

# Sustainable Growth & Redevelopment of Wadena-

EVOKING MEANINGFUL CHANGE.

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# Sustainable Growth & Redevelopment of Wadena-

EVOKING MEANINGFUL CHANGE.

A Design Thesis Submitted to the  
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By

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# THE STATEMENT OF INTENT



# Thesis Abstract

## TITLE

Sustainable Growth & Redevelopment of Wadena- Evoking Meaningful Change

## SUMMARY

The general public often delude themselves into thinking that the landscapes we design are implicitly sustainable, though they frequently are not. We, as designers, must make known, and take responsibility for, the implications of our work.

By dedicating ourselves to the principles of sustainable landscape construction, we are able to design in ways to work with nature, not against it. As professionals, we have the ability to positively influence not only the environment, but also the perceptions of our clients and the general public.

Through the design and redevelopment of a community devastated by natural disaster, I hope to reinforce the sense of community to ultimately strengthen the quality of life within.

## KEY WORDS

Sustainable Design, Environment, Community



# Problem Statement

How can advancements in the sustainable landscape community drive meaningful wholesale change within a community devastated by natural disaster?





# Statement of Intent

## TYPOLOGY

An Environmentally Sustainable, Resilient Community

## THE THEORETICAL PREMISE / UNIFYING IDEA

### CLAIM

By dedicating ourselves to the principles of sustainable landscape construction, we are able to design in ways to work with nature.

### SUPPORTING PREMISES

Landscape architects have a responsibility to keep healthy sites healthy, heal the injured, and to erase the notion that all landscapes are inherently sustainable, when often times they are not.

Sustainable design is, by the UN Brundtland Commission's definition, a "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (Report of the World Commission on Environment & Redevelopment, 1987, pg 1). In other words, design should not create a negative impact on the environment, user, and/or municipalities of the past, present, and future. The commission was created to address growing concern of the deteriorating human environment and natural resources.

Our environment is a sensitive organism that is under constant give and take from those of us who inhabit it. It is important to be more sensitive to *its* needs in order to best ensure a healthy future.

### CONCLUSION

We, as landscape architects, have a responsibility to the environment and the clients we serve. We must re-evaluate the assumption that all built landscapes are environmentally sound, and offer practical, professional alternatives for more sustainable landscape construction, design, and maintenance.



# Statement of Intent

## THE PROJECT JUSTIFICATION

As society becomes more in tune with the issues of sustainability, it is important to stay ahead of the curve in order to best serve our clients. In order to do this, *we* must be in tune to how our decisions might impact the environment.





# THE PROPOSAL



# The Narrative

For the general public, it is troubling and confusing to think that our creations damage the environment. How can a green growing place hurt the Earth? Environmentally destructive practices are used all the time in landscape construction, both intentionally and unintentionally.

We have a responsibility to keep healthy sites healthy, heal the injured, and to erase the notion that all landscapes are inherently sustainable, when often times they are not.

There are many opportunities for environmental intervention within our communities. We have the opportunity to introduce initiatives that aim to deliver sustainable options for our clients. As professionals, we have the ability to positively influence not only the environment, but also the perceptions of our clients and the general public.



# User-Client Description

## THE CLIENT

### **Wadena Housing and Redevelopment Authority**

*Mission Statement:* To evaluate the housing and redevelopment needs of the greater Wadena area, and to enable appropriate public and/or private solutions (City of Wadena, 2011).

Throughout its 45 year history, the Wadena Housing and Redevelopment Authority has strived to fulfill its mission. Serving as a technical and financial resource, the WHRA is continually finding new and innovative ways to meet its goals.

### **Wadena City Planning Commission**

Working within the City Planning and Zoning departments, the Planning Commission is delegated to propose plans for future activities and developments.

The Planning Commission holds meetings on the 3rd Monday of each month if there is business scheduled to come before the Commission. Public hearings for Conditional Use Permits, Variance, Land Use issues, etc. are held at the Planning Commission meetings.

## THE USERS

### **Community Members & Residents of Wadena, Minnesota**

People benefiting from this redevelopment are the residents of Wadena. The tornado destroyed their city but did not destroy the community; it brought them closer. Redevelopment with green initiatives will not only help to unify the city once again, but will help create the growing, multi-generational Wadena the community seeks.



