Urban Design Assessment

New Urbanism as a Modern Tool to Reconnect Society

Tyler Harnisch . North Dakota State University . 2016

Department of Architecture and Landscape Architecture

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Urban Design Assessment

Project Title and Signature

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Tyler Harnisch

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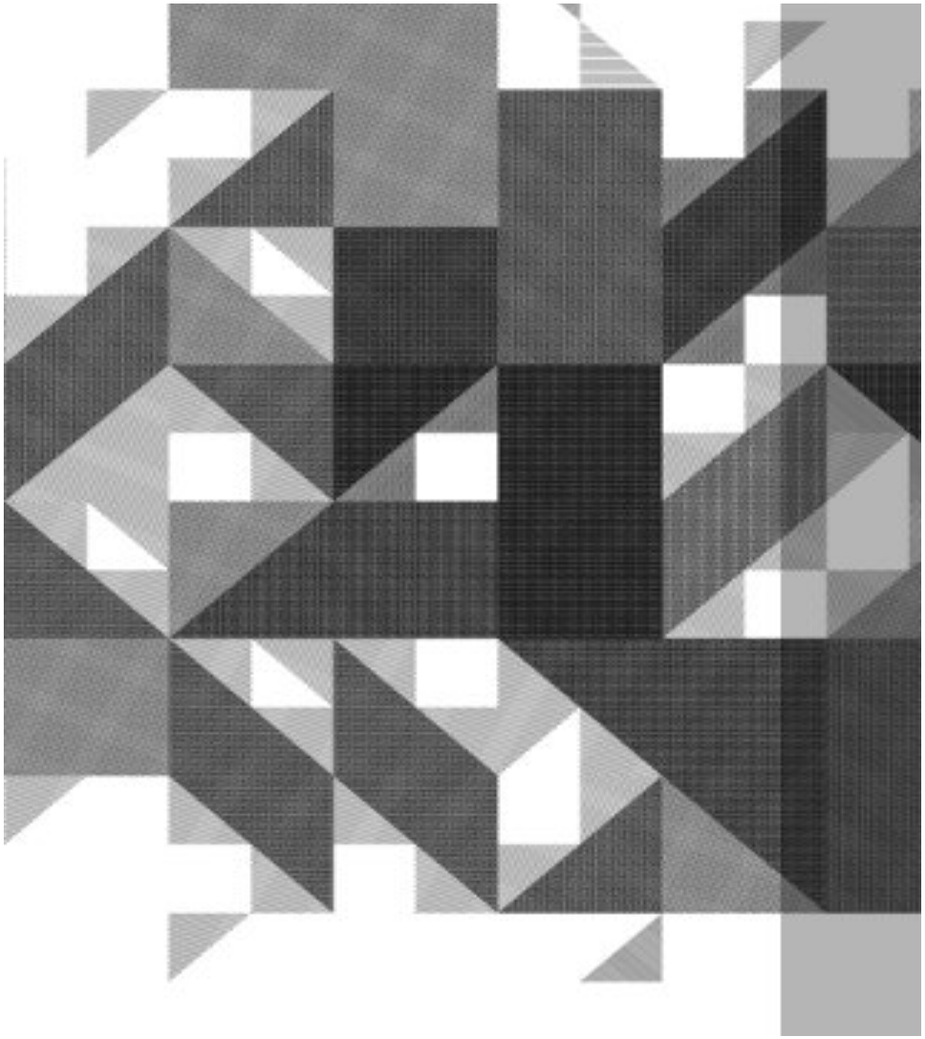


Thesis Abstract

The concept of New Urbanism is something of a new ideal throughout the last 20 years or so. Communities have begun to move away from the sprawled suburban environment into more closely knitted communities, environments that are easily accessible for a wide variety of participants and users. By accepting the idea of decreasing urban sprawl we need to consider the implications of proper design in a more concentrated space. To provide appropriate amenities within a more condensed environment one needs to place more attention and consideration than just downsizing current concepts and designs.

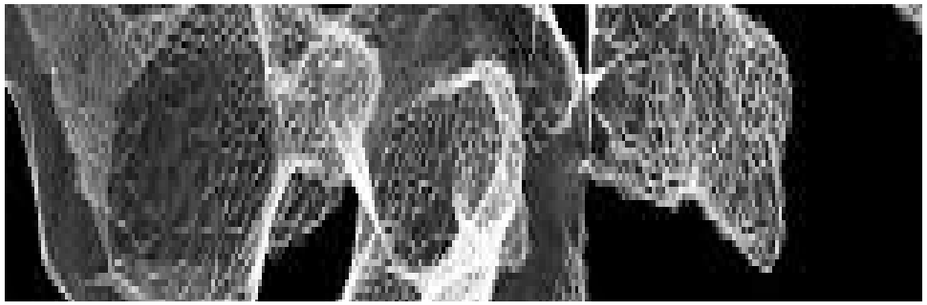
The main purpose of this thesis design project is to observe and implicate specific cause and effect principles that have the most effect on efficient and effective urban design. By correlating specific passive design factors, such as walk ability, orientation, solar gains, and wind factors, we can simulate appropriate design solutions that maximize sustainable concepts while not losing the efficiency or design guidelines that help urban development's strive.

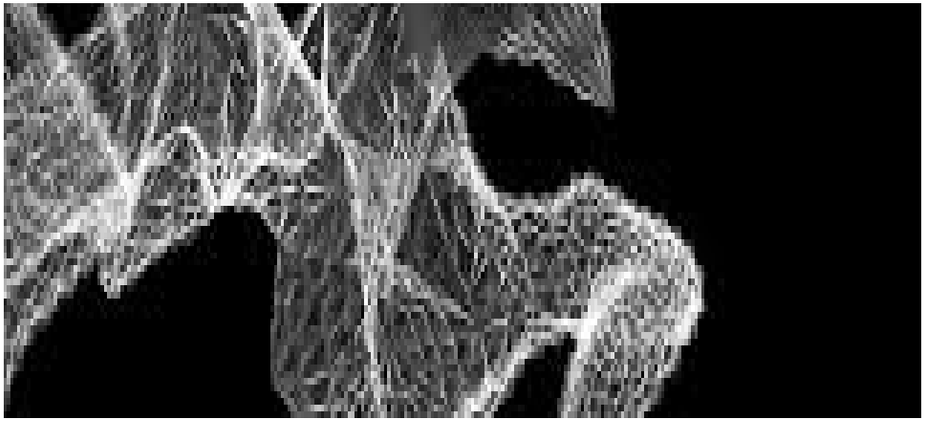
Unifying Idea

Throughout the past century communities have been constantly evolving. From the basic design concepts of the Wild West, limited facilities or buildings centralized for easy access, all the way to the Urban sprawl that we are currently trying remedy, due to increased cost of resources and land development. New Urbanism was a concept that arose in the early 1980's that specifically targeted the idea of being able to access multiple facilities and needs by simply walking, instead of organizing and designing cities based off of the automobile. Without even thinking about it the main objective of New Urbanism was to minimize the use of natural resources and the depletion of usable space.

By incorporating basic design ideals of New Urbanism, such as smart growth, environmentalism, and regionalism we would be able to take efficient city and community development to the stage of city evolution if we would include passive design principles. The idea of walkable cities was to create an environment that did not revolve around the automobile, which in fact leads to the idea of sustainable design in a very simple sense. By collecting data and research we can correlate smart design with sustainable principles.

Including passive characteristics into data collection can give us ground work that tells us indefinitely if sustainability and passive ideals actually lead to more efficient and therefore more livable cities or if those concepts are just lavish pipe dreams that actually have minimal effect on our daily lives. By utilizing state of the art software and technology we can create a one to one correlative study that can pinpoint the effects that wind studies, solar gains, passive orientation, internal cooling strategies and other passive concepts actually have on an environmental system the size of a community instead of just looking at spaces and buildings as individual pieces, but now investigate the community as a whole.





After the collection and analysis of the data my overall design idea is to create a modern example of urban design. One that meshes the idea of sustainability with usability. The goal is to be successful on both fronts without sacrificing in one area over the other. By doing so we can evaluate the benefit between technology and simplistic design. No longer are the two ideas separate but continuously merged as one complex entity.

To explore the capabilities of utilizing a technical software such as GIS to it's complete potential the scale of the project needs to be of an adequate size and expanse.

This leads to developing a project that encompasses a larger variety of mediums and typologies as a whole. Therefore the initial project typology will be:

Urban Re-Development (Passive Emphasis)

- Transportation and Infrastructure
- Residential
- Multi Family
- Single Family
- Commercial
- Renovation, Addition, and Adaptation
- Education
- Recreation

Compared to most design projects, re- development affects an entire sect of individuals, in this case it will affect an entire community along with outlying members of the expanded area of focus.

Project Typology

The project typology is to encompass an entire urban development, from infrastructure to residential and commercial units. The idea is to utilize as much multi-disciplined buildings in order to create a unified and efficient concept.

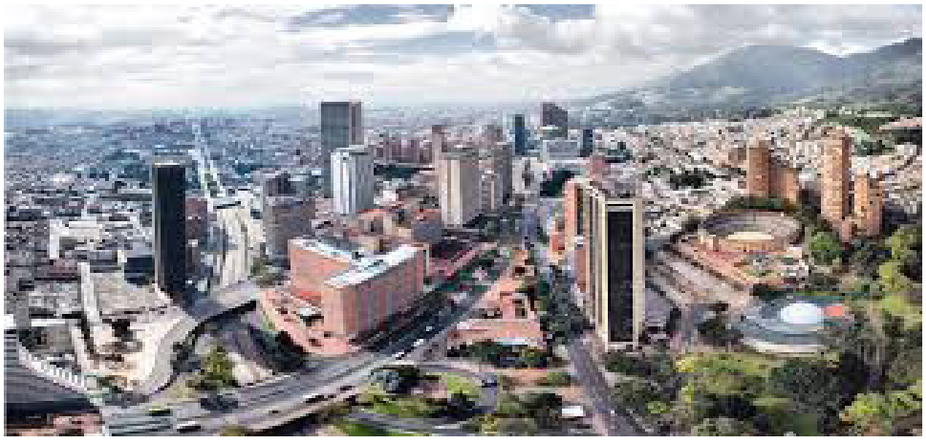
By utilizing the concept of urban design we are able to link many multi-faceted building ideals into a more singular design focus. Instead of treating the project as multiple designs, we can manipulate our general focus by classifying our design guidelines and principles under three major areas:

1. Major Development Regeneration

2. Passive Design Utilization

3. Manipulation of Technology

By creating such classifications we are not only referencing the major project typology but creating a reference point for the methodology and goal classifications that are needed throughout the thesis preparation.



Typological Research

Vancouver _ Infrastructure Development

Bogota _ Urban Transportation

Rio de Janeiro_ Sustainable Communities

Vancouver *Infra-Structure*

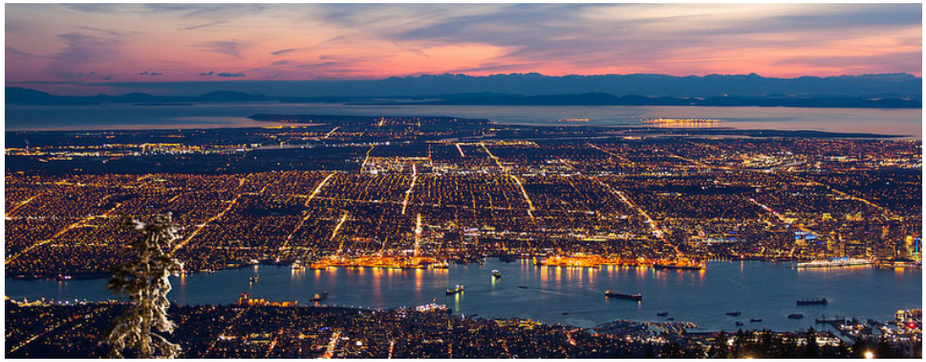
Case Study 1

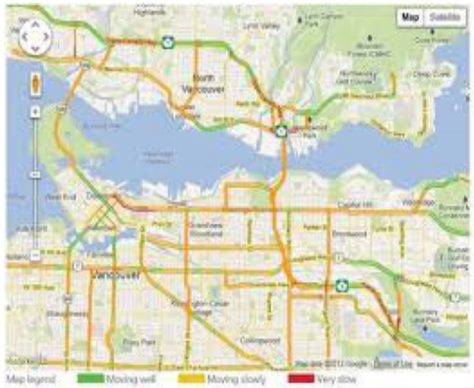
As Vancouver continues to grow it becomes more and more sought after as a viable model of new and old. Vancouver encompasses many newer ideals and technological advancements when it comes to transportation and the layout of infrastructure, especially in New Urbanism terminology.

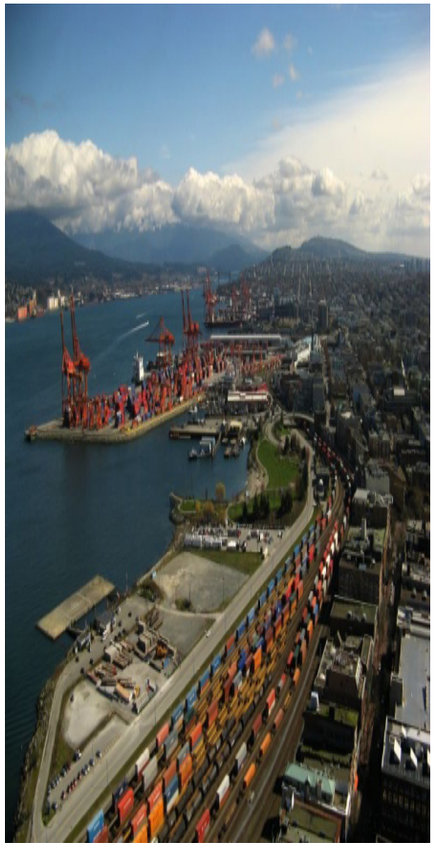
Though Vancouver can be stated as a major metropolis it is hard to believe that it does not have a single freeway passing through or traveling into the downtown area. The city commission elected to keep the downtown area a more pedestrian focused environment.

Along with the pedestrian mindset, Vancouver also boasts the worlds second largest automated light rail system, the largest in North America.

In order to develop or even re-design an urban and/ or city environment, one needs to understand the importance of the basic infrastructure. Understanding the infrastructure is completely different than letting it completely engulf the community and the traits that make such areas unique.







Bogota *Urban Transportation*

Case Study 2

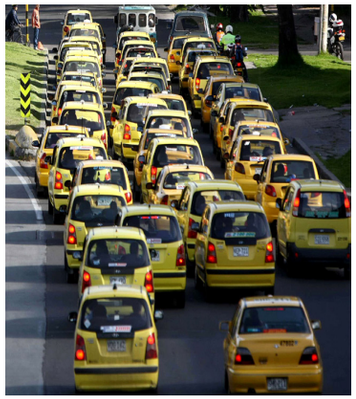
Bogota, Colombia. Along with most Central American countries, Colombia has had detrimental issues with pollution and infrastructure related complications.

With all of that said, in 2014 Bogota won the City Climate Leadership award for urban transport. Bogota took on a major challenge of designing and upholding a sustainable mass transit system. The system called BRT (Bus Rapid Transit) along with their E-taxis project has been the major reason Bogota has reduced their carbon emissions by almost half in less than 5 years.

The transit system is one of the most successful yet it is not a metro or a tram system. According to the Urban Mobility Observatory the system helps approximately 5 million people commute a day, by diesel bus.

Not to be undone by themselves, Bogota took the transportation idea to another level when they put into motion a fleet of electric taxis back in 2013.

Even in communities such as Bogota, Colombia we are able to see the benefits of sustainable urban design. By creating affordable transportation, they are not only helping the environment but putting value back into the community as a whole



Rio de Janeiro *Sustainable Communities*

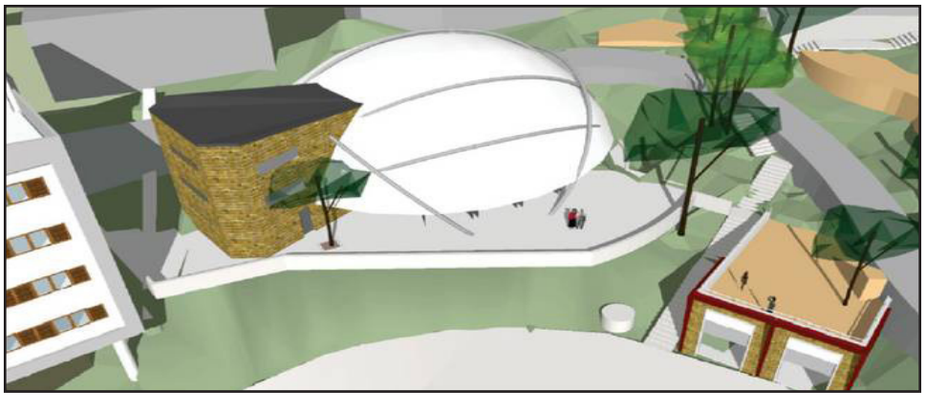
Case Study 3

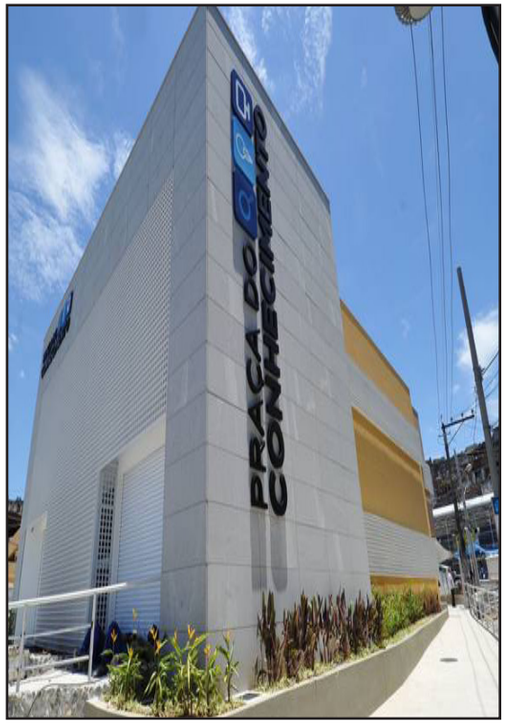
When one thinks of Brazil it's hard not to think of the slums of Rio de Janeiro while your at it. The city new this fact all to well, so they decided to do something about it. They did such a good job with cleaning up the violence and drug issues that they are no longer on the list of most dangerous cities in the world, a list they use to be on top of.

