtown Minneapolis south along Washington Avenue N. Access to the site is currently provided at Dowling Avenue N. and 33rd Avenue N., along 2nd Street N./ Washington Avenue N. The Upper Harbor Terminal site is equipped for intermodal transfer of a variety of commodities including grain, aggregate, coal, fertilizer, and metal products, and comprises a number of buildings and structures for storing and handling these materials, including concrete domes, loading and conveyance structures, a large concrete warehouse building, outdoor storage areas, a seawall, barge mooring cells, and an open area for storage of dredging materials.

Within the site there is a CP Rail Line runs parallel to the river and I-94 and continues to provide rail shipping service to customers' south of the Upper Harbor Terminal site and is anticipated to continue to do so into the future. Overhead electrical transmission lines and lattice pole structures are located on the site, between the rail line and the river. The transmission lines originate across the river at an Xcel power plant that has been in operation for over 100 years. The rail and power lines possess easements that limit development of structures within them and carve the terminal site into long narrow development parcels between the river and the rail line. The Upper Harbor Terminal was constructed by the City of Minneapolis beginning in 1968 and took over two decades to reach its present form.



Figures 22



Figures 23

Site Context continued.

Since the mid-19th century the Upper Mississippi has played a role in the industrial history of the city. From the 1850's through the 1920's, sawmills, lumberyards and foundries were located along the river, above Saint Anthony Falls. Rail transportation played a key role in the distribution of materials and its location next to the river was ideal. The lumber industry declined in the early 20th Century and was replaced with scrap metal, aggregate, fertilizer, coal, and grain industries. The Upper Harbor Terminal continues to play a role in the storage and transfer of those commodities today, but that is about to change soon. The move to reduce the threat of invasive Asian Carp migrating into the upper waters of the Mississippi has led to the Water Resources Reform and Development Act of 2014, signed by President Obama in June of 2014, ordering the U.S. Army Corps of Engineers to close the Upper Saint Anthony Falls Lock within a year. The closure of barge business above Saint Anthony Falls provides an opportunity for the City to shape a new vision for the Upper Harbor Terminal.