# Major Project Elements

At the community and residential scale, I hope to redefine what a neighborhood is for some people. Wadena is largely concerned with keeping younger generations in the community and creating a multi-generational, sustainable place to live. With this community suffering a recent natural disaster, they are looking to rebuild their city. My goal is to give them a working model of what can make Wadena great again; perhaps even better than it was before.

Inventory and analysis, especially at the macro level, will start to reveal spatial tendencies of the neighborhoods and opportunities to improve urban environmental quality. A 'green neighborhood,' will generate development patterns that use land more economically, create higher densities, and sufficiently mix land uses to increase the likelihood that daily services are within walking distance. A greener Wadena would create explicit places for nature and ecological functions, integrate them into the development pattern, and balance the competing spatial demands of open space, streets, and land uses within.







# Site Information

## MACRO: REGIONAL



Wadena is situated in central Minnesota and is characterized as a sparsely populated, suburban community. It is about 160 miles northwest of the Minneapolis – Saint Paul metro area and was home to 4,294 people at the 2000 census. The city is the administrative center of Wadena County, notably appointed in 1873.



# Site Information

## MICRO: SITE

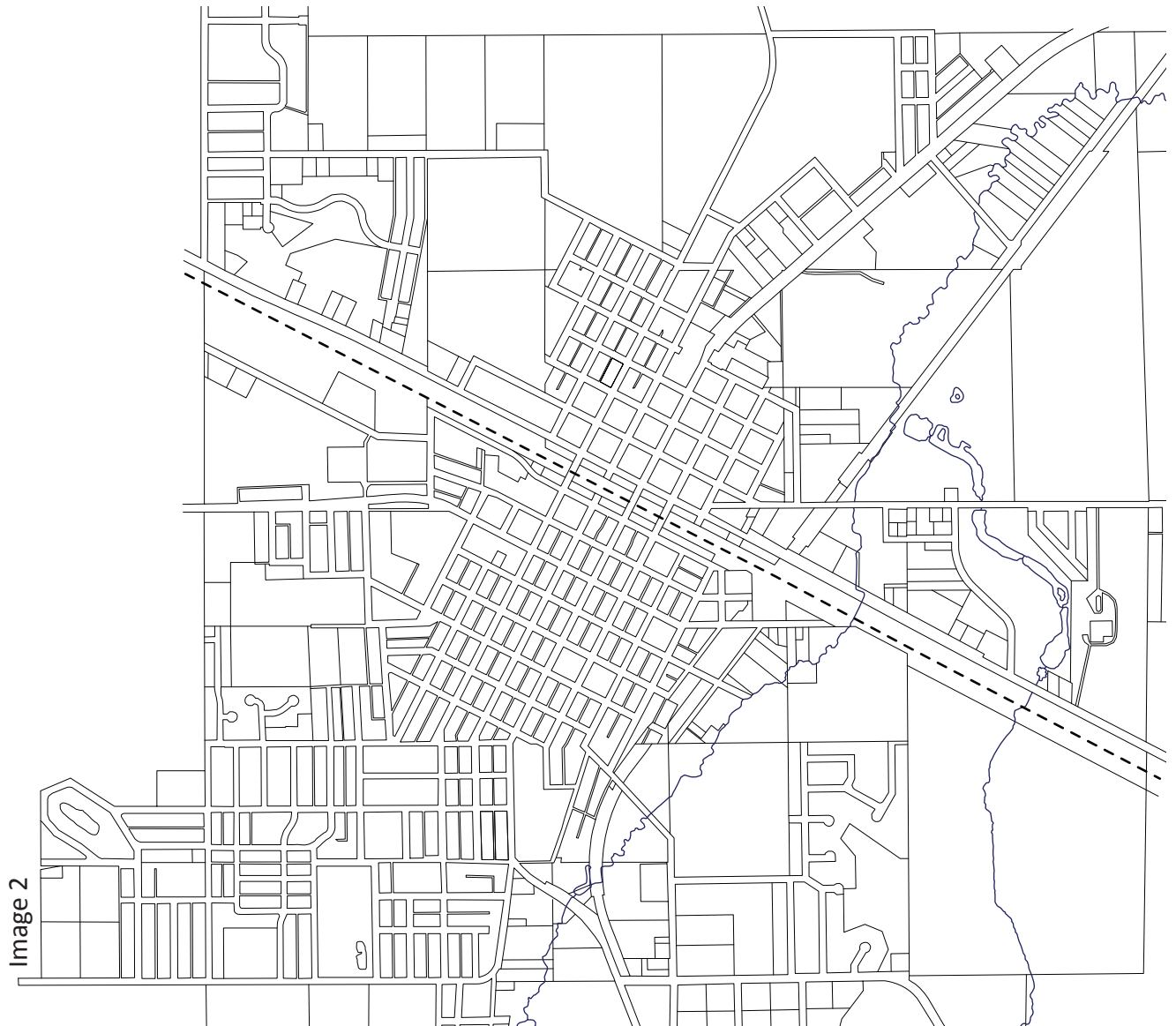


Image 2

The town is made up of primarily white, and mostly married couples with a median age for residents at 40.8, older than the average of the United States. This is a tight knit, friendly community open to ideas to better their city (US Census Bureau, 2000).



# Project Emphasis

The emphasis of this design project will be to create a model of what sustainable living is and can be, applied to an area in need of an environmental intervention. The project will focus on varying levels of design, including master planning, zoning, community design and redevelopment, and residential design.

## A Plan For Proceeding

### DEFINITION OF A RESEARCH DIRECTION

To ensure that the research conducted for and about this thesis is comprehensive, relevant, and useful, the following areas will be investigated: the theoretical premise/unifying idea, project typology, historical context, site, and programmatic requirements.

### DESIGN METHODOLOGY

The research for this thesis will follow a Mixed Method Quantitative/Qualitative Approach and will employ a Concurrent Transformative Strategy that will yield both quantitative and qualitative data. The perspective of this strategy will be guided by the premises developed in the Theoretical Premise/Unifying Idea.

The quantitative data that will be compiled will be both statistical and scientific in nature. Statistical data includes information that is either gathered and analyzed locally, or obtained through an archival search. Scientific data is information that is either obtained directly through instrumentation and/or an experiment, or obtained through an archival search.