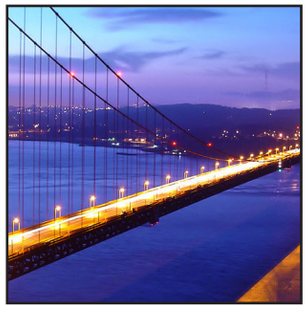
The government also announced a plan to turn the favelas, hostile environments that acted more like incubators for drugs and violence, into actual neighborhoods by 2020. The plan is providing assistance remodeling individuals homes and installing new infrastructure and housing developments.

As part of the favela program the area is testing out a prototype system that develops green buildings and uses the area as a test site for other developments. By incorporating sustainable cutting edge technology the government is providing the resources to continue to grow in a positive direction instead of dwindle back to where they came from after everyone looses interest.

One major system they have in place is the trash for light program, which encourages individuals to bring in recyclable materials in order to get discounts on electricity and service bills. By creating logical incentives the program has become almost self sufficient.







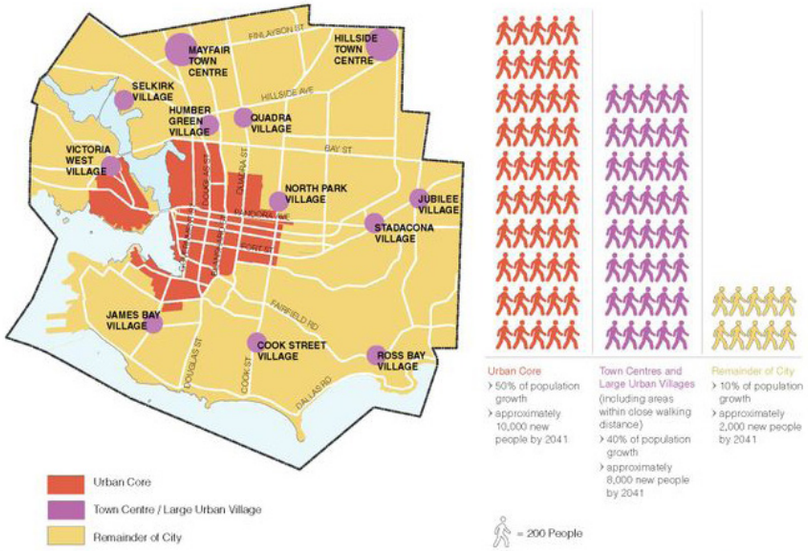
Major Project Elements

Since the expanse of the project encompasses an entire community or development the major project focuses or emphasis are:

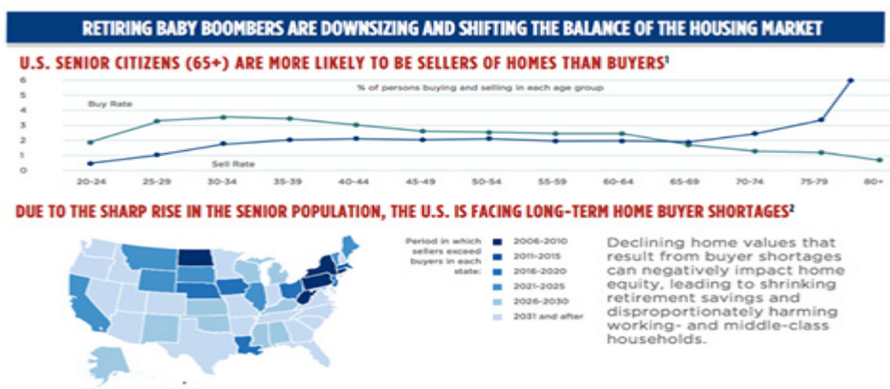
- Internally managed infrastructure that can continually adapt
- Passively designed community spaces
- Gardens, recreational plazas, learning environments
- Incorporated transportation nodes
- Multi and single family development areas that intertwine with commercial and multi-use office spaces in order to create a minimally invasive design that allows for appropriate design flow and spatial relationship

The major concept is to incorporate data from passive design correlation and development planning and layout strategies in order to create a modern urban design concept and layout.

By utilizing technology we can than analyze different design problems and solutions in order to make efficient and therefore effective decisions.



Info-graphics provide visual information that users within a city environment are always growing and



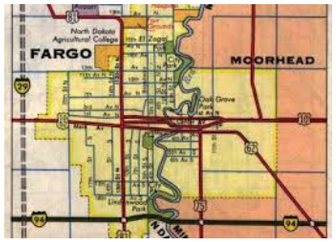
Development of urban areas are drastically changing due to the change in the socio-economic structure, generations are being redivided.

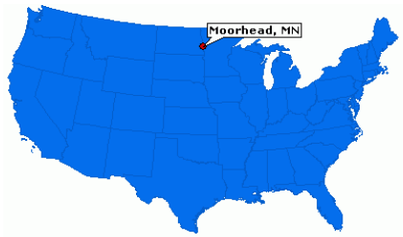
User Description *Client Information*

Since this typology reaches to all of those clients and users that make up a traditional city or urban development the data needs to be taken into consideration regarding how many utilities and facilities are needed in order to accommodate a small to moderate size development. Once the size and relationship of the development is decided we then need to take into consideration the sustainable and passive concepts in order to make the appropriate change to the standard thought process of a traditional city layout with regards to amenities.

Entire Community/ City Development

- Residential Occupants
- Government Officials
- Commercial Owners and Employees
- Recreational Staff
- Transportation Staff and Frequent and non-frequent travelers
- Restaurant staff/ employees/ and patrons





The downtown environment of Moorhead is in shambles. Enough that it leads it to be a perfect contender for a modern redevelopment of urban sustainability with a major focus on passive design. This plays a major role due to our extreme climate changes, we are able to harness multiple different strategies from geothermal, solar, and Geo-graphical orientation. We can experiment with multiple different variables in order to create an efficient and effective city model while proposing modern design concepts in order to revamp a trampled and disheveled down town center.

By utilizing Moorhead we can not only provide necessary revitalizing to a community in need, but we can also prove the credibility of using technology to enhance and optimize multiple location sets. We can not only analyze information but show viable solutions to the issues at hand.

Project Emphasis

Beyond all possible outcomes and goals for this comprehensive project there remains a few ideals that seam to come out on top. Ideals that seem to emphasis in our daily lives and in the lives of society as a whole.

- ***Passive Design***
- ***Usability***
- ***Efficient Design***
- ***Context Related***

Society has been obsessed with the idea of sustainability. For all intensive purposes, it's a good thing. The worst part about it though is it is just a term thrown about without care. No one really tends to spend to much thought or time considering how or why, they just use it as a popular term to get societies attention.

The areas my thesis will focus on are areas or ideals that encompass sustainability and a greener mentality but also have actual rigidity to themselves, instead of just being flashy and meaningless. Passive design allows us to utilize nature in a way that not only produces results but increases efficiency and capabilities ten-fold.

If thesis ideas and problem statements don't do anything but help society realize specific down falls of specific communities, than in themselves they are successful.

Beginning with the assumption that New Urbanism is based off of the concept of walk-ability and pedestrian oriented city planning. By making this inference I am assuming there will be a direct correlation between passive design strategies and New Urbanism concepts. My goal is to show, and or prove that the more passive elements within a design project, area, or region will lead to a more pedestrian focused solution, therefore creating a more successful design envelope. By doing so we will positively change the way our environment interacts with our overall design goals.

- To explore the relationship between urban design principles and passive design strategies
- To incorporate experimental observations and data into logical and usable design models
- Produce an urban design for a deflated city center that correlates information and design principles in order to relate ideas and concepts in a fluid expression of a modern urban area.

Since my design concept has developed more to the side of technology and using specific systems to correlate parametric data my overall goals have shifted slightly. I want to be able to create a prototype system that can be adapted to any design problem. By utilizing this prototype designers will be able to calculate specific data quickly and efficiently. Designs will now take into account various forms of raster data such as, geothermal, economical, socioeconomic, and so on.

Goals of Thesis Project

Along with the overall goals of the thesis a major area of importance is the idea of creating significance in more of a social environment not only the built. By utilizing a prototype to analyze specific data we are simultaneously evaluating data that responds to a more social level of interaction.

Creating efficient and logical design solutions directly correlates to the human condition. Making the design more about the user and the effect on the user than the environment itself. The ability to create a system that would manipulate how one interacts, therefore how someone perceives a space would allow the designer the ability to rationally delegate spaces for specific uses, function, and therefore specific emotions. Design would than take on an entirely new persona, one that allows individuals to interact at a basic personal level, too create what most strive to produce through human interaction.

To be able to create a system that would revolutionize the way designer would interact with information would be ideal. Allowing multiple individuals to get the most out of every problem statement, this would create a level of intimacy with a project that would go beyond the academic and professional realms completely.

The idea of this thesis project is to see and to be able to quantify the concepts of using technology to create modern and efficient means to designing or re-designing urban spaces. By creating a prototype within the framework of layers and data points, one is capable of formulating concepts and solutions that directly relate to specific problem statements. The initial system was created to utilize geographical information systems or GIS. By utilizing such systems one is able to correlate multiple data sets within a fraction of the time and is capable of seeing overlaps within the information. The utilization of multiple layers provides the user with a level of control or purpose. As with many things not all sets of information directly correlate with one another. The purpose of the software is to extrapolate the correlation in either a direct or indirect fashion. Soil layers for example are now within the same realm as property use and to take it further we can see how property use, soil layers, and wind calculations now affect one another. By creating such a system we can input external design alternatives and see how they can be affected by all of the collected and inputted data sets. In short we have the capability of fast tracking design decisions based on numbers instead of pure opinion or want.

To create a link from the analytical information to positive and useful design we need to find a deeper bridge or connection to where we want to go and where we have come from. To do so phenomenology seems to be a direct path to achieve meaningful design. Phenomenology allows us connect paths of information that seem entirely separate or completely unrelatable, similar to the hopes of the created prototype software system. While phenomenology explains the experience it can also bridge the gap between new or different descriptions of something. This therefore allows us to connect the idea of looking at something in a new way with the possibilities of phenomenology and the GIS prototype concept.

Phenomenology

Throughout the modern age many definitions have been linked to the term or idea of phenomenology. Every discipline from philosophy to medicine has their own, more specified, description of what phenomenology is.

Theoretical Premise

Phenomenology comes from the Greek word Phainomenon and Logos. Phainomenon means "that which appears" and logos means "to study". The basic explanation of phenomenology given by the Merriam-Webster dictionary is the study of the development of the human consciousness and self-awareness as a preface to or as a part of philosophy. Going further, the medical definition within the same dictionary describes phenomenology as the way in which one perceives and interprets specific events and one's relationship to them in contrast to both one's objective responses to stimuli and to any inferred unconscious motivation for one's behavior.

"A unique and final definition of phenomenology is dangerous and perhaps even paradoxical as it lacks a thematic focus. In fact, it is not a doctrine, nor a philosophical school, but rather a style of thought, a method, an open and ever-renewed experience having different results, and this may disorient anyone wishing to define the meaning of phenomenology" Quote by Gabriella Farina, a Professor of Philosophy at the University Roma Tre, Rome.

Phenomenology can therefore be perceived as an idea that is always changing depending on the focus and the realm in which it is being evaluated within. Understanding phenomenology through the ideas of architecture alters the concept or definition, we can derive that within Architecture, phenomenology is the description or explanation of a built environment and the experience that one obtains through the interaction with such a space or environment. Experience, like most things, is not the same when you compare it from multiple viewers' perception. Therefore the experience of architecture, the design and execution of built environments, carries an infinite amount of possibilities, dependent on specific groups of individuals and characteristics of those individuals. The basic principle of phenomenology seems to point towards the idea of multiple answers, none being more right or wrong than the next, just opening up a virtual dialogue that promotes the investigation of experience and ability of specific objects or spaces to create a viable response. There might be no right or wrong answer but we need to realize that our evaluations of our experiences alter our overall ideas and therefore the ideas of individuals around us.

During a seminar at the University of Houston in 1984, Dalibor Vesely spoke about phenomenology, and specifically the relationship it has with architecture, hence the transcript holds the title "On the Relevance of Phenomenology". Almost immediately Vesely states that the term phenomenology is not what is important or the actual discipline of phenomenology, but what is important is the questions phenomenology raises in the areas of culture where we as individuals work. Vesely looks to link architecture and everyday occurrences with the expansion of phenomenology as s starting point of the conversation. Phenomenology begins to be a relevant term only if we establish the ability to link the cultural persona with the experience that is related or correlated to that experience.

Phenomena, to some is the root of phenomenology. Phenomenology can be described as the study of phenomena, or simply stated the study of experience. Society seems to complicate ideas and concepts in order to fill a void, or give the false characterization of intelligence. The notion seems to be completely reversed from what reality should actually be striving for. If one is able to explain an idea, an idea that is far beyond the average comprehension, in a simple a concise manner, than what is stopping us from understanding that person is the embodiment of intelligence? The concept comes full circle when juggling the multitude of definitions and explanations of a simple concept. Phenomenology can therefore be understood simply as the study of experience and the characteristics of that experience related to anything beyond and including our consciousness.

The Link to Modern Design

Modern society as of recent is overly focused on fads or buzz words. Society throws out terms like green, sustainable, efficient, holistic and organic in order to give a false sense of importance. Modern culture always needs to feel as if we are progressing and revolutionizing standard ideas and techniques in order to feel like we are accomplishing something, the idea is to always move forward or else we will fall back, we can never reach a stand still. As a whole we need to understand that in order to progress and move forward we need to study and understand our past, our culture and historical relevance are major factors in who we are and what we are

capable of accomplishing. Successful progress takes the shape of a cyclical system, a system always learning from itself and looking back on previous information, not a simple linear progression through time and space. In order to improve on the past and continue to make progress we need to establish and recognize the link that is created through space, or the void between objects and ideas. The ability to link the most obscure objects allows us to create our own thoughts, and allows us the opportunity to evaluate those thoughts compared to link, what is being linked, and what is beyond the link.

Classical or even pre-modern architecture never created a rift between disciplines; the possibilities seemed endless because areas of expertise were never specific or clarified by titles or realms of knowledge. Different realms of consciousness were readily allowed legitimacy, the communication between different realms, realities, and grounds allowed for the open communication of an era. This philosophy no longer manages the majority; most do not relish the idea of disciplines being merged into a collective melting pot of sorts. Modern culture delegates that we need separate disciplines, we need individuals that are experts at specific ideas, specific tasks. We no longer have the want to create a society based off of the Renaissance man, a polymath, a person whose expertise spans a significant number of different subject areas. We refer to the ideal as the Renaissance man because we are making a direct link to the specific period in time and history that we allowed knowledge to grow in more of a free and less grounded state. Our goal was to enlighten the minds and bodies of a civilization, the more knowledge one person could possess or understand only led to more knowledge that could be shared with the masses, or the collective consciousness.

Phenomenology needs to be utilized in our everyday design, from material design to the creations of built environments. The gap that needs to be filled is the connectivity between cultural ideas throughout the generations along with the modern persona of creating something new, advancing civilization forward. Why do we continually have the notion to create, to create without a purpose develops spaces and ideas that are harsh

and analytical, versus a space that responds to people at a personal level? By responding to individuals, or developing for the experience, spaces can transcend the traditional concept of use, and can be iterated into our unconscious mindset, therefore manipulating our experiences and the reactions of our experiences at a basic level. Historical culture is a diminishing ideal within many modern societies. The idea that we cannot learn new concepts or iterations from the past is creating a weak and divided connection to what clearly helped develop the modern era.
Infusing culture within our thoughts and ideas allows for better developed mindsets, mindsets that allow us to bridge the gap between multiple things that regularly seem consumed by the distance or uncommonness between them. Culture allows us to understand that the distance between seemingly unconnected subjects gives us the freedom to be creative, in that creativity we are expressing our understanding of what came before and what might come next.