Figures 24



Figures 25

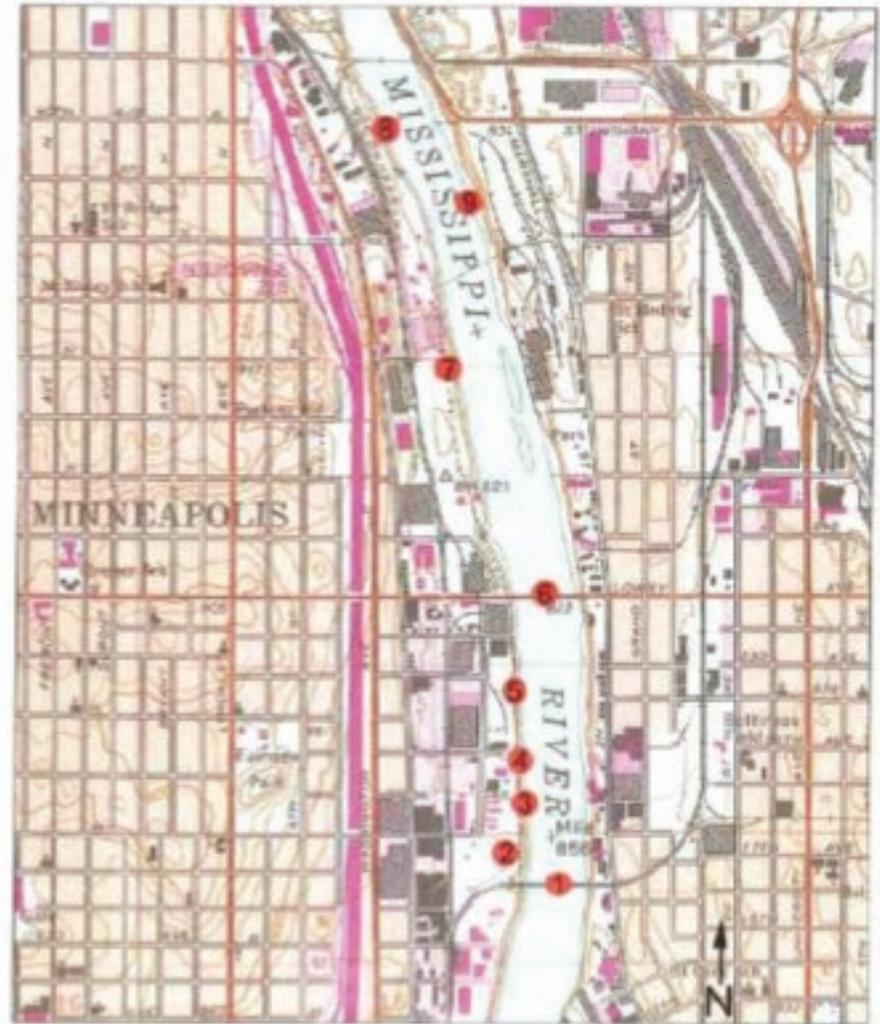


Figures 26

Site History

Between 1968 and 1987, the Upper Harbor Terminal site was developed as an inter-modal barge shipping terminal located at almost the head of commercial navigation on the Mississippi River. The terminal continued in operation until the closure at the end of 2014 of the Upper St. Anthony Falls Lock, at which time the operation shifted from using commercial barges to interim use to store commodities that are trucked to and from the site.

A historical survey that was completed in 2007 determined that the UHT site is eligible for listing in the National Register of Historic Places as part of a potential historic district that encompasses the larger Upper Mississippi Harbor. The terminal also is eligible for listing as a local Minneapolis landmark. The site's historic significance relates not to its architectural beauty or significance (although its four concrete storage domes are architecturally and structurally unique), but to the role the site played in the City of Minneapolis' decades-long effort to have two new river locks built that would make Minneapolis, not St. Paul, the head of navigation on the Mississippi River. Reusing existing structures would increase the sustain ability and reflect the character of the site.



Contributing properties to the potential Upper Harbor Historic District

- | | |
|-------------------------------------|---|
| 1. Northern Pacific Railroad Bridge | 6. Lowry Avenue Bridge |
| 2. Huron Cement Terminal | 7. Upper Harbor Terminal |
| 3. Northside Barge Dock | 8. Dundee Cement Terminal |
| 4. Northside Boat Ramp | 9. Riverside Station Power Plant Terminal |
| 5. American Iron and Supply Company | |