The qualitative data will be gathered from direct observation, surveys, interviews, or through an archival search.



The types and amount of data collected will be determined by the specific research requirements of each premise. These investigations will yield information that will be analyzed, interpreted, and reported at various stages of the research process, and will be presented through both text and graphic illustration. This information will be the foundation for a base of knowledge necessary to successfully complete the goals of the emphasis of the project.

## DOCUMENTATION OF THE DESIGN PROCESS

A properly executed design process requires the utilization of many different types of media. Because of this, various methods will be employed to ensure its accurate and comprehensive documentation. Any electronically produced materials (i.e. drawings, models, renderings, illustrations, photographs) will be stored electronically by saving copies of each individual work to a separate folder. Any physically produced materials (i.e. hand drawings, sketches physical models) will be saved both electronically and physically. Materials will either be digitally scanned or photographed, and the digital copy will be saved in the same folder with the copies of the electronic materials. The original drawings or sketches will then be placed in a folder to be referenced at a later time. In an effort to ensure the completeness of the documentation, this process of duplicating, saving, and compiling both electronic and physical materials will occur every two weeks.

At the conclusion of the design process, the final solution will be presented through digitally produced plans, sections, and perspectives, as well as in the form of a physical model. This final solution, along with all of the preceding research and design that guided and influenced it, will be compiled and preserved in a bound thesis book. This book will then be catalogued at the NDSU Architecture Library to be referenced and used by future scholars.





# THE PROGRAM



# Theoretical Premise- Unifying Idea Research

## Human Impact on the Environment

To what extent have humans transformed their natural environment? This is a question that had fascinated the eighteenth century French natural historian, Count Buffon. He has been regarded as the first Western scientist to be directly concerned with the human impact on the environment and its ecosystems. Among other things, he was also much interested in the domestication of plants and animals – one of the major transformations in nature brought about by human actions (Goudie, 2006, p. 24).

Humans have had a generous impact on the environment of the past and present and presumably of the future. Of those to consider are: the human impact on vegetation, human influence on animals, impact on the soil and water, and the human agency in geomorphology.