If we look specifically at architecture and specific projects we are able to conclude a few main thoughts. Architecture that does not derive itself from the past, or some connection to historical culture, does not emanate deeper within individuals as a whole. Phenomenology within design can be boiled down to the ability of a built environment to evoke an experience, and therefore allow the experience to interact with multiple levels of our reality or the realm we reside in. If we continue to expand with haste we will eventually create an entire environment that has no meaning and cuts all ties with deeper emotional sense, we will no longer have spaces of worship that touch us in unspeakable ways. Places of sentimental value will be lost forever, and we will never know what it is too experience a place that alters how we experience everything around us, even though there is connection between all things on some level or realm of reality we will have successfully deleted every one of them, purely because we refused to use our past, our heritage and culture, to shape our future.

Architecture is the simple idea of an environment that is designed and created. Experience is the basic connection one has with the world and objects around us. Phenomenology gives us the ability to link multiple

different realities, realities that think and understand in different ways, and provides us the opportunity to comprehend the conversation. Without the understanding of phenomenology we are destined to fail at creating anything that can speak beyond itself.

Summary

The basic unifying idea for the redevelopment or design of urban spaces using data collection software is the ability to connect points of interest through a new concept or idea. As discussed phenomenology has the capability of explaining or divulging different sensory experiences within our consciousness along with how we interact with the built environment. Utilizing this path of theory one is able to make links that are either obscured or even not evident. By adapting the connection between phenomenology and the creation of modern architectural pursuits we can clearly see the possible abilities of a system that uses data points to link deeper to design ideas and efficient solution design. It is no longer an environment where we choose to either use logic or emotion, but the two can be intertwined in order to get the best results of both schools of thought.

Literature Review 1

The Thinker and the Painter by Jacques Taminiaux
Translated by Michael Gendre in "The Merleau-Ponty Aesthetics Reader"

Jacques Taminiaux Background

Jacques Taminiaux is a Belgian philosopher born May 29, 1928. Jacques Taminiaux has been a professor since 1989 at Boston College in Chestnut Hill, Massachusetts . He studied philosophy at the Universite Catholique de Louvain (Louvain-la-Neuve, Belgium). His major focuses and areas of research interests are on phenomenology, aesthetics, political philosophy, and contemporary continental philosophy. Together with Herman Van Breda, he worked on the Husserl-Archives Leuven at the Higher Institute of Philosophy of the Catholic University of Leuven. In 1977, he was awarded the Francqui Prize on Human Sciences for his work on the history of philosophy.

The Thinker and the Painter

Taminiaux wrote the critical essay, "The Thinker and the Painter" in order to create a connection or link. He believed that with-in Merleau-Ponty's eyes there was common ground, or a link between the activity of a philosopher and that of a painter. This ideal suggests that in some basic form, there is a correlation that creates common ground in which both the ideals and devotion of philosophy and painting can be related and therefore communicate with one another. This simplistic notion seems to be contradicted at a base level, all the way back to a pioneer of Western philosophical tradition, Plato. Plato maintains that within the Republic, to paint corresponds to the idea that one refuses to think, in the same thought the activity to think requires a level of detachment from perception and that which is perceived. To the painter all importance comes from the element of perception, to relay and manipulate ones perceived environment. Plato goes on to explain that to paint is to refuse to think, the painter is par excellence for he is the one who takes sides with appearances, which are labeled adverse to being. A painter copies the appearances without ever taking into consideration the essence, he deals with copies without ever being concerned with the models they come from. The painter fails to recognize that beyond the surface, it is possible for the mind to have access to the clear and peaceful ordering of intelligible ideas, but to do so the mind must be detached from the sensible realm. As to do this is to access

the being beyond appearance, to scrape away all ambiguities of the sensible framework and to see and understand what is actually there. To Plato the Philosopher is capable of clearly understanding that which the painter only tries to capture and reproduce, but within this framework of thought and within doing so the painter allows himself to then be led astray by something that does not exist, the non-being. Being that the painter is only fascinated by the sensible appearance of things, he then only creates and produces reflections of reflections, having no meaning or definition in the sensible realm.

Perception

Taminiaux states that Merleau-Ponty understood to think does not mean to turn away from the perceived but embrace it and allow it the status of the first ground. He embraces the idea of dwelling within the boundaries of perception, to be able to listen to the echoes, to interrogate it, and to always go back to what is perceived. In Taminiaux's words the perceived never presents itself as some strictly individual feature, some singular form, or some incomparable color. Instead perception is known to generalize along with providing a stylized ideal. When dealing with the perception of color we do not see a specific color but a variation or an example of color, it becomes more non-specific. Along with the stylization, the example given was a single tree, we look at the tree as a single form at the same time that we correlate it to a type of tree. In this state we contemplate how it connects to all other trees, creating a link to a larger body of information. In addition to the overlapping of particular and general, the perceived attests to a surprising overlap of our fellow beings and the "I," a pluralistic intertwining of multiple subjects. Taminiaux goes on to reveal that the profiles of a specific thing or object stay the same for one with an unchanged view or vantage point yet when viewed through a different point from an individual with different thoughts or beliefs an entirely different profile of the thing is created or manifested. This point directly corroborates one of Husserl's main objective mottos: "We see and we understand not simply as an individual among other individuals, but as individuals along with others." Simply stated, our perceptions of things and known objects are coincidentally related not only to our own ideas but also those of individuals and groups that occupy the same realm and space.

Painting

As stated earlier within the essay Taminiaux described painting to be merely the act of representing a reflection with a reflection, not attempting to disregard the need or importance of painting but to put it within a platonic view point. Taminiaux now dives deeper into the theory behind the painting when he links the idea of overlapping in perception and how it corresponds to multiple areas, the overlap. Painters have often said that the outline of a painting is derived by an inspection of the thing within nature. No less frequently it is stated that the outline is found within. Linking all of these strategies together it seems as if the painter paints not only what is visible but also the intertwining of the visible with the seeing. Taminiaux then proposes the view that the dimensions of the visible are inseparable from the seeing individual. This goes as far to relate to the echoes that are provoked in our bodies from such encounters are as much our bodies reacting to the gathering of those dimensions and specific sets of information. These echoes are what paintings strive to make noticeable, creating a link between the overlapping, the visible and the seen. Taminiaux goes on to explain that the painting or a picture is therefore not an unreal double of reality but it manifests to our gaze the unmistakable schema of the life of things within our bodies. Giacometti, an artist whose work seems to only resemble minutely the common perception states, "What I am interested in when I look at a painting is the resemblance, that is to say what for me is resemblance: what allows me to discover a little bit of the external world." Purely by his definition he is recognizing a link of overlap, a connection of something beyond the reflection of a reflection. In this state the work of the painter is not about bringing our view upon an unreal double, but what Merleau-Ponty calls the "imaginary texture of the real, creating yet another overlap, one with the real and the imaginary. Using this definition of the painting creates more of a parallel between the work a philosopher and that of a painter. They are no longer part of separate realms but connected through the overlap.

Personal Take

Through the thoughts of modern philosophers such as Plato we are held to believe that there is a complete distinction between the thinker and the painter, hence there are minimal connections between the two at best. After examining this text it seems to muddle this once profound ideal. In both realms there consists overlap, the thought that an individual's thoughts are formed and are altered due to the others around us. We see this as well in the idea that was is seen and what is visible is not always entirely different yet not completely the same. Painters should be allowed the same grounds of thought when using a painting to enrich and therefore speak about the external world along with creating a vision of what seems to be just a duplicate of a possible perception.

Literature Review 2

On the Relevance of Phenomenology by Dalibor Vesely
Transcript revised and edited by Dalibor Vesely and Mark Schneider for publication.

Dalibor Vesely Background

Dalibor Vesely was a Czech-born architectural historian and theorist. Vesely studied engineering, architecture, art history, and philosophy in Prague and Munich, after which he received his PhD from Charles University. Dalibor was influential through his writing and teaching in establishing the role of hermeneutics, the theory and methodology of text and interpretation, and phenomenology as part of the discourse of architecture and of architectural design. Vesely taught some of the current leading architects and architectural historians, including Daniel Libeskind, Alberto Pérez-Gómez, and David Leatherbarrow to name a few. He taught at the University of Essex, the Architectural Association in London and at the University of Cambridge in the Department of Architecture. Most recently, up until Vesely passed away in March of 2015, he taught Architectural History and Philosophy at the University of Pennsylvania, and was an Honorary Professorial Fellow at the Manchester School of Architecture. In 2005 he was the recipient of the CICA Bruno Zevi Book Award granted by the International Committee of Architectural Critics. In 2006 the Royal Institute of British Architects honored Dalibor Vesely with the Annie Spink Award for Excellence in Architectural Education. The primary volume of Vesely's work would fall under the idea of cultural hermeneutics and his exploration of the historical background of modern science and the changing nature of representation.

Relevance of Phenomenology

Phenomenology comes from the Greek word phainomenon which means "that which appears" and logos which means "study". Phenomenology is therefore stated as the philosophical study of the structures of experience and consciousness. "A unique and final definition of phenomenology is dangerous and perhaps even paradoxical as it lacks a thematic focus. In fact, it is not a doctrine, nor a philosophical school, but rather a style of thought, a method, an open and ever-renewed experience having different results, and this may disorient anyone wishing to define the meaning of phenomenology", stated Gabriella Farina, a Professor of Philosophy at the University Roma Tre, Rome. Dalibor Vesely describes the

resonance of phenomenology to be directly correlated with architectural studies instead of a topic to be merely glanced at with passing thought. Throughout the seminar held at the University of Houston in 1984, Dalibor Vesely fields questions regarding phenomenology and its' relevance within architecture.

"Why should an Architect study phenomenology? What is its value and relevance for the current architectural reality? One may see it as something which is perhaps too sophisticated, complex, and demanding: but the irony is that phenomenology is a tendency to see things in the way that people use to see them, as designers or painters." Dalibor goes on to state that phenomenology is an attempt for one to understand from the inside and not do dismiss or ridicule from the outside, the whole spectrum of the current experience which we generally call "reality." Reality is subjugated by many differing ideals and opinions while never giving a clear and precise definition. Reality is romanticized as the conjectured state of things as they actually exist, rather than as they appear or might be imagined, included within a concept that reality includes everything that is and has been, whether or not it is comprehensible or has the ability to be proven or observed. Reality therefore differs depending on the population that is viewing or understanding it, as Vesely states, reality of a specific society is actually a reality within than society and nowhere else.

Phenomenology is not a philosophy, as such, but tendency to restore to the modern situation a global and consistent conceptual direction. One that can think of it as an inevitable dimension or hygiene of the modern mind. Dalibor specifically states that the term phenomenology is not what is important or the actual discipline of phenomenology, but what is important is the questions phenomenology raises in the areas of culture where we as individuals work, as architects, that understand our surrounding context in more of a relation of planning methods and regulations combined with the conceptual nature of symbolism, culture, and meaning. Vesely describes this combination or merging of multiple layers of questions as being thrust into a second level of phenomenology. The second level or form of phenomenology pertains to the ground upon which

the conflict can be understood. The ground for which the conflict can be understood changes depending on the person and emphasis that you are focused on. The ground state allows individuals within a specific realm or ideology to communicate with ease, the difficulty comes when trying to explain a specific idea to multiple disciplines using the same information. To explain an idea or to communicate between a physicist, a philosopher, and a psychologist one has to consider phenomenology. Can individuals of different realms actually communicate and understand one another? The issue these questions raise is the fact that there is a lack of central reality, an equivalent of polis in the Greek sense. TO each person their central reality differs slightly depending on their experiences and views. So if this is the case and there is no central reality that we can agree on than how can we communicate or even debate with one another. Vesely raises the question, how can Peter Eisenman and James Stirling find common ground for discussion? According to Vesely this is a question of hermeneutics, the latest stage in phenomenology, which involves the problem of agreement in disagreement. Plainly stated that no discussion or debate can take place unless there is already an established amount of agreement, for there is no argument unless there is an understanding and ability to see some possible degree of agreement. One would not engage in a serious argument unless both parties were seriously invested and actually cared about the outcome. If there is no mutual interest than there is no reason to care about the outcome, leaving both parties completely indifferent. This is the ideology that Vesely uses in order to link the common ground to the last stage of phenomenology, culture of hermeneutics.

To correlate with the reasoning of phenomenology in architecture Vesely fields a questions regarding the differentiation between reality and Disneyland. Disneyland, as a major feature in American society, shows the ability to create a societal norm that creates a convincing relationship between fact and fiction. Vesely correlates the concept of relationship of the two ideas with what could be the fundamental problem of hermeneutics, there is no absolute reality, no ultimate norm which is authentic. A way to view this concept is by examining if the two opposing concepts can

withstand confrontation from a larger entity or a broader reality than just itself. If you challenge the premise with the phenomena in which it pretends to represent it will fail. He then states that this can be considered in the same way when discussing monologue and dialogue situations. As long as an artifact is treated as a monologue in isolation, it can seem equal to any other object or idea in the same realm. It is only when you bring the artifact into dialogue with a reality that is beyond itself that you can clearly see where it fails. The concept of Disneyland creates an illusion that masks the idea of a logic that falls short of the specific reality. Vesely argues that there might me a small portion of this illusion that actually becomes positive, it's the ability of the illusion to extend the possibilities of reality. He goes on to state that there is a point where illusion becomes impossible in European culture because of the development, this is where the contextual horizon is lost. The logic here is that whatever was being represented becomes something in its own, it creates its own surrounding and ground to now occupy. Illusion is no longer but is transformed into delusion, the ground or basis the information occupies is no longer clear or discernable. In this case one is no longer representing the idea but is participating, therefore creating an authentic gesture.

One of the final thoughts of the seminar was to question the ability of science to be what painting is today, an access to being. Art more than any other field is still capable of maintaining a dialogue in what otherwise tends to be the monologue of a hermetic civilization Vesely states. Within reality science and aesthetics belong together but not science and art. Art and science are shown as the most contradictory tendencies in modern society and culture. He goes on to state that in order to get science to become what art is, science would have to be elevated to the level of philosophy. The correlation between aesthetics and science is that aesthetics becomes the science of things perceived or what we classify as what is beautiful. Modern science is anti-poetic in nature, not because it is void of emotion and only contains rationale, but as Heidegger states it, science challenges forth rather than bringing forth what it discloses. This states that science and technology are ultimately privileged constructions which

have not been confronted with cultural reality that is beyond its own reality. These philosophies and concepts begin to solidify the point that phenomenology is coincidentally correlated to the basic architectural mindset and thought process.

Project Justification

Project viability, no matter what profession you are a part of, is crucial to composing successful outcomes. Projects might seem interesting or unique, but if they cannot create a link to culture or society than why waste the time and effort. By developing a system that correlates data into visual solutions we are capable of linking a larger majority to the meaning and needs of specific projects. So often projects are designed and developed to meet the needs of a specific user, rarely are multiple facets looked at in order to create a project that affects society as a whole, giving them options and abilities they never knew were possible.

On a personal level my goal was not to only create a thought process that would develop a logical framework for design and increase efficiency but deliver a tool that could visualize multiple solutions in a feasible realm. By utilizing software to analyze data in an urban setting we can justify the positive growth of a community, producing necessary design decisions that would provide structure and feasibility for a developing and ever changing community. By continuously adding layers of information we can build upon existing conditions and see what layers have been forgotten about and see what layers can be manipulated in order to give a better overall design solution. Is it not a more comprehensive approach than to only add what we think is important versus looking at outlying information that could prove to enrich users experience and efficiency abilities?

Creating a thesis concept of this nature, we are applying every concept and layer of knowledge that the architectural field deems worthy and even layers that have long been neglected and forgotten about. Within a thesis project we are asked to exhaust all knowledge that we have accumulated throughout our academic career. In order to create an exhaustive idea we need to be able to include concepts from every thought process. This idea does just that, it allows users and designers alike to become part of the solution, therefore creating a product that reaches beyond itself and hopefully helps the community as a whole.

Context Background

People look throughout time and space for meaning, a simple explanation of why, who, and what, in order to make sense of the ordinary and the everyday. In the simplest form, these are the questions that are answered by context. The dictionary definition of context according to Merriam-Webster is the parts of a discourse that surround a word or passage and can throw light on its meaning, also defined as the interrelated conditions in which something exists or occurs. Context is seen by majority of society as the pieces of information that allow us to see and understand meanings within a more visual thought process. Depending on the descriptors or accompanied terms, proper context can make an idea or image jump off the page, at the same time allowing us to understand the object more clearly, answering questions that seemed so complicated. When it comes down to it all sometimes the context tells the story better than the story itself.