Figures 28



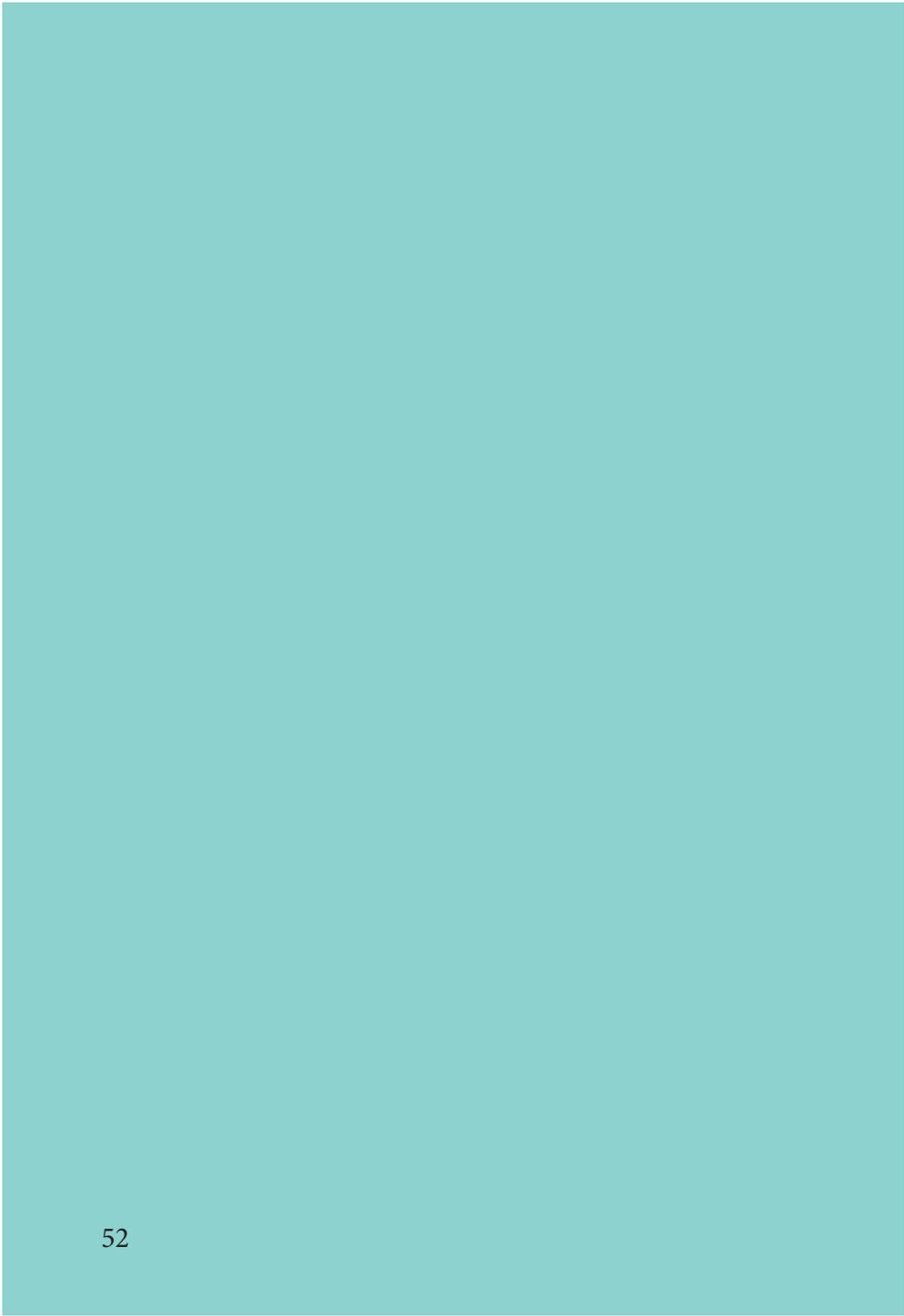
Figures 29



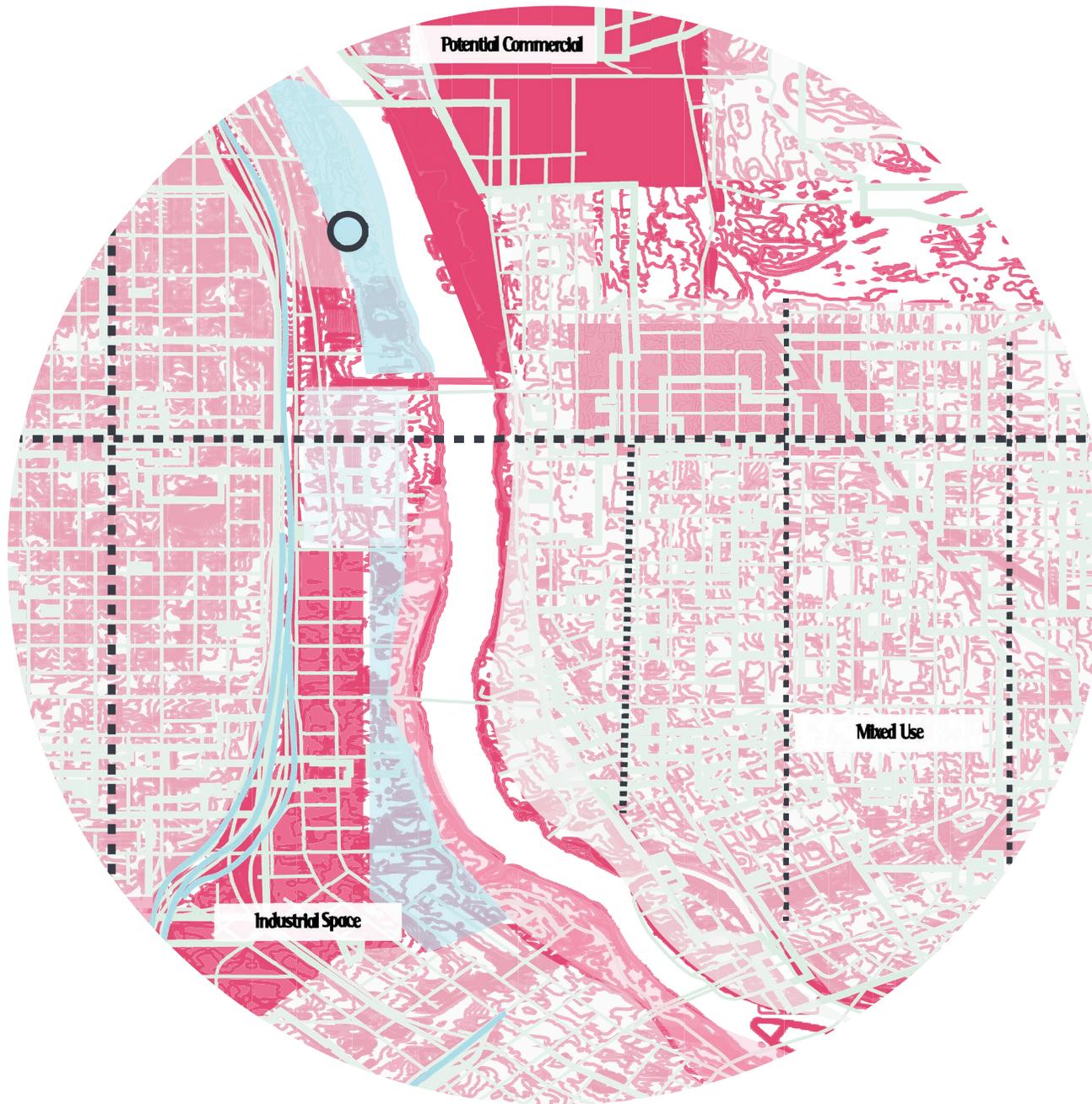
Figures 30

Existing structure

The Upper Mississippi Harbor Development Architectural/Historical Survey, completed in 2007, suggesting that the terminal site, structures, and buildings retain a high degree of historic integrity and as an assets, are eligible for listing in the National Register as part of the potential Upper Harbor Historic District. The Upper Harbor Terminal may also be eligible for Minneapolis landmark designation. The 2007 study states the following: the Upper Harbor Terminal is eligible for National Register listing under criterion A in the areas of Commerce, Industry, Maritime History and Transportation. The terminal's four monolithic domes may be eligible for National Register designation with local significance under criterion C in the area of Engineering. The domes may also meet Minneapolis Heritage Preservation Commission criterion 4 in the area of Engineering. The Upper Harbor Terminal is eligible for local designation under criteria 1 and 3 for its importance as an industrial site envisioned, promoted, constructed and funded by the City of Minneapolis in response to the Upper Mississippi Harbor Development. For these reasons, this Redevelopment Study prepared an alternative that anticipates preservation and reuse of the potential historic structures. Further analysis is recommended to determine the historical need to preserve these structures, the impact of preservation on future development potential at the terminal, and the feasibility of reusing these structures for other future uses.