### *i. Vegetation*

When considering the human impact on the environment it is best to start with the impacts on vegetation, for it is said that humankind has had a greater influence on plant life than on any other inherent element of the environment. Among all of the impressions humans have made in land use and land cover, some of the most notable include: the modification of soils, the influence of climates, the affect of geomorphic processes, and changes in the quality and quantity of some natural waters. Indeed, the nature of whole landscapes has been transformed by human-induced vegetation change (Goudie, 2006).

A model for classifying the extent of human influence on vegetation is provided by Westoff (1983), who adopts a four-part scheme:



# Theoretical Premise- Unifying Idea Research

1 *Natural*: a landscape or an ecosystem not influenced by human activity.

2 *Subnatural*: a landscape or ecosystem partly influenced by humans, but still belonging to the same formation type as the natural system from which it derives.

3 *Semi-natural*: a landscape or ecosystem in which flora and fauna are largely spontaneous, but the vegetation structure is altered so that it belongs to another formation type.

4 *Cultural*: a landscape or ecosystem in which flora and fauna have been essentially affected by human agency in such a way that the dominant species may have been replaced by other species (Goudie, 2006, p. 24)

## *ii. Animals:*

Humans, who have the greatest biomass of any other species, have had quite a range of impacts on animals. Those impacts have been conveniently grouped into five main categories: domestication, dispersal, extinction, expansion, and contraction. Humans have domesticated many animals, to the extent that those animals depend on humans for their survival and, in some cases, for their reproduction. Also true for plants, the amount of animals that have been dispersed by humans, both deliberately and accidentally is enormous. This is especially true if you consider the clouds of microorganisms that accompany the human 'vehicle' upon food, clothes, shelter, domestic animals, and their own bodies. "The extinction of animals by human predators has been extensive over the past 20,000 years, and in spite of recent interest in conservation, continues at a high rate" writes Goudie. In addition, human presence has contributed to the contraction and expansion of many species. In some cases, factors such as pollution have altered the distribution and welfare of several animal species. On the other hand, human alteration of the environment and modification of competition has favored the expansion of some animals, both spatially and in the size of populations (Goudie, 2006, p. 65).





# Theoretical Premise- Unifying Idea Research

## *iii. Soil and Water*

The ability of the natural environment to absorb human-made waste is infinite. “However, substantial flows of nutrients and domestic organic wastes, if adequately distributed, can be broken down and the by-products recycled by local ecosystems with little exclusive addition to the ecological footprint. (Only the land required for pre-release sewage treatment facilities need be included. Nature’s final processing of the residuals takes place in waters or on lands used and counted in the EF for other purposes)” writes Wackernagel. That which cannot be degraded, however, accumulates; either locally, or is carried away by water and air only to gather elsewhere, in the sea, or in global food chains. Contamination of soil, water, and airsheds may lose productivity or become so badly polluted that all consumption by humans could be out of the question. Wherever significant, these land and productivity losses will become part of the large waste disposal footprint. Also, the depletion of the atmospheric ozone layer also results in reduced bioproductivity and only further adds to the environmental footprint area. Not accounted for in these environmental footprint examples are waste absorption and pollution damage. (Wackernagel, 1996, p. 76)

## L. Architects and the Environment

Landscape ecology in the past decade has begun to make its way to the forefront of importance in the work of landscape designers and architects. Focus on heterogeneous land mosaics, such as neighborhoods, landscapes, and regions become important spatial scales when looking at how ecosystems interact and relate. Dramstad writes, “Animals, plants, water, materials, and energy are spatially distributed, move, flow, and change in predictable ways in these mosaics.” Many professionals have incorporated aspects of ecological processes into their work, and many more have requested a summary of key principles and how they might be applied in design and planning. (Dramstad, 1996, p. 7)



# Theoretical Premise- Unifying Idea Research

Using these ecological principles is not difficult and often times leads to designs and plans that are better incorporated into the overall landscape. Also, it helps to reduce landscape fragmentation and degradation seen increasingly in land mosaics throughout the world. Solutions to environmental and societal problems require a cooperative relationship between ecologists and landscape architects. Such collaboration would result in a deeper understanding of the ecological principles, the development of future principles, and the incorporation of the principles into land planning and design. (Dramstad, 1996)