History, society, and culture, three of the most important descriptors of the modern age, help us as individuals and communities understand the information around us and let us create societies that fit ours needs, our, beliefs, and our wants. Our past does an extremely vivid job at visually laying out where we came from and where it is possible to go. Our past also sets a certain amount of precedent, if we have conquered something in the past than it is possible to manipulate it slightly in order to get new and innovative results. By doing so we are building our legacy and future directly upon the legacy of our forefathers. When specifically looking at the ability to rejuvenate a city block the most important information usually lies within projects that share commonalities. When first adopting the idea of urban renewal my focus was to understand the projects that came before, by understanding those projects I would be able to infer if I could take it that next step. Projects like the River District in Portland, Oregon and The Downtown Project as it is called in Las Vegas, Nevada are important and valuable to recognize even though they reach a different necessity.

By looking at larger scale projects one can take ideas and mental concepts and reiterate them into concepts that have a place within a justified space our boundary. The Downtown Project in Las Vegas is slightly different than almost any other revitalization project. The project is aimed to create an entirely different persona for the downtown center. Most revitalization projects are focused on removed rundown structures and re-invent unused space, Vegas rather is trying to create and manipulate experiences across the board. Though intriguing and filled with valuable information, looking at projects within a more similar scope have seemed to bear more logical fruit. Major focus was cast on Dallas, Texas, where the Mayor Mike Rawlings unveiled a plan to re-energize South Dallas, The Grow South Initiative. The purpose of the proposal was to try to begin to eliminate or at least lessen the blight that covered throughout South Dallas. The concept allowed developed properties to not only be renovated or redeveloped but also returned a sense of purpose to the sites, returning a sense of belonging to the long standing traditions of the area. The area took certain blocks and coordinated the appropriate mixture of commercial, retail, and residential in order to create a warm and inviting environment that would also lead to an upturn in the local economy, financially and socially.


Grow South Initiative (Dallas)


Container Park (Las Vegas)


The Downtown Project (Las Vegas)

Existing Cultural and Physical Context of Moorhead

Within the realm of the site and the adapted thesis area there are a few historically and culturally significant monuments if you will, areas and structures that resemble Moorheads inner character and personality.

Rourke Art Museum, Moorhead

Rourke Art Museum, Moorhead

Hjemkomst Interpretive Center, Moorhead

American Legion/ Usher's House, Moorhead

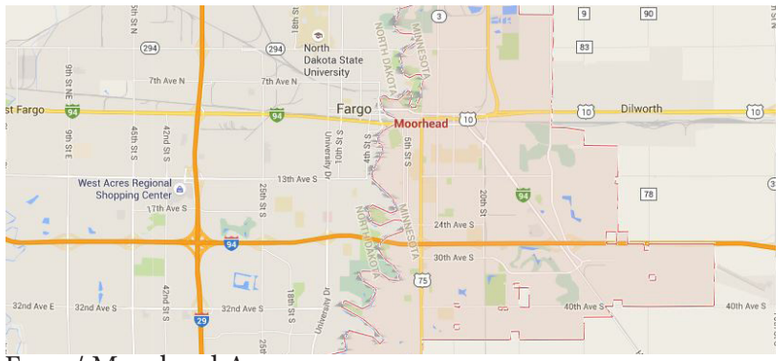
St. Josephs Church, Moorhead

Historical, Social, And Cultural Context

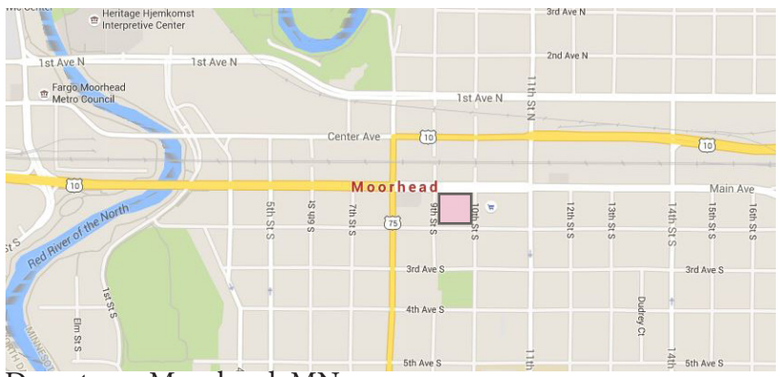
Social and Physical Context

Society as a whole wants to take responsibility for our communities, individuals want to be proud of what they have and what they will be leaving for generations to come. This initiative is evident in the fact the communities are making it a personal goal to recreate downtown vitality. Communities want to show what they are worth and in that they are re-investing in communities all over the world. The new social construct shows smaller communities that it is okay to show pride again, why not challenge one another for the best community, the best society? In the right context if you will, social movement has helped reinvigorate individuals, investors, community boards, etc. to put a stop to diminishing social and physical environments. We have finally begun to see our generation take pride in the ideals that we have and in the potential of the ones we could have. Society is trying get back its lost link to past cultures. As a whole we have realized that in order to create anything meaningful going forward we need to be able to understand and be proud of our past, the building blocks of ever future goal.

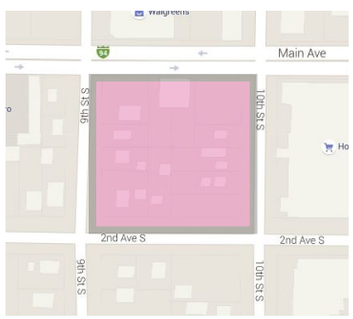
Moorhead, MN to most just seems like an average small metropolitan area that is in a standard regression, slowly reducing in population while being unable to generate enough interest in redevelopment to drum up enough community supporters and investors. Actually to be blunt, that's what it seems like to most locals as well. The downtown area of Moorhead has extreme highs and extreme lows. The physical context of the area can range so drastically that you think you have been transported back and forth in time. Many neighborhood areas throughout the main downtown strip show promise, areas show character but also give a sense of success. What is better than holding on to the essence of a place while still redeveloping a newer and more modern appeal to the public masses? Moorhead has a rich essence about itself, the only problem is not every one is on board with making it a prominent city image, one that's transcends place, time, and ideals in order to join a community.

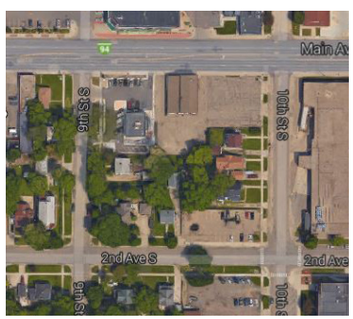


Fargo/ Moorhead Area



Downtown Moorhead, MN





1 Block Area, Bounded by Main Ave, 9th St, 10th St, 2nd Ave

Qualitative Aspects

As with anything from our child hood homes to where we end up taking family vacations, we can instantly understand that every place has a unique quality or essence about it. A quality that makes each place unique and therefore desirable, or even the opposite, either way it leaves a distinguishable mark on our senses. Moorhead Minnesota is absolutely no different; there are areas that completely captivate the mind while other spaces leave something to be desired. Within the downtown area of Moorhead we can instantly see both appearances. There are spaces that we can instantly see have been cared for or even been renovated in order to create a new image for Moorhead. Unfortunately there seem to be more lots and areas that are in dire need of such sprucing up. The block of Main Avenue and 9th Street South seems to fall directly in the realm of the ladder.

When spending more time than a few minutes one is able to recognize a community area that seems to be in shambles. This is seen most clearly in the abandonment of The Knights of Columbus building that directly faces Main Avenue. Along with the abandoned structure most of the single family residential homes have fallen into similar disarray. Siding colors have begun to fade do to too many summers of beating sun and harsh winters have done there damage on most of the rooftops, it seams shingles have begun to disappear and soft spots in the supports have become noticeable from the public sidewalks. The area seems to be in a sort of zone of its own, south of the site the homes seem to be in better shape, where yards are perfectly manicured and foliage seems to be well behaved. Towards the southeast corner the church; St. Josephs seems to be a beaming image of a thriving community, even if its shine does not overlap that of the site. On site you can see into the small backyards of the standing homes, many have multiple out buildings littering the area, from small garages and sheds to standing structures that seem to have no purpose, maybe they never did. The mostly vacant parking lots on site are the only areas that seem to be spread out, the only areas that do not seem overgrown or overly occupied. This being said, the parking lots seem to create a void that leads to a drearier and more dismal feeling, one that even the overgrown residential areas seem to be doing a better job of hiding.

As with most areas in older neighborhoods the spaces have been laid out in a generalized grid formation. The grid or any pattern seems harder to see these days due to the creation of multiple parking lots and the visual feel that multiple homes or buildings have been re-arranged or moved since first being developed. A bright spot in the neighborhood is what seems to be newly planted trees along that scatter the south side of the block along the boulevard section of the street, along 2nd Avenue. Thought the trees only have the maturity of a few years they seem to mingle well with the advanced growth of the elder trees along the boulevard of 9th Street. Even during the fall and winter months the trees seem to bring about a renewed sense of life, showing that there is some resemblance of flourishing life on the block. Each home attempts to mimic the sense of growth with perennials and annuals dotted throughout the small gardens and around the homes. Most of the vegetation seems to show resilience to the cold winters and hot summers but some show signs of neglect and have slowly begun to fade away, evident in the monotone colors and the non-existent glow of flourishing plants.

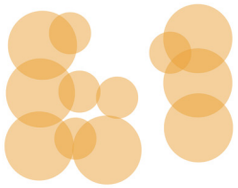
Colors always seem to be more dependent on year that spaces themselves. During the summer colors pop against a high sun while shadows are kept to a minimum, usually collecting around the base of trees and ground hugging bushes. The winter seems to bring a ding to the entire area. Without snow littering the ground one only observes brown grass and muddy tracks leading to out building in the rear of the homes. The houses seem to have muted color schemes running throughout. Not only are the houses dirty and sparse they do nothing to reflect a warm or inviting feel. Activity seems to be stunted when looking at plain scenery such as the sight, they only sense of activity comes from the minimal appearance of residents wandering slowly from garage to home with no attempt to interact with the site other than using it as a pathway from one thing to the next. The air seems more stagnant on site due to the few large trees and closely located homes. The space lacks a sense of fresh air or vent air movement in general. There are no tall structures or buildings' blocking views or breeze flow yet the space seems to be in complete isolation, not

views or breeze flow yet the space seems to be in complete isolation, not even Mother Nature wants to intrude. The only positive flow of human interaction seems to be the lineup of cars in the drive through of Subway, the only commercial building on site that is actually in use. Though activity does surround the business it's not exactly the homely and inviting feel that a neighborhood community wants or strives for.

Communities thrive off of diversity, commercial buzz all the way to the laughter of families enjoying a quiet afternoon on the back patio. As I wondered throughout the area this site seemed to be one of the only deprived of most if not all of these warming charms. The area seems to be surviving but not flourishing, as if it's just buying its time until it is completely re-utilized or re-purposed. Blocks that are is disrepair lead to a more dismantled unity of the entire community, action needs to be taken before the mute emotion of this space begins to cover more of the thriving areas nearby.

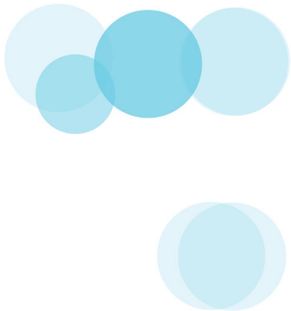
Residential Space Diagram

Looking at spacial relationships through bubble diagrams one can see the overlap of private spaces.



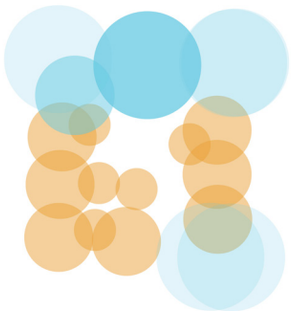
Commercial Space Diagram

The commercial space diagram allows a visual description of the building foot-prints and the use related to the spaces. The image puts space allocation into a different realm of thought.



Overlapping Correlation Diagram

Visually the overlap of spaces shows a direct and indirect connection between types of spaces. One can induce that the site needs to adequately house both commercial and residential needs without creating unnecesarry boundaries.



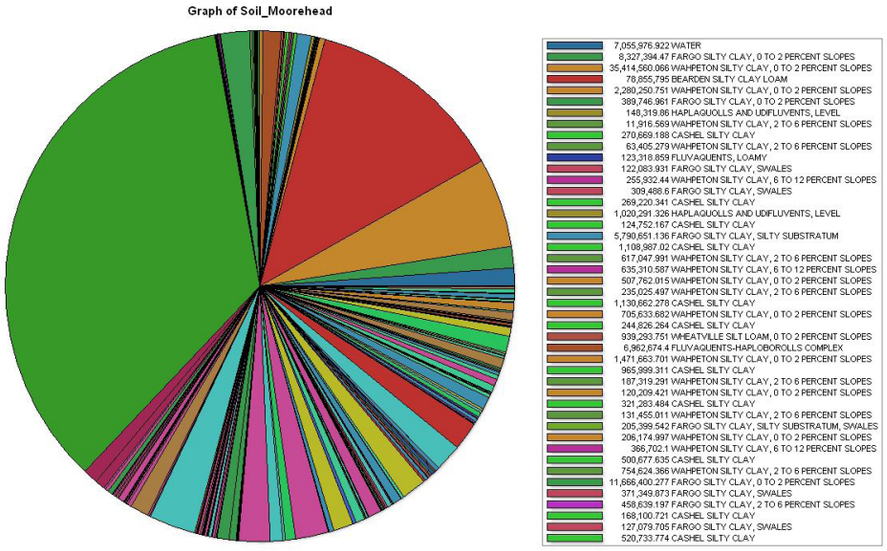
North to South Section

West to East Section

South to North Section

East to West Section

Moorhead, MN Soil Info fr GIS Prototype



Moorhead , MN Soil Chart

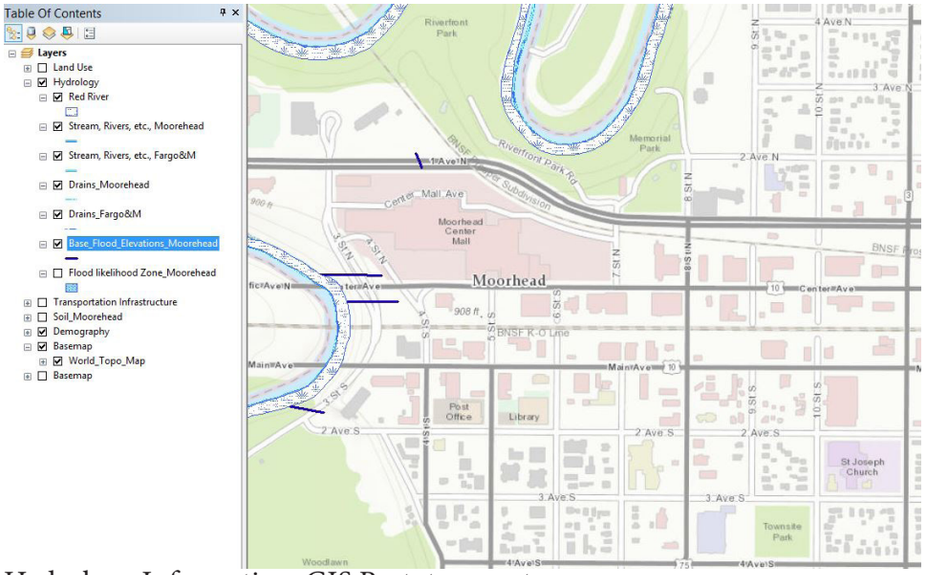
Soil Information

The soils throughout the area of Fargo and Moorhead consist of multiple variances of clays, silts and even certain types of loams. The soil images are taken from the GIS prototype system, the images clearly show a variance of different specifications of soil along with a major section being categorized as a combination of silt, plastic, and non- plastic clay. The fact that this region has a lot of clays or silts allows us to infer that our soils cannot accept a large amount of weight or stress. In order to make up for the lack in soil capacity we need to understand possible ways of diverting the issue, such as using deeper structure systems or even floating systems in order to build larger infrastructure off of.

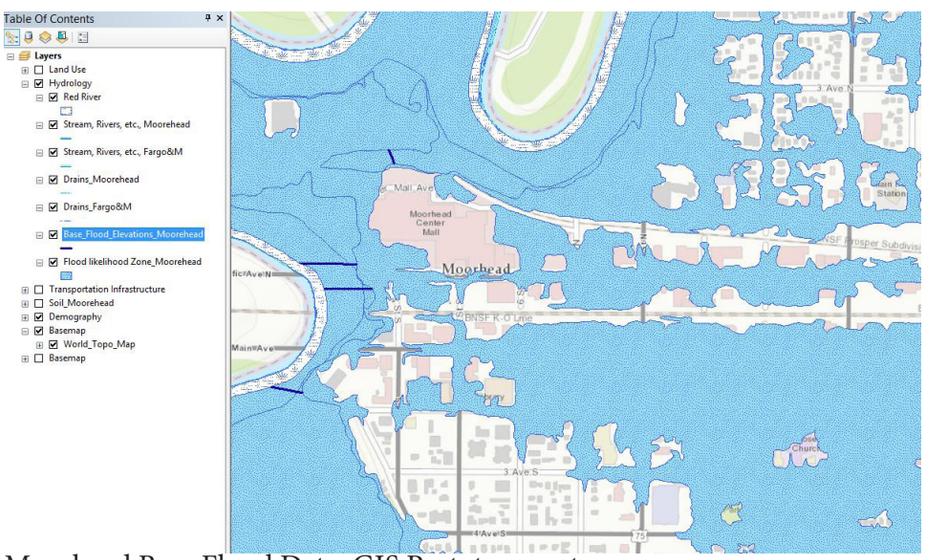
In our specific site the soils we are going to come in contact the most will be under the soil orders of Mollisols and Alfisols. These orders mainly describe sub-orders that have lots of nutrients and are usually found in prairie landscapes or semi-forested areas.