Figures 31



Lumbar Mill opens its doors



1869

First Lock and Dam Built



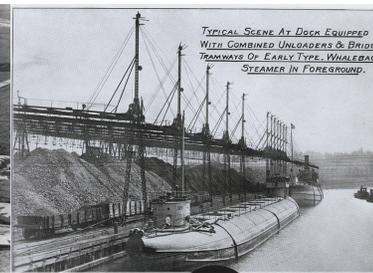
1926

River is labeled a public health problem and most native fish die



1958

Pistbuge Steel Plants continue to disspose slab



1958

Clean water act



1972

Mill finally closes doors at 1915



Gas Water Park

**MSP and ST.Paul
seperates sewers**

Duisberg Designed

Waitangi Park

Edge Park



1975

1998

2000

2006

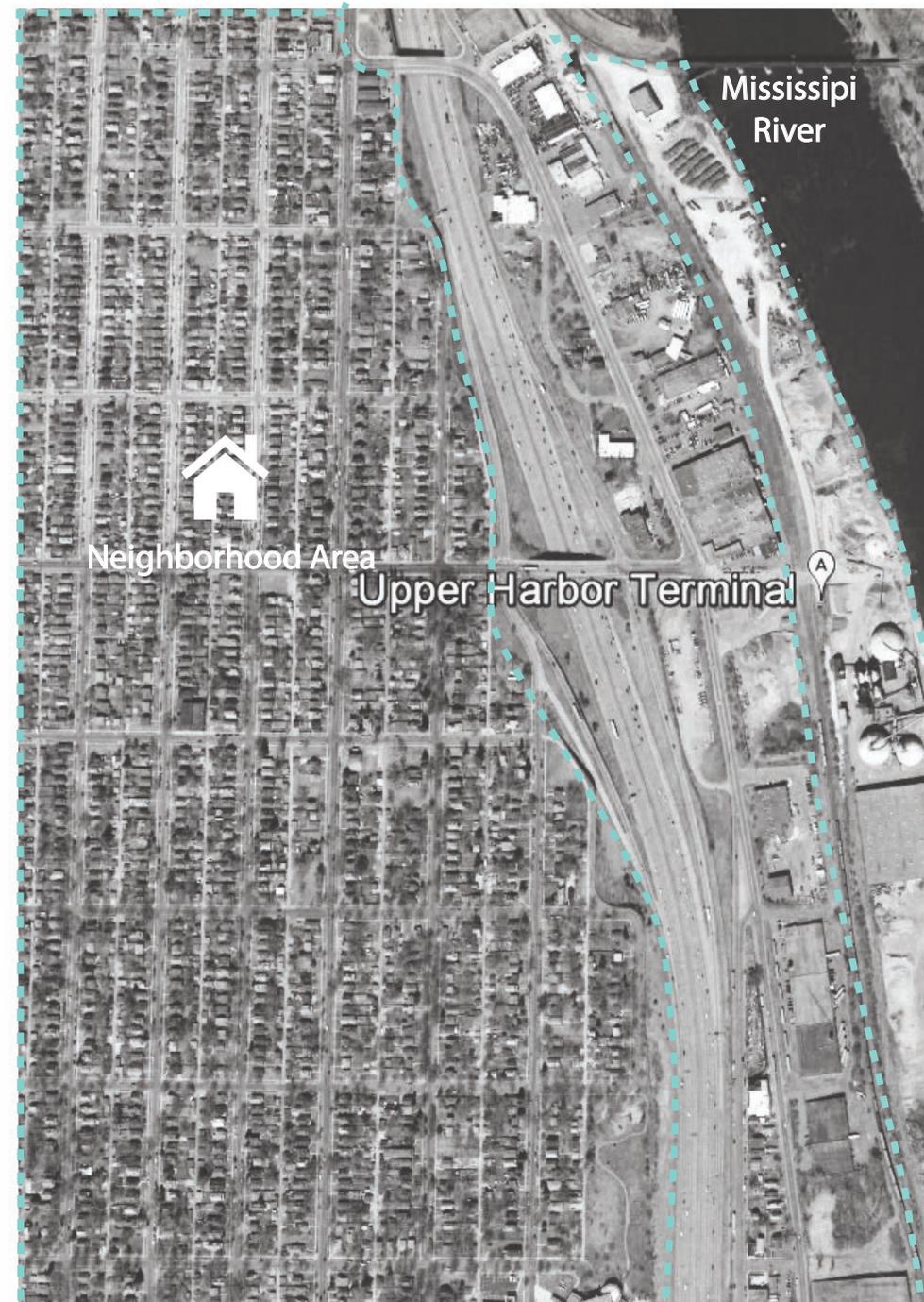
2011

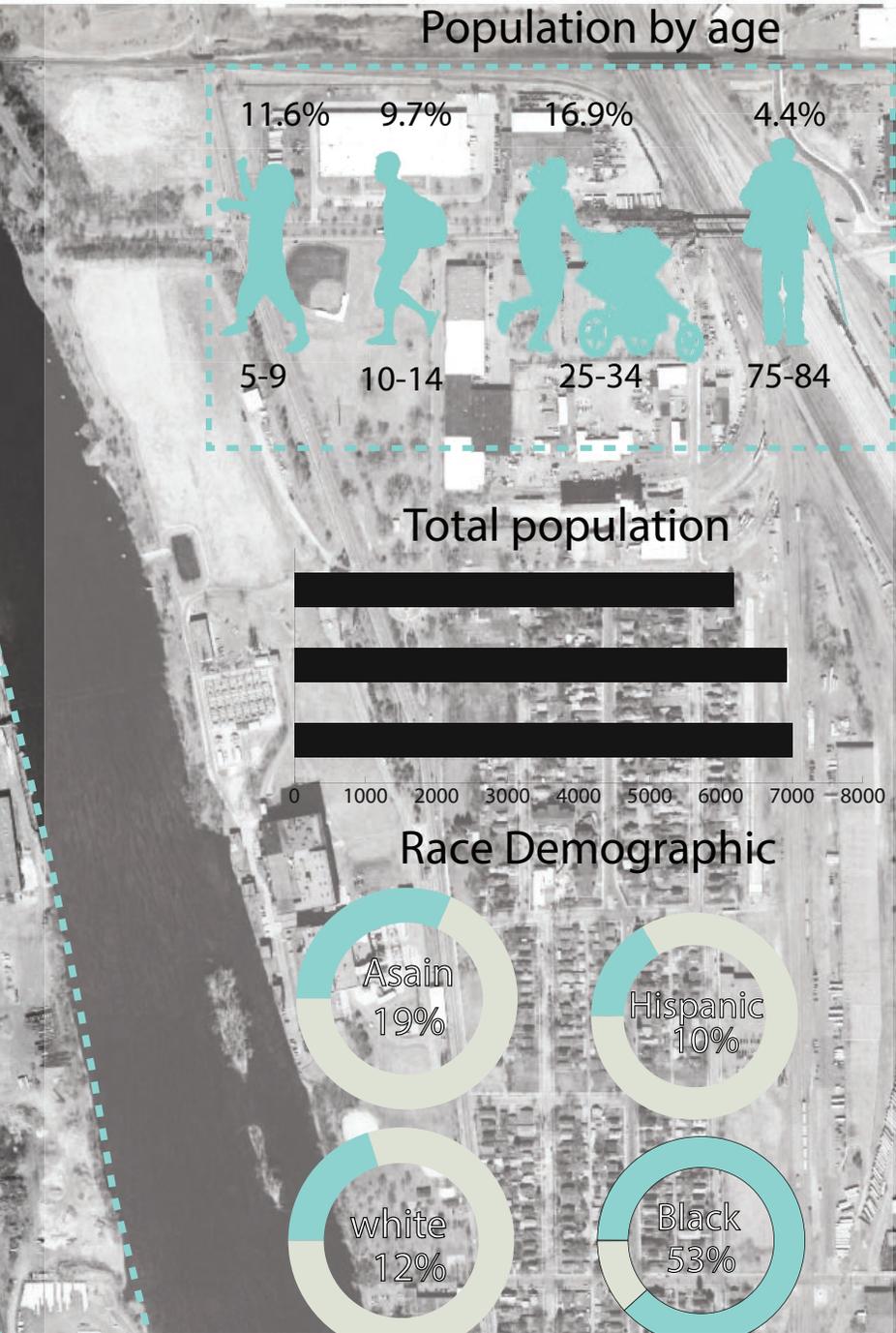
Demographics

The population of the neighborhoods adjacent to the upper riverfront is highly diverse. The historic immigrant base of this area has changed over time, with the influx of new waves of residents to the city. Also consistent with its past, the Neighborhoods (with the exception of some areas close to Downtown) have remained largely blue collar □ with median incomes lower than average.

In recent years, the population has declined slightly. This is in part due to the recession and accompanying foreclosure Crisis, which has disproportionately impacted these neighborhoods, especially on the north side. A number of homes still stand vacant, and home values have declined significantly. Additionally, these areas are primarily low density □ and like similar areas of the city, declining average household sizes (a national trend) can mean declining population, even if there is no increase in vacancies.

In terms of economic activity, there are related stresses on the residents here. Unemployment rates, which are closely correlated with race, are significantly higher than average. Businesses serving the immediate community are fewer and less successful than some areas of the city.





Figures 33

Public Health

PUBLIC HEALTH

Public health issues in this area are a significant concern, due to a range of economic and environmental factors. The following summarizes some of the major public health concerns.

Obesity

The idea plan is to have a positive impact on an area that currently has relatively limited access to the regional park areas compared to other areas of the city and that experiences disproportionate rates of obesity. According to the SHAPE Survey residents of Camden-Near North communities report height and weight values that are considered obese significantly more than adults in other areas of the city. Thirty percent of adults in the Camden and Near North communities are considered obese compared with 16 percent of adults in other areas of the city. The communities along the Northeast Riverfront have prevalence rates of obesity similar to the city overall. Not only does the North Side of Minneapolis experience disparities in obesity compared to the rest of the city, the data clearly underscore the potential benefit of increasing access to parkland to increase affordable opportunities for physical activity for residents who live in and around the UTH area.

The effects of particulate matter and ozone air pollution caused by vehicle and industry emissions have been shown to lead to negative health outcomes like asthma. The worst rates of asthma in Minneapolis among children are in a nonindustrial area in South Minneapolis and the worst rates among adults are located in and around the ATF area.

Air Quality and Asthma

According to the Minnesota Pollution Control Agency (MPCA), the level of air quality in Minneapolis is generally good-to-moderate, except during the warmest months. In 2011, Minneapolis experienced 4 days during which the level of air quality was considered harmful for sensitive groups, and zero days in either of the unhealthy categories.