The sub-orders of soil within our scope are mainly Aquolls and Aqualfs. Aquolls are mainly wet prairie soils that occur where the water table is at or near the surface. The most extensive area of these soils is the Red River Valley due to it being the bed of an old glacier lake. Aqualfs or described more as wet forest soils. These type of soils also occur in basin's of glacial lakes, such as that of Lake Agassiz.

Further in-depth analysis of the soils can be had by utilizing the prototype system. For the area in question one is able to pull up all classifications and soil types in order to map out a desired area within the Fargo/ Moorhead area.



Hydrology Information, GIS Prototype system



Moorhead Base Flood Data, GIS Prototype system

Hydrology

Throughout the site there are multiple drain basins, or street drainage in order to collect storm water runoff. There are commonly 1 to 2 drains connected to the same system that populate the linear travel of a block. The total drain coverage for the area it approximately 7 drains that connect to a larger storm water collection system.

The images to the right correlate information for drains, streams, collection systems, and larger bodies of water. The image at the lower left shows the standard flood levels of the downtown
Moorhead region. Being that the region is so close to the Red River Flooding is usually a major risk in the spring when ice collections outside of city limits melts and ends up collecting in the river system.

The figure to follow is a list of all major flood base elevations throughout the downtown area of Moorhead.

Table

Base_Flood_Elevations_Moorehead

FID	Shape *	ELEV	LEN_UNIT	V_DATUM	COUNTY	Shape_Leng
54	Polyline	904	FEET	NAVD88	CLAY	67.467277
55	Polyline	904	FEET	NAVD88	CLAY	236.397723
56	Polyline	904	FEET	NAVD88	CLAY	177.134797
57	Polyline	901	FEET	NAVD88	CLAY	107.844484
58	Polyline	901	FEET	NAVD88	CLAY	136.213828
59	Polyline	901	FEET	NAVD88	CLAY	113.608846
60	Polyline	901	FEET	NAVD88	CLAY	188.353621
61	Polyline	897	FEET	NAVD88	CLAY	22.657793
62	Polyline	897	FEET	NAVD88	CLAY	134.154561
63	Polyline	897	FEET	NAVD88	CLAY	41.984955
64	Polyline	897	FEET	NAVD88	CLAY	45.903383
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66	Polyline	897	FEET	NAVD88	CLAY	179.267509
67	Polyline	901	FEET	NAVD88	CLAY	103.870702
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70	Polyline	901	FEET	NAVD88	CLAY	75.070449
71	Polyline	901	FEET	NAVD88	CLAY	43.38561
72	Polyline	902	FEET	NAVD88	CLAY	143.230084
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81	Polyline	895	FEET	NAVD88	CLAY	83.988729
82	Polyline	895	FEET	NAVD88	CLAY	103.349929
83	Polyline	896	FEET	NAVD88	CLAY	87.052725
84	Polyline	897	FEET	NAVD88	CLAY	493.06901
85	Polyline	897	FEET	NAVD88	CLAY	124.339553
86	Polyline	897	FEET	NAVD88	CLAY	17.409181
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91	Polyline	897	FEET	NAVD88	CLAY	20.423031
92	Polyline	897	FEET	NAVD88	CLAY	19.660772
93	Polyline	897	FEET	NAVD88	CLAY	18.994686
94	Polyline	897	FEET	NAVD88	CLAY	81.726842
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96	Polyline	897	FEET	NAVD88	CLAY	83.405026
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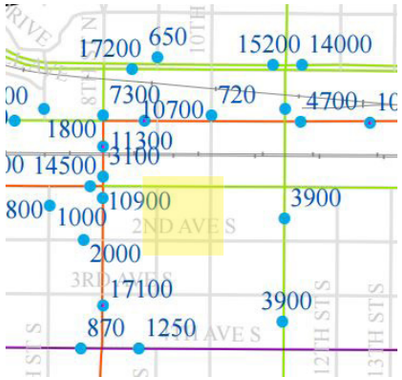
98	Polyline	896	FEET	NAVD88	CLAY	1317.439133
99	Polyline	896	FEET	NAVD88	CLAY	21.283237
100	Polyline	896	FEET	NAVD88	CLAY	728.360872
101	Polyline	896	FEET	NAVD88	CLAY	50.669756

1 (0 out of 103 Selected)

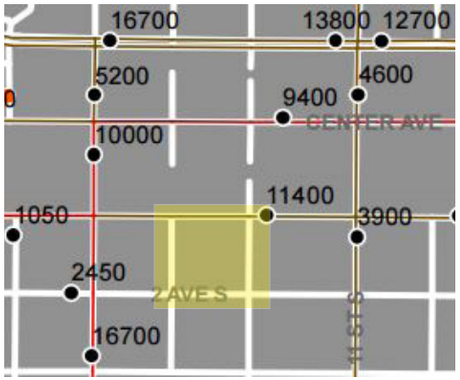
GIS Prototype system, Flood Elev. Data set

Traffic around the specified block, 9th st s and 2nd Ave S in Moorhead , MN, has fluctuated through the past few years. Main circulatory paths have seen an increase of up to 5000 vehicles more per day whole secondary roads have seen a very minimal if any increase. Throughout the site there stands three parking lots that consume over 30 percent of the entire site, yet stand nearly empty nearly 75 percent of the time. Space allocation due to traffic volume is considerably mis-appropriated.

Pedestrian traffic around the site keeps its main focus to the north, along Main Avenue. The secondary and tertiary pathways see a minimal amount of foot traffic, only accounting for about 10 percent of the overall traffic volume.



2006 Traffic Volume, Specified Site



2013 Traffic Volume, Specified Site

Utilities

Utilities on site range from modern broadband connection nodes to more outdated electrical junction systems that are stemmed directly off of the high line power grid. The broadband connection systems are patterned out in a loose grid system, the average connection node services two single family homes or commercial building. The only fire hydrant visible on site is at the southeast corner of the block, about fifteen feet from the intersection of 10th Street South and 2nd Avenue South. Other electrical systems consist of the lone light post with live electrical runs on the north side of the property and the larger junction box that is located on the northeast corner of the Hornbacher's employee parking lot.

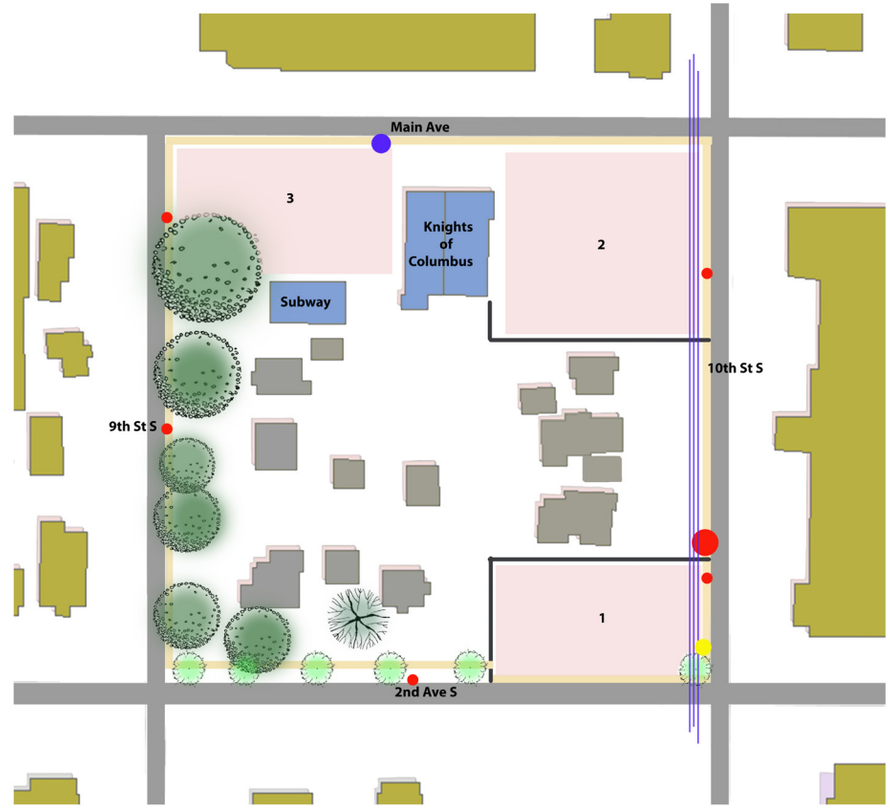
Slope Analysis

The slope through out the site varies from just above 1 percent to approximately 4 percent. The grade from the property lines to the foundation of the single family homes is approximately a change of 5 percent in most spots. The seemingly flat spaces on site still have a gradual incline that allows proper drainage of standard moisture to be wicked away from the foundation of existing buildings into scattered storm drains. The parking lots are of an older nature but still appear to have an inclined system within the center of the lots to help with appropriate drainage. Observation shows that even with slight accumulation of snow when melted there are no obvious areas of water collection on site. The elevation on site is recorded between 904ft and 905ft, with an appropriate latitude and longitude of N46.87222 degrees by W96.76389 degrees.

Visual Form

The visual form on site, total context from changing terrain, cover, atmosphere is very minimal. The largest change in viewing is out of the northwest corner towards the river bank, the slightly elevated hilltop that is home to the Hjemkomst Heritage Center. Activity within the area is most concentrated west of the site towards the riverfront and downtown areas of the city center

Site Analysis Illustration



- Existing Foliage
- Existing 1 and 2 Story Homes
- 1 - Hornbachers Employee Parking
- 2 - Knights of Columbus Parking
- 3 - Subway Parking
- Utilities: Phone/ broadband/ electric
- Sidewalk, Existing
- Commercial Buildings
- Fire Hydrant
- Light Post
- Overhead Power Lines

Site Character

The main reason for this specific site selection is that fact it is becoming more and more of a community eye sore. The area use to be a well taken care of residential area that houses a few commercial properties towards the north end of the block, facing Main Avenue. The two commercial properties now in the vicinity is the newer home of Subway and the second building is the home of The Knights of Columbus. The Knights of Columbus building is a standard stick frame constructed building from the early 80's. The building now stands empty and the specific location has been permanently put out of commission. The empty building continues to decay leaving and unwanted visual right off of Main Avenue.

Along with the empty building right off of the main corridor of Moorhead the parking lot to the northeast corner along with lot to the southeast corner are beginning to visually erode. The class five gravel soil beneath the parking lots has begun to shift, creating rifts within the pavement along with section that have been completely broken away. Along with the eroding lots many of the single family homes have gravel driveways. The driveways seem to be un-kept and are continuously degrading, pot holes have begun to form from the continuous ruts from vehicle traffic in the center sections of the driveways.

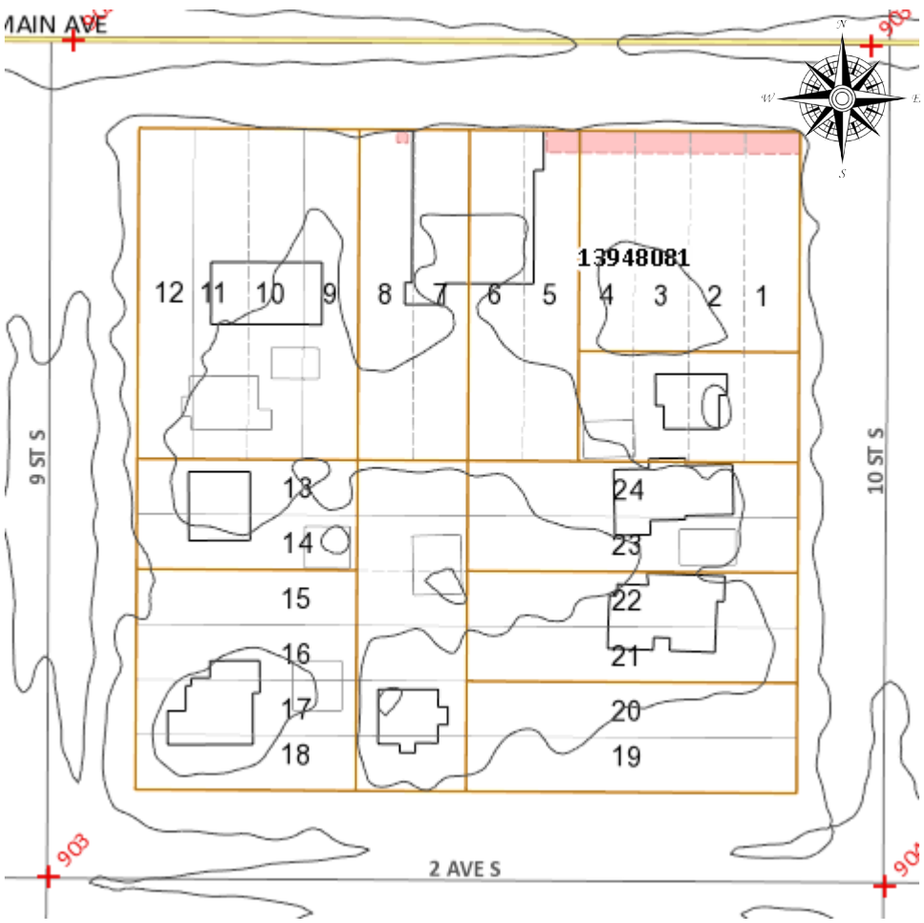
Other than the dismal store fronts and beaten parking lots many of the homes within the block seem to be in fair shape. There are a few homes that have begun to break down physically, along with backyards housing many old pieces of equipment and disabled out buildings. The accompanying vegetation seems to be thriving even if most has been un-kept and have not been recently tended to.

The other main point of concern is the outdated overhead power lines that run the east side of the property section. The concern comes when looking at the connection of the older houses electrical connections directly to the exposed power grid.

Spot Elevation - 903ft , 904ft
Elevation Levels - 903ft , 904ft , 905ft , 906ft

The high spot on site is set at 906ft. The lowest elevation mark is set just below 903ft near the edges of the road, where it slopes into the drainage curb area.

Block and parcel numbers are listed on map according to the GIS system. All building placements are current except for the building in the northwest quadrant.



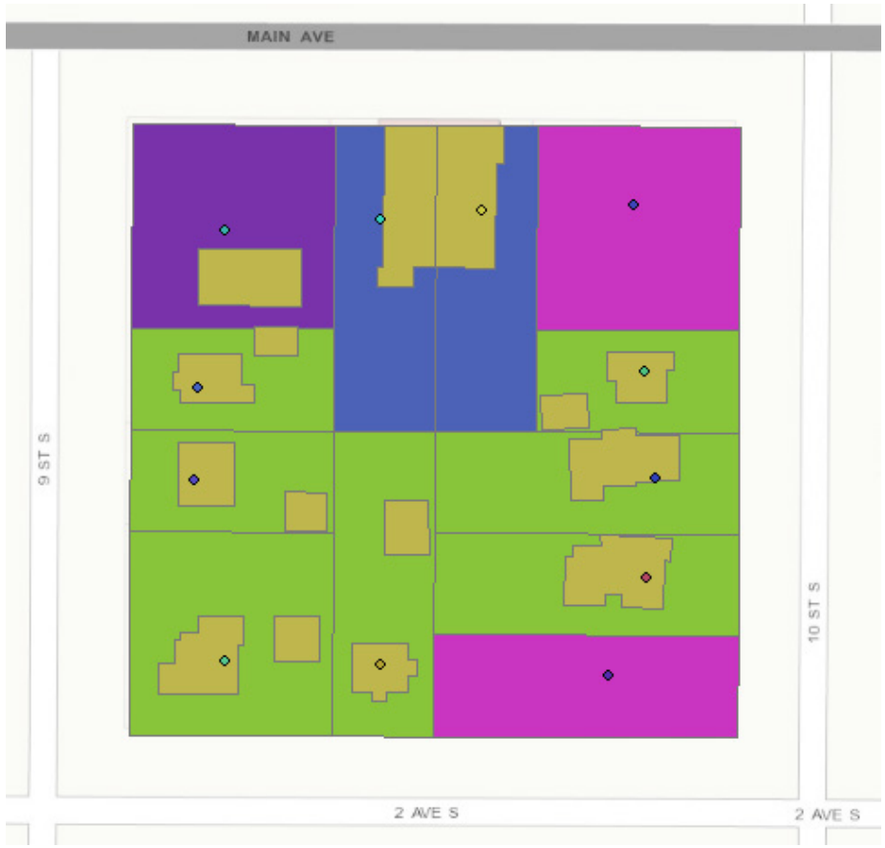
Site Analysis *Base Map & Aerial Imagery*

Aerial Imagery 2014 (MHD)

Aerial Imagery 1994 (MHD)