The area is host to at least four sites with known air pollution-related issues. The MPCA has twelve air-quality monitoring sites in the metropolitan area, two of which are located in Minneapolis. One site is located Downtown and another site in South Minneapolis. No monitoring sites are currently located in the ATF area. In September 2012 with the North Minneapolis Air Monitoring Project, plans were developed to begin to monitor air quality at a site located in North Minneapolis.

The effects of particulate matter and ozone air pollution caused by vehicle and industry emissions have been shown to lead to negative health outcomes like asthma. The worst rates of asthma in Minneapolis among children are in a nonindustrial area in South Minneapolis and the worst rates among adults are located in and around the area.

Noise Pollution and Health

Air is constantly filled with sounds, yet most people would probably not say that they are surrounded by noise. For some, the persistent and escalating sources of sound can be considered an annoyance. This annoyance factor is what has negative consequences on health. Studies have shown direct links between noise and health. Problems related to noise include stress related illnesses, high blood pressure, speech interference, hearing loss, sleep disruption, and lost productivity.

Noise levels for the most part have not been monitored consistently in the ATF area. An independent study conducted by David Braslau & Associates within the ATF zone looked at the noise levels caused by a nearby industry. The Riverview Town homes are located less than 100 feet from a large, concrete-making factory. The 2011 study showed that the factory Noise levels frequently exceeded night and daytime standards for noise pollution.

Unemployment and Premature Mortality

Unemployment is associated with premature mortality, cardiovascular disease, hypertension, depression and suicide. Minneapolis-Saint Paul-Bloomington is sixth in the nation in terms of metropolitan areas with the highest rates of unemployment Among Blacks/African Americans. According to a 2011 Economic Policy Institute Report, the Black-to-White unemployment ratio in Minneapolis-Saint Paul-Bloomington is the second worst in the nation behind Milwaukee. The ATF neighborhoods, particularly the neighborhoods along the west bank with a large proportion of Black/African American residents, experience some of the highest rates of unemployment in the city. Hawthorne and Jordan neighborhoods, which are delimited by two main River way streets, West Broadway and Lowry Avenue, have the highest unemployment rates among ATF neighborhoods, between 13 and 26 percent, compared to 6.4 percent citywide. Based on 2010 Census data, premature age-adjusted death rates are 1.5 times higher in the ATF area compared to outside the ATF area.

Performance Criteria

- Performance Measure: The performance that I want to measure is the sustainability of the site now and after the project is done. This would be looking at anything that has to do with water. The other item that I want to measure is the social well-being of the area and understand how much space is needed for each program element in my project. One of the books that I am using is *Understand and Revitalizing Urban Parks* and in this book it has figures and tables of why people feel mistreated and how this correlates with spaces that people feel comfortable going to.
- Performance Measure Source: The Landscape performance series allows for people to see the necessary qualifications in order to have a sustainable site. It also helps with understanding how to calculate how much everything is. There is also multiple websites that help students figure out this number sooner and also inform people what are the best practices in your area
- Performance Analysis: The type of analysis of understanding the favorite draws of my site. With this I would be able to understand the best spaces that people that come to the space. I also am doing geolocation on where people have taken pictures and uploaded them on social media
- Performance Judgment: I think the ultimate goal would be seeing how many people would arrive at my park and how far people have traveled to see it. Another way to measure would seeing what the qualifications are for having a LEED certified project this way I can further label my project with that accreditation

Thesis Appendix

Bibliography

Gehl, J., & Koch, J. (2011). *Life between buildings: using public space*. Washington, D.C.: Island Press.

The book was used to understand aspect of space between infrastructure. This was also used to see different techniques that can be used to create economic benefit for the surrounding communities.

Jacobs, J. (2011). *The death and life of great American cities*. New York: Modern Library.

This book was used to look at chapters regarding use of city neighborhood parks, city neighborhood, and the kind of problems that are in a city

Schicketanz, P. (2000). *Phyto*. Frankfurt am Main: Umschau-Zeitschr.-Verl. Breidenstein.

This book was used to examine key qualities in techniques in phytoremediation. This book also helped on different sites that were considered to be brownfield site and the steps of legislature that a city would have to undergo.

Upper Harbor River Terminal: history, status & options. (1994). Minneapolis: The City.

This book was used to further understand the site and what was existing before and after industry. This gives a better grasp on what the surrounding area is undergoing