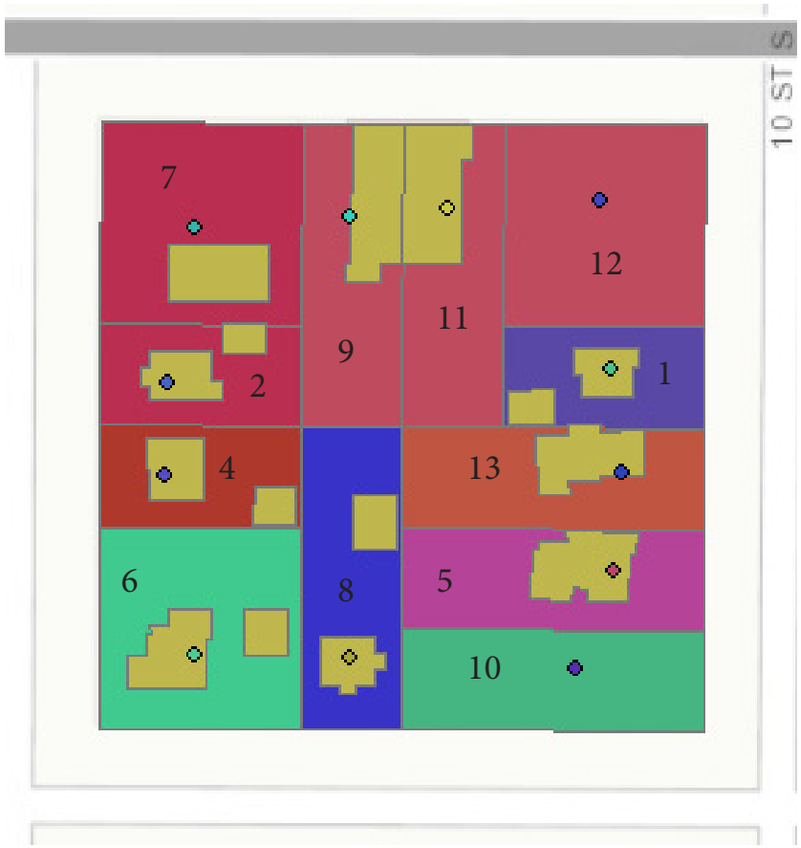
Aerial Imagery 2008 (MHD)

- AGRICULTURAL FACILITIES
- GENERAL COMMERCIAL
- HEAVY INDUSTRIAL
- INDUSTRIAL
- INSTITUTIONAL, COMMUNITY
- LIGHT INDUSTRIAL
- MIXED-USE
- MULTI-FAMILY RESIDENTIAL
- PUBLIC ASSEMBLY
- SINGLE FAMILY RESIDENTIAL
- TRANSPORTATION
- UTILITY, NON-BUILDING
- VACANT
- VACANT, AG-LAND
- VACANT, PARK-LAND
- VACANT, ROW



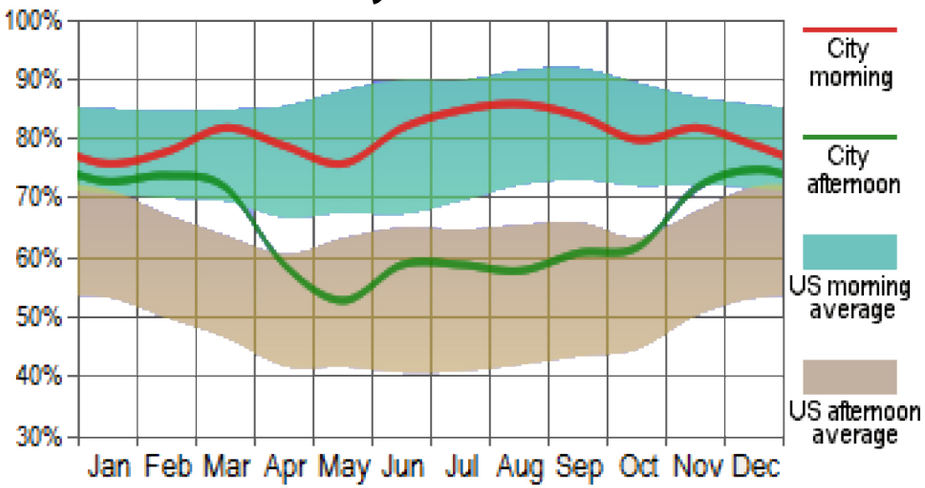
Land Use and Zoning Map (GIS Prototype System)

(1) -109 10th St S, Moorhead
(2) -110 9th St S, Moorhead
(3) -113 10th St S, Moorhead
(4) -114 9th St S, Moorhead
(5) -119 10th St S, Moorhead
(6) -124 9th St S, Moorhead
(7) -903 Main Ave, Moorhead
(8) -910 2nd Ave S, Moorhead
(9) -913 Main Ave, Moorhead
(10) -914 2nd Ave S, Moorhead
(11) -915 Main Ave, Moorhead
(12) -923 Main Ave., Moorhead

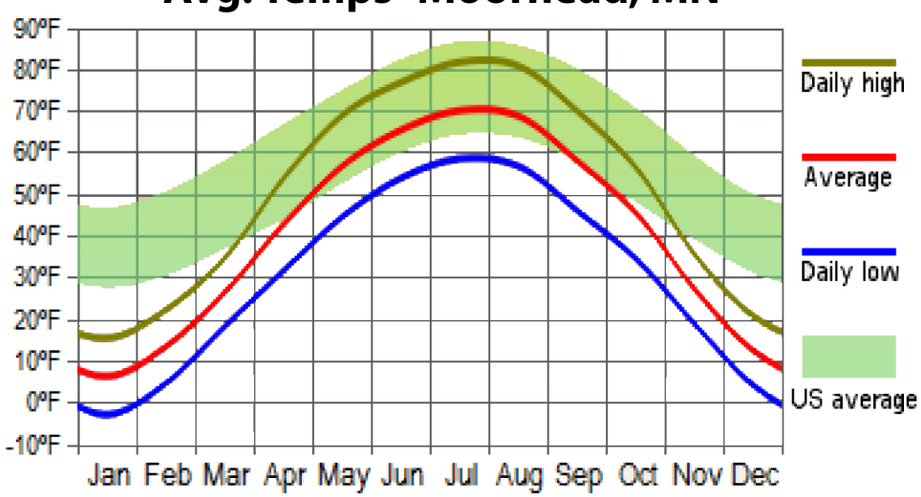


Parcel and Address Map (GIS Prototype System)

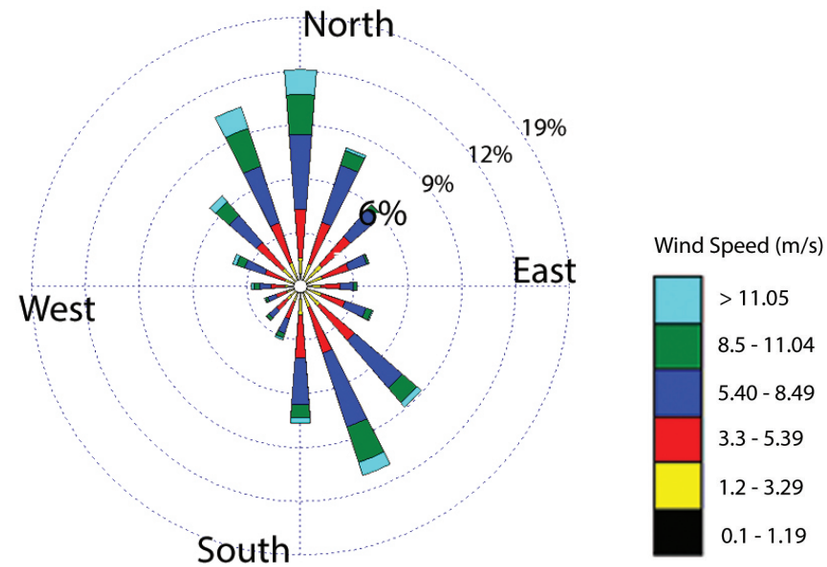
Humidity -Moorhead, MN



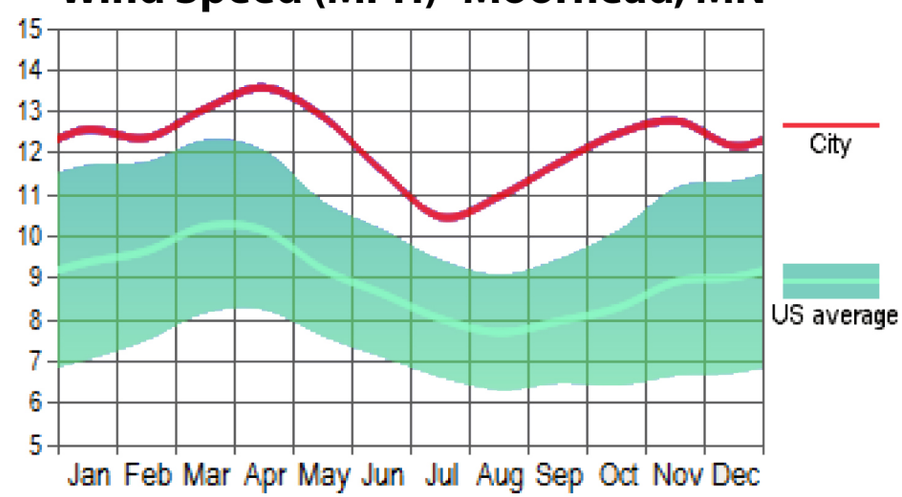
Avg. Temps -Moorhead, MN



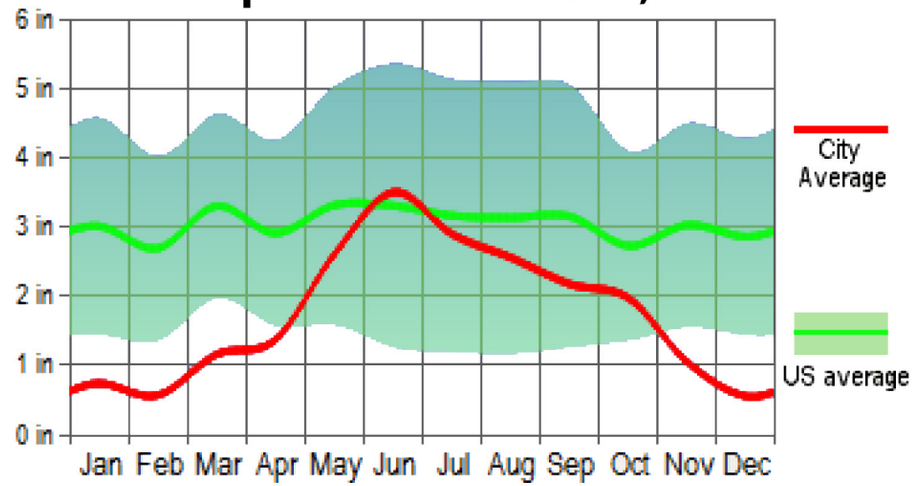
Wind Data -Moorhead, MN



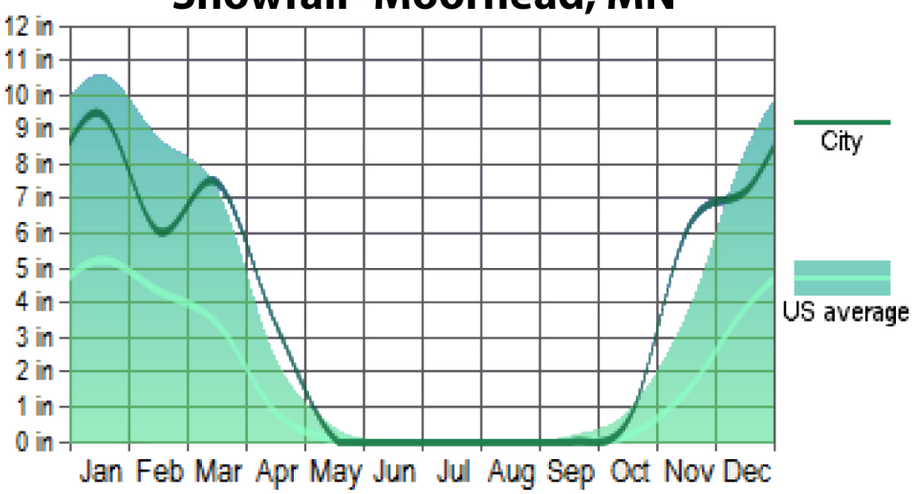
Wind Speed (MPH) -Moorhead, MN



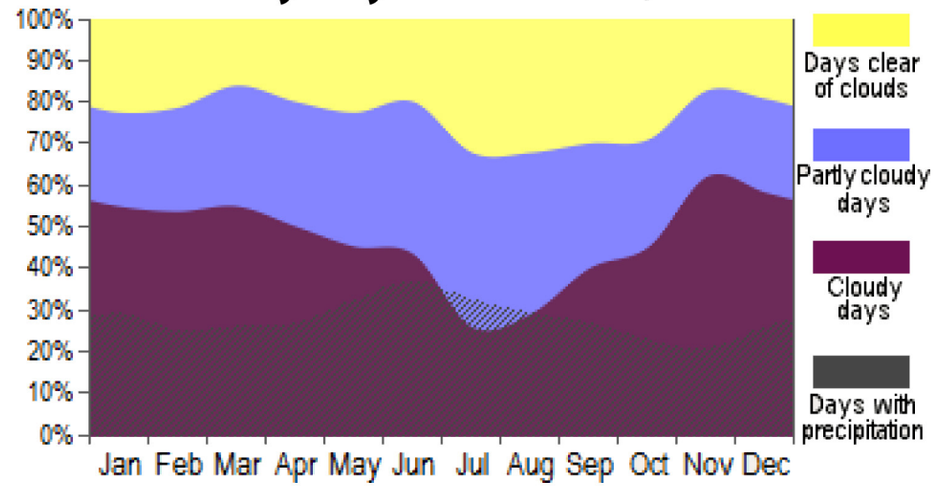
Precipitation -Moorhead, MN



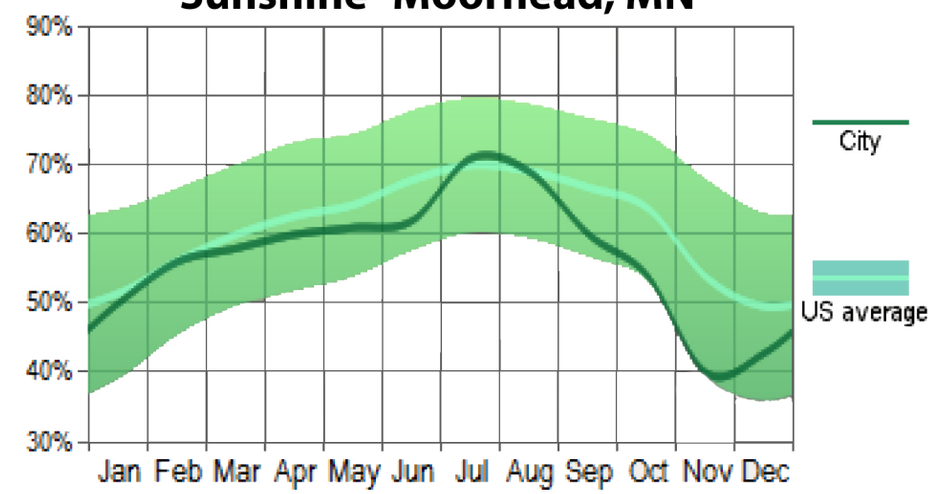
Snowfall -Moorhead, MN



Cloudy Days -Moorhead, MN

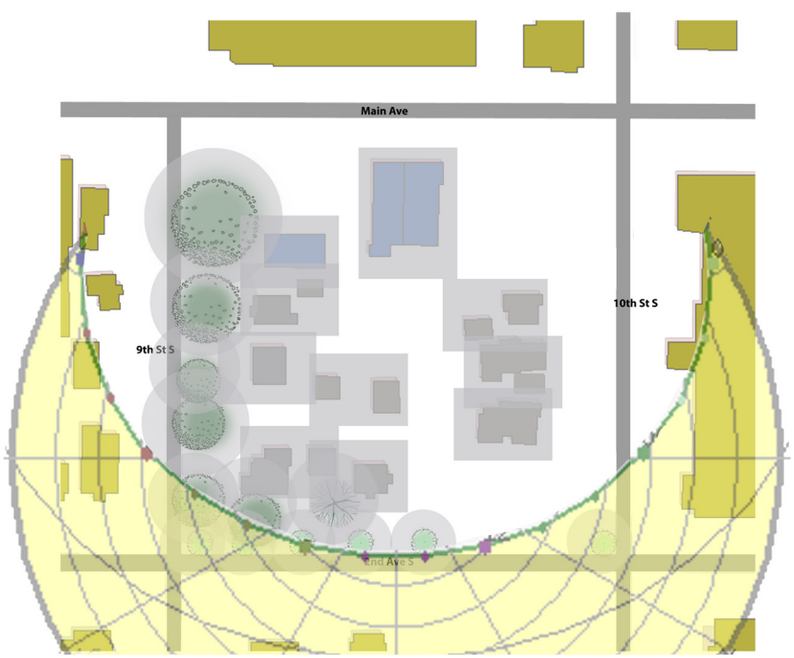


Sunshine -Moorhead, MN



Shade Coverage on site accumulates about 45 percent of the site. Leaving roughly half of the site in a moderately direct line of sun on any given day. The quality of sun allowed on site is rather high due to the small stature of built structures and the open rigidity of most of the established trees and foliage.

The sun path data was collected from the national repository and overlayed onto the existing site. The sun path shows the monetary movement of sun amount and angles throughout a standard progres-

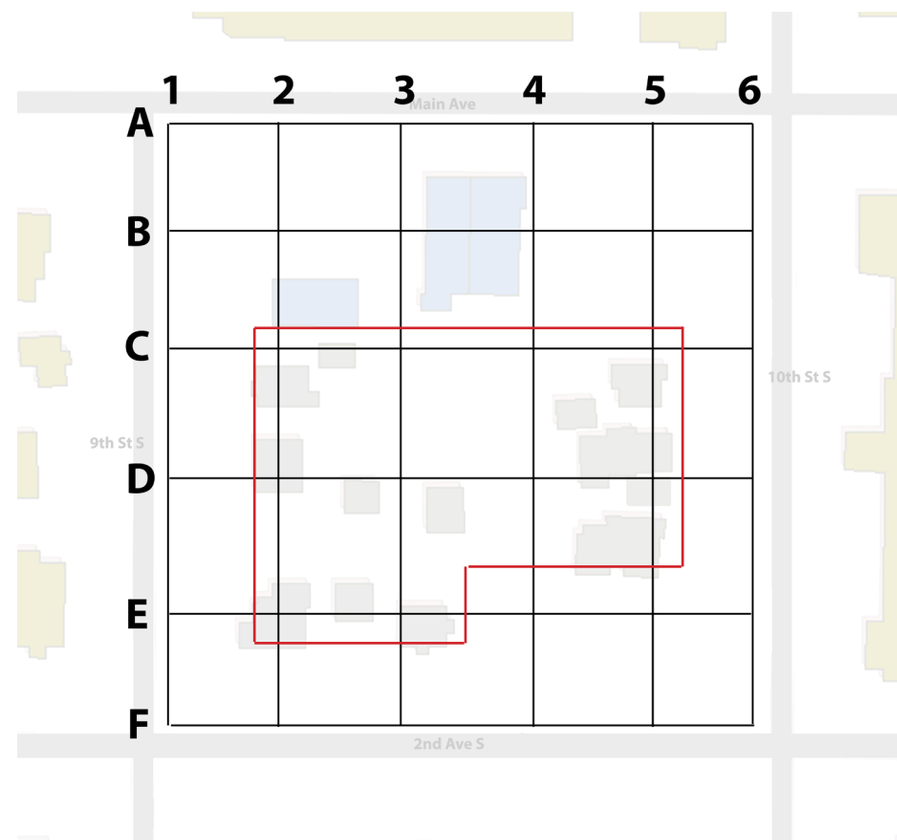


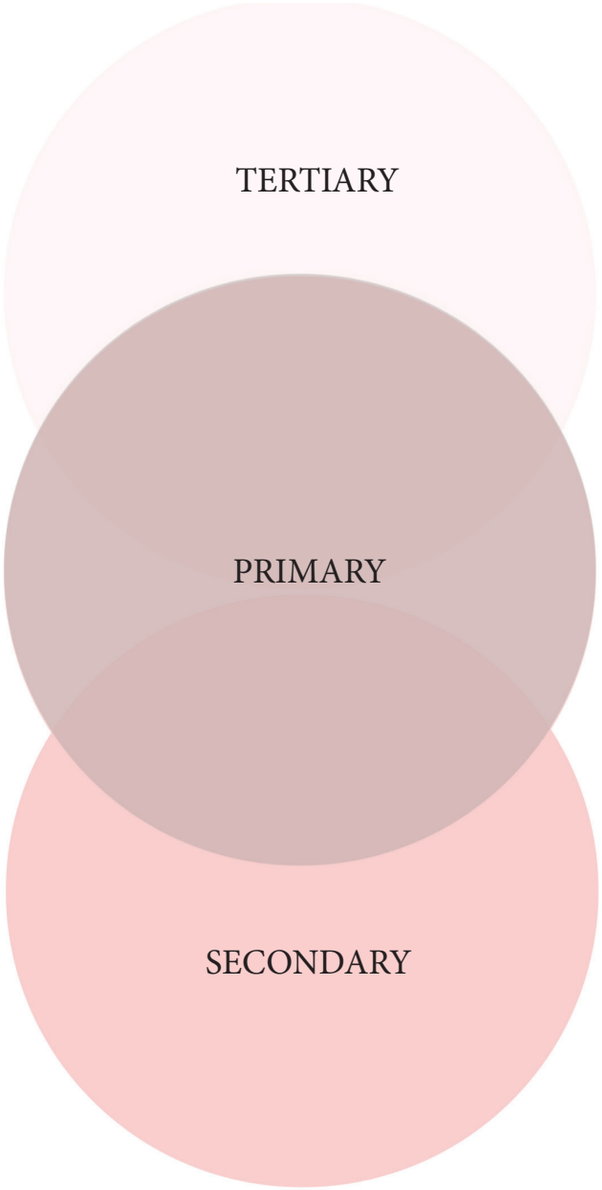
Shadow and Sun Path Diagram (Moorhead Block)

Site Reconnaissance

In order to get accurate descriptions it worked best to layout a grid overtop of the site in order to catolog informtaion and necessary images. The grid is numbered from 1-6 going West to South, and lettered A-F from North to South.

Internal grid coordinates are mostly within priavte property and I have not recieved authorization in order to document information.





Space Allocation

Programming needs should be set by the overall context of the surrounding area and environment of the specific site. Even though community green space and outdoor recreation areas seem to be wonderful additions to communities, they mean very little if placed into an environment where it is not needed or warranted. The block on 9th Street South and Main Avenue in Moorhead needs to be redeveloped in a way that will make the whole surrounding community better, not just the site itself. Since the site currently houses residential and commercial the focus will be to provide multi-use space that allows an easy transition between commercial and residential while allowing the community as a whole to interact and imprint on the site as well.

Current Space Allocation

Overall Site – 89,300 square feet
Commercial – 46,400 square feet
Single Family Residential – 42,900 square feet

Proposed Space Allocation

Overall Site – 89,300 square feet	100%
Commercial – 16,000 square feet	17.9%
Usage – Average 50 hours per week	
Mix Use – 25,000 square feet	28.0%
Usage – Average 125 hours per week	
Residential	
Usage – Continuous Usage	
Multi-Family – 28,000 square feet	31.3%
Single Family – 13,000 square feet	14.6%
Community Greenspace – 1100 square feet	8.2%
Usage – Average 80-90 hours per week	

Commercial spaces need to be divided appropriately to allow for a mixture of small to medium size identities, the idea is to attract smaller local companies that need affordable rent while still having a desirable and well located store front. This will help with the overall renovation of the downtown of Moorhead, MN. Within the commercial and multi-use spaces it would be best to allocate at least 15 percent of the space to circulation and standard utility space.

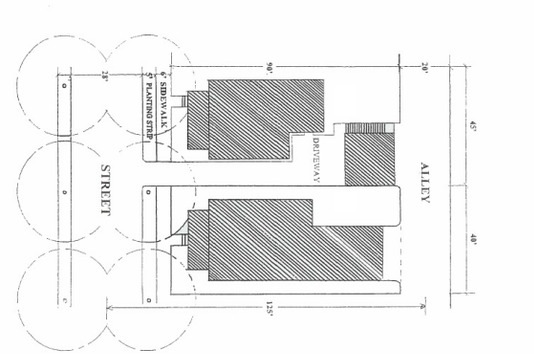
The mix-use spaces will allow for a melting pot affect within a small environment. By incorporating space for commercial, office, food services, and etc., we can promote the stability and localization of very specific areas of the downtown area. By incorporating these features within the site surrounding areas will have access and therefore continue the growth of all surrounding blocks and communities.

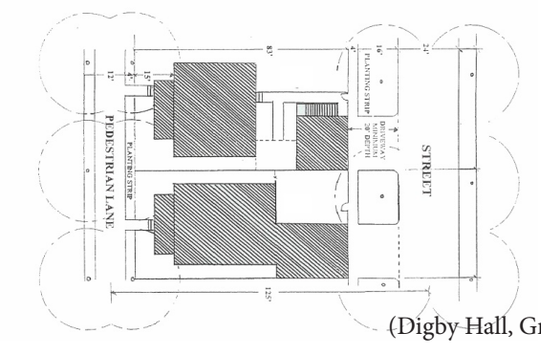
Since the space currently houses residential we can overlook the need for appropriate housing on site. Housing should vary from multi-family dwellings to single family homes. We can create single family capabilities while still giving the appropriate sensation of downtown condo style living, this will add to a positive persona that we can carry through the entire space.

The usage numbers allows a quick determination of how frequently the spaces and types of spaces will be used on a weekly average. The residential states it will be continuous use, meaning that individuals are occupying the space off and on without interruption. The fact that the residential space is almost always occupied it creates a sense of security, eyes on sit, for the entire block. The commercial and multi- use spaces are mainly meant to be used between regular or semi-irregular business ours. Office spaces are usually active between 7 a.am and 6 p.m. Monday through Friday. The multi-use space might operate later in the evening depending on retail and food service industries. This will allow the site to be active longer, creating a larger revenue stream and creating continuous commotion which prevents unwanted criminal activity. This positive attributes end up carrying over to surrounding areas, creating a more family oriented and safe environment.

The correlation between spaces, as seen in previous bubble diagrams, does not currently allow for a positive flow through the area. One of the main focuses is to create an intertwined environment that has very subtle boundary conditions allowing the continuous flow of activity through the space without taking away from personal privacy. Along with spatial relationship each type of space needs to be appropriately sized and allocated for specific purposes. Instead of creating a blanketed design strategy we want to move towards personalization and create more of a custom feel throughout the site. By leaning towards the idea of customization it allows individuals the get the most out of there spaces while creating a sense of ownership, therefore more pride is taken and spaces retain their values longer.

The preliminary budget takes into accounts the estimated cost and fees along with allowing for a necessary buffer, in order to counteract unforeseen issues and costs. By quickly estimating costs of necessary components for the project we can create a ball park for our budget. Through research we can see that apartment buildings or multi-family homes come in around 140 dollars per square feet, single family homes for the area are about 105 dollars. Community green space can be calculated with an overall fee of 65 dollars a square foot while the commercial and mix use will vary from 130-160. Taking a calculation we can state that the initial cost without land ownership will be roughly 12 million dollars for the complete renovation. These numbers are just standard figures that only allow us to visual an estimated price, not nearly accurate enough to create a final budget off of.

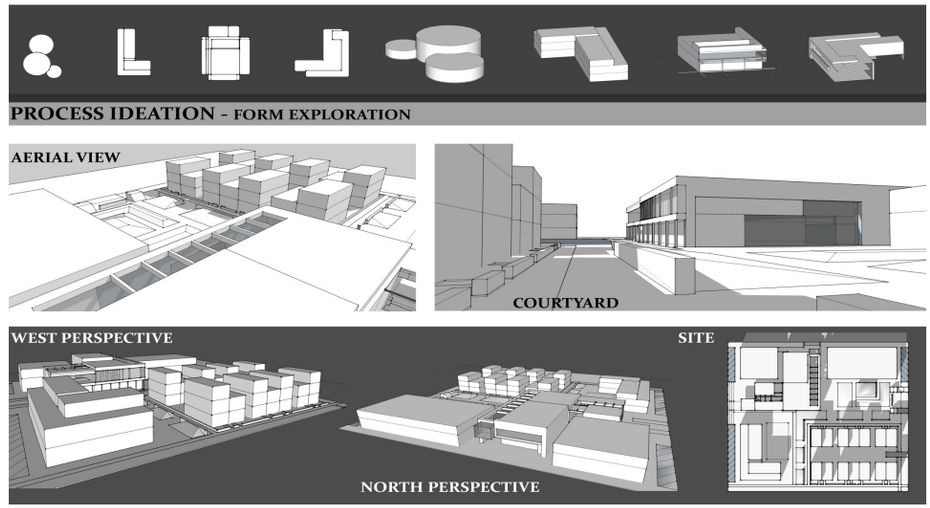


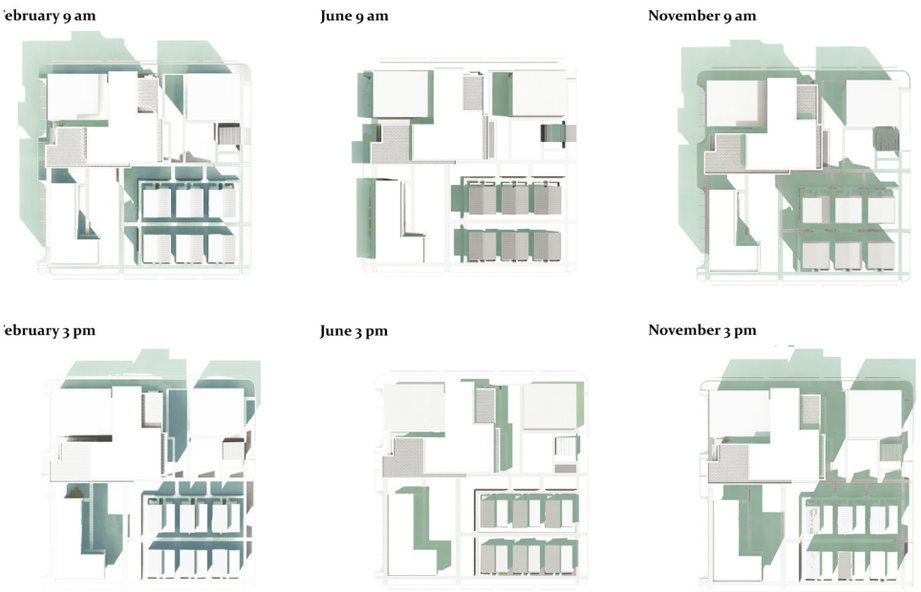


(Digby Hall, Green Futures)

Design Process

- Establish a centralized location for community growth
- Re-locate the community library to promote better coverage
- Create a higher density environment to decrease sprawl
- Re-energize a dilapitated down town environment





Shadow Study

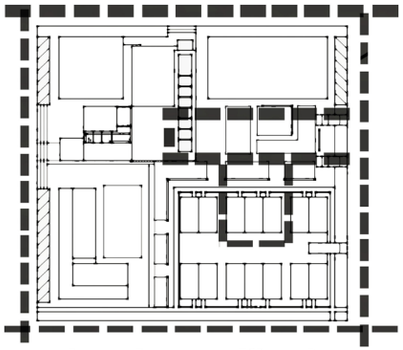

Proposed Dispersion

Design Process *Form and Material Exploration*

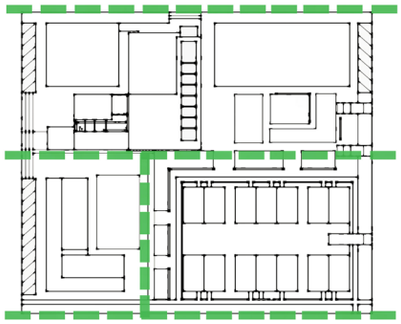
Form and material exploration came from the need to fit the design into the surrounding vernacular while still providing a higher level of design and execution.

By incorporating a planar design the building is able to be one with the landscape instead of appearing to have just been dropped on it.

Throughout the design phase multiple studies were taken in order to analyze the surrounding. Shadow and sun studies become the most important due to the proposed usage of the site as a year around facility instead of a weather permitting site.

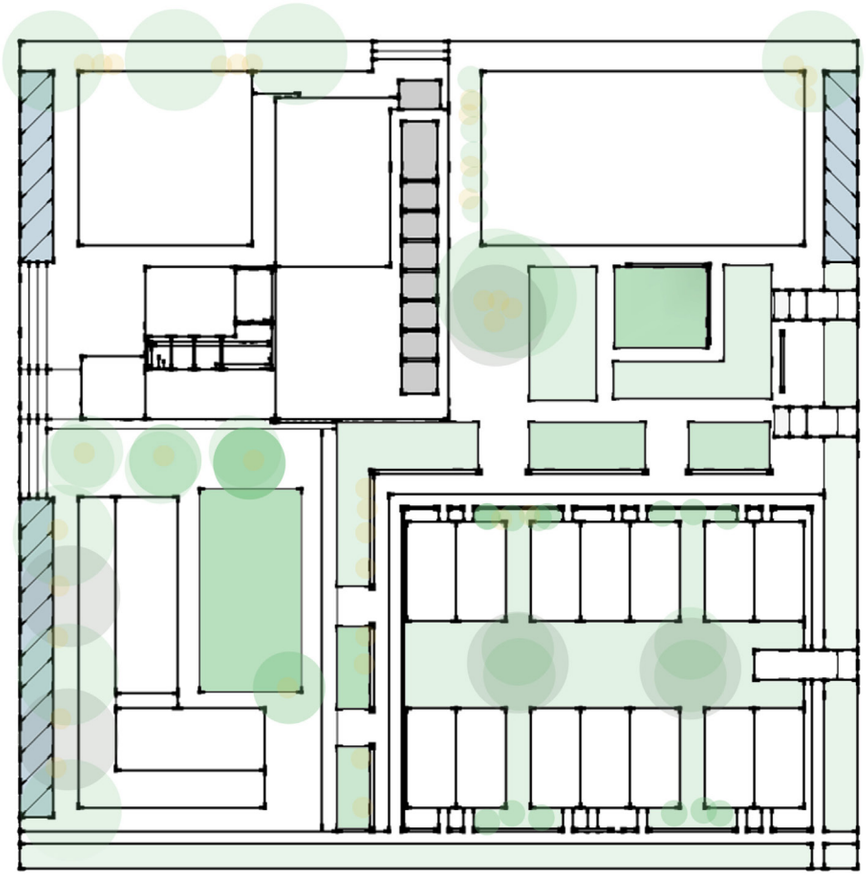


Vehicular Traffic Flow



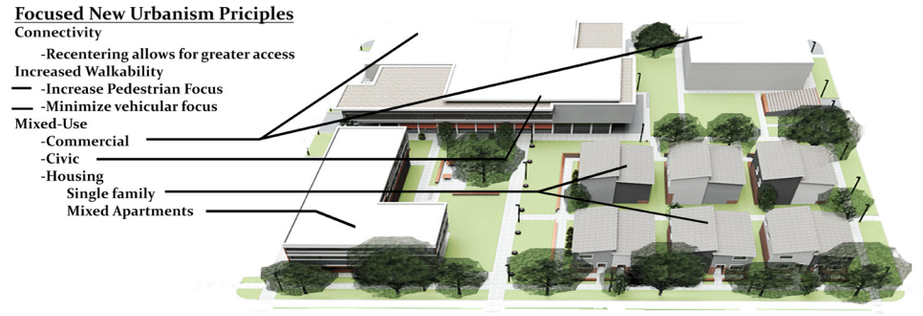
Bicycle Circulation

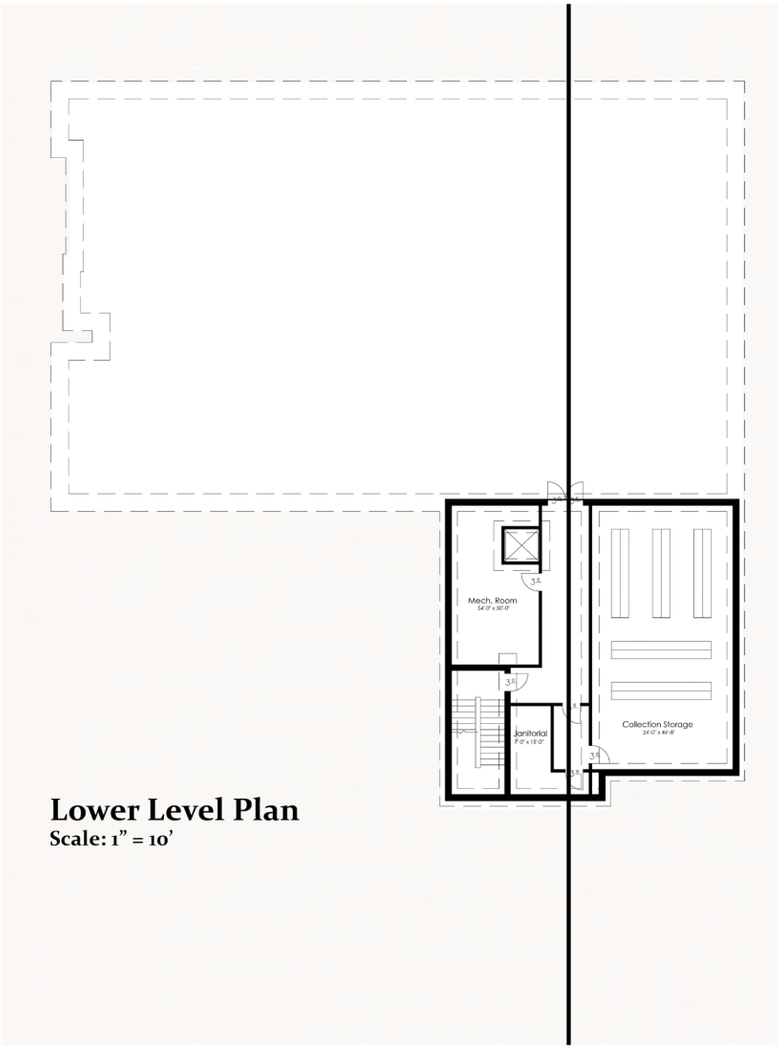
Pedestrian Nodes



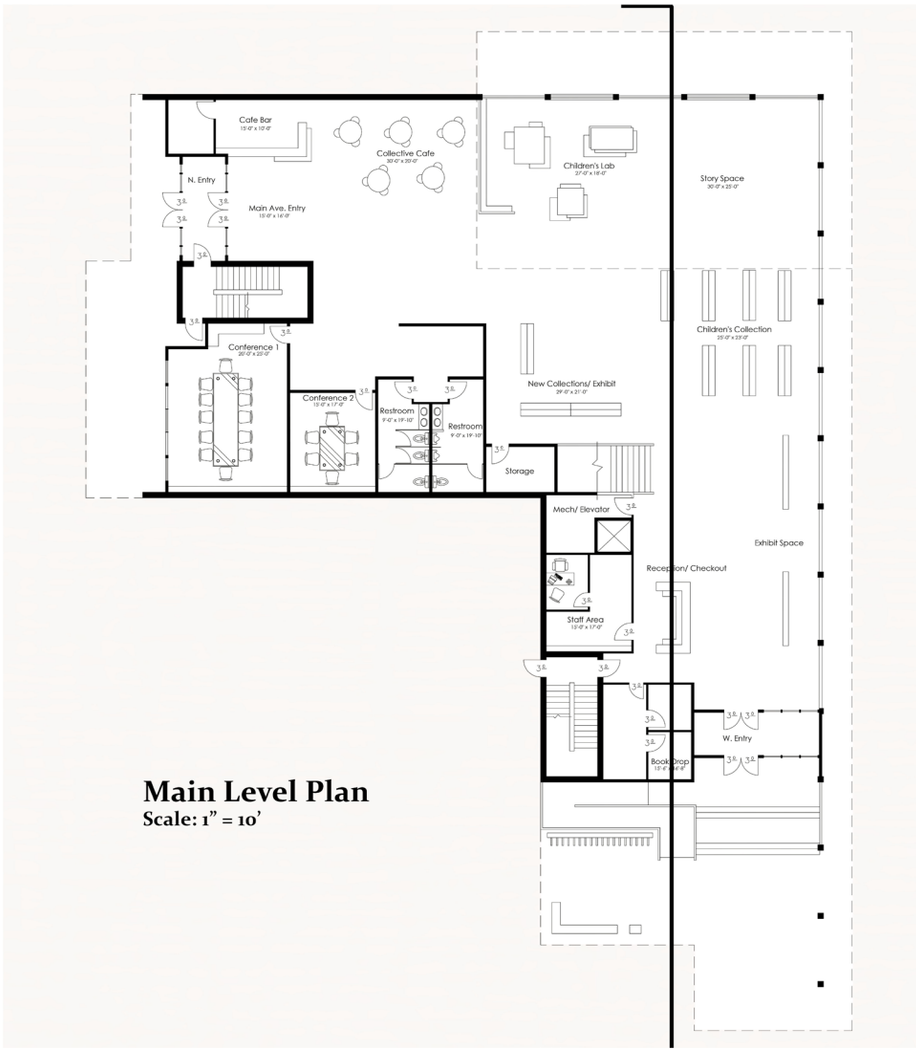
PROPOSED SITE USAGE

Final Site

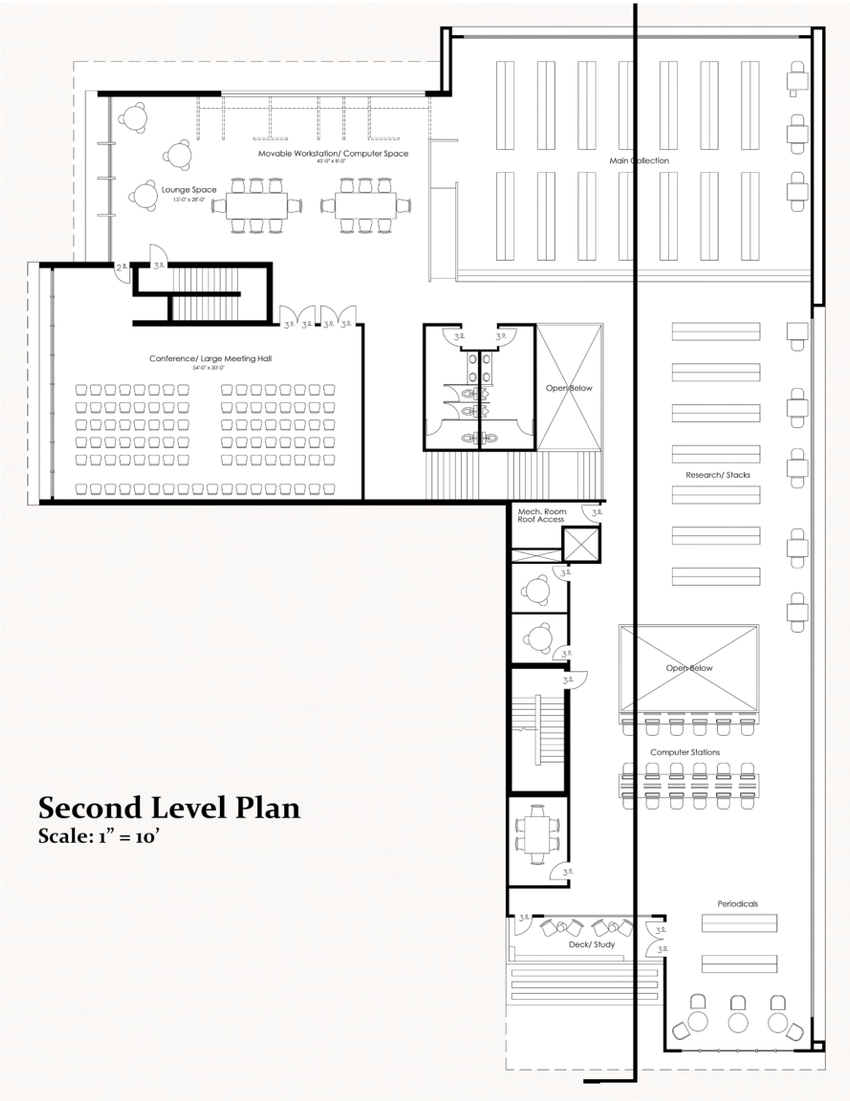

Focused New Urbanism Priciples
Connectivity
-Recentering allows for greater access
Increased Walkability
-Increase Pedestrian Focus
-Minimize vehicular focus
Mixed-Use
-Commercial
-Civic
-Housing
Single family
Mixed Apartments



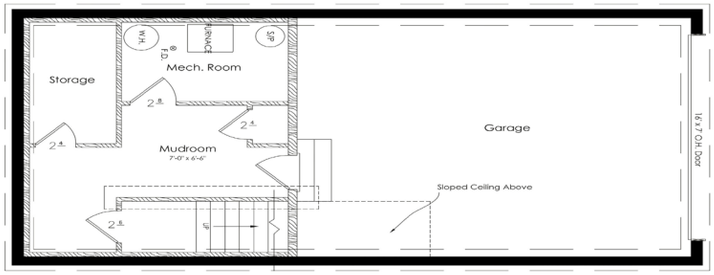
Lower Level Plan
Scale: 1" = 10'



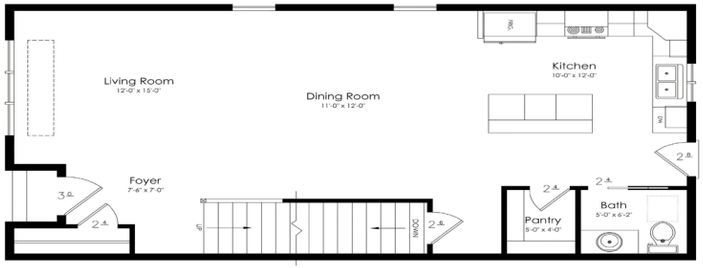
Main Level Plan
Scale: 1" = 10'



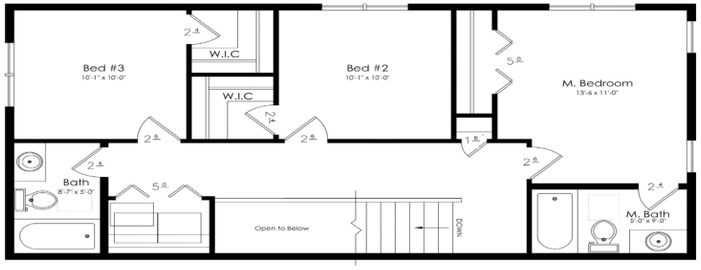
Second Level Plan
Scale: 1" = 10'



Basement Floor
Scale: 1" = 5'



Main Floor
Scale: 1" = 5'



Upper Floor
Scale: 1" = 5'

Main Collections

Central Plaza

Children's Learning Zone

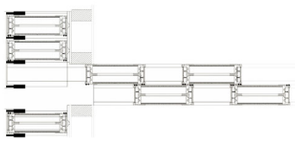
Final Renders

Operable Wall Louvers Located on South Wall Below Glass Block

Closed Lovers Limit Air Flow

Open Louvers Allow Passive Ventilation

Partition Wall Detail

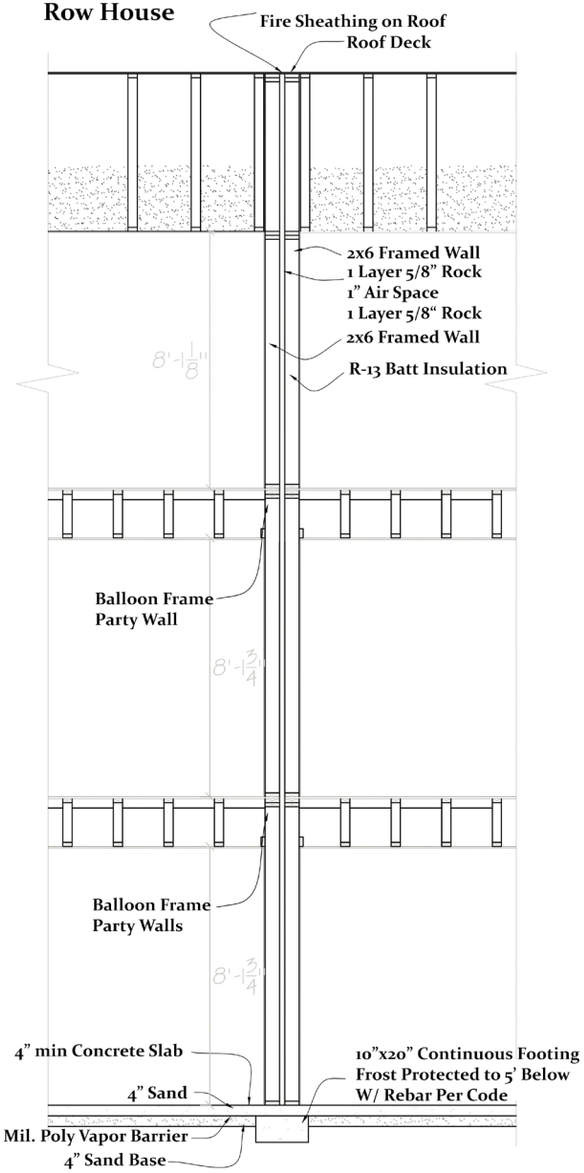


Folding wall system that stores within the wall cavity(East Wall)

Structural Glass Block

Party Wall Section

Row House



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Previous Studio Experience

Second Year - 2012

Fall: Stephen Wischer
_Tea House
_Boat House
Spring: Phil Stahl
_Dance Studio
_Chair-Metaphor
_Dwelling

Third Year - 2013

Fall: Paul Gleye
_Moorhead Revitalization
_Moorhead Revitalization 2
_Urban Planning
Spring: David Crutchfield
_Steel Design
_Concrete Design

Fourth Year - 2014

Fall: Bakr Ahmed
_High Rise (Capstone)
_Vision Award
Spring: Don Faulkner
_Marvin Windows Competition
_Urban Design Renewal
_Urban Master Plan

"Some think that school is a means to the end, what happens when we flip the theory inside out. Education is what makes us wonder, it makes us push the boundaries and see how far we can go. Whether it is through design, photography, or specific classes I have found that taking the road with greatest resistance is a whole lot more interesting."

22160 Logan Ave.
Lakeville, MN
701.809.1030
Tyler.Harnisch@ndsu.edu