Dramstad describes, comprehensively the role of landscape architects and ecology: “Land planners and landscape architects are uniquely poised to play key roles for society, to provide new solutions. These are professionals and scholars who focus on the land. Solve problems. Design and create plans. Look to the future. Are optimists, can-do people. Are synthesizers who weave diverse needs together into a whole. have ingenuity and creativity. Know aesthetics or economics. Know that human culture is essential in a design or plan. And know that ecological integrity of the land is critical.” (Dramstad, 1996, p. 9)

Frederick Law Olmsted also describes the importance of integrating landscape design and ecological principles: *“There is an increasing evidence suggesting that mental health and emotional stability of populations may be profoundly influenced by frustrating aspects of an urban, biologically artificial environment. It seems likely that we are genetically programmed to a natural habitat of clean air and a varied green landscape, like any other mammal. The specific physiological reactions to natural beauty and diversity, to the shapes and colors of nature, especially to green, to the motions and sounds of other animals, we do not comprehend and are reluctant to include in studies of environmental quality. Yet it is evident that in our daily lives nature must be thought of not as a luxury to be made available if possible, but as part of our inherent indispensable biological need.”* (Olmsted, 1982)



# Theoretical Premise- Unifying Idea Research

## Sustainable Design

“In many ways, the environmental crisis is a design crisis. It is a consequence of how things are made, buildings are constructed, and landscapes are used. Design manifests culture, and culture rests firmly on the foundation of what we believe to be true about the world” (Sim Van der Ryn, 2007, p. 24).

Sustainable design is a concept that’s finally made its way into the spotlight. All around the country, indeed the world, architects, engineers, developers and builders are all searching for ways to better market their services to reflect a new age of building and a new method to design. Many firms are coming to the realization that they must change the way they approach their business to better reflect sustainable methods and to take advantage of this new, rapid growing market. Those who have not heard of sustainable design will soon come to understand that to stay competitive they too must begin to appreciate its need, and how it is transforming our design profession. (McLennan, 2004)

Despite the growing awareness and interest in the topic, few words have been as misused and misinterpreted by design and construction industries as sustainable design and green architecture. The terms have come to mean several different things to many different people. Misconceptions surrounding their use have made it difficult to aid in the adoption of these principles. Almost every architectural and engineering firm today claims, at least to some extent, to be practicing sustainable design when in fact they have no real grasp of its concepts. Buildings have been recognized as “sustainable” when they clearly do not deserve such a title, overshadowing the few that actually do. (McLennan, 2004)

For many professionals, a green building is something that merely contains a few recycled products or has good windows. This approach is falsifying of true sustainability and is not nearly enough to earn the label. “Few buildings built today in Western society should even be called sustainable” (McLennan, 2004, p. 2)



# Theoretical Premise- Unifying Idea Research

Several buildings and building products are dubbed green because they contain a few features that lower their environmental impact, if even a small degree. Sustainability is not about the features. While it is disappointing the amount of misunderstanding that exists among design professionals, it is reassuring to know that many are beginning to learn the meaning behind the words, when a few short years ago the issues were barely being discussed. (McLennan, 2004)

McLennan states that some of the discrepancy may start with the term itself: “Part of the problem is that the term Sustainable design is wholly inadequate to describe the movement and philosophy behind it.” He goes on to say that the definition of the word ‘sustainable’ does not accurately describe the need to change the way we relate to the natural world. Better words could have been used to describe the challenge of ecological design and help highlight the main focus of the philosophy. (McLennan, 2004, p. 2)



# Typological Research

## Case study one:

### *i. Introductory statement:*

“Cypress Villages’ is among the country’s most ground-breaking green communities. Amidst organic gardens, winding paths and willow playgrounds, the team has built a self-sufficient neighborhood of \*LEED Platinum-certified homes that go above and beyond most standards of sustainability. Cypress Villages is a 145-acre subdivision located in the middle of “Silicorn Valley”, a bustling, culturally rich Southeastern Iowa region that’s been lauded by Mother Earth News, CNN Money and more for its entrepreneurial spirit and quality of life.” (Cypress Villages, 2010)

### *ii. Research findings:*

Common of other “eco-communities”, Cypress Villages is built around sustainable practices and LEED standards. They strive to create a diverse, multi-use residential area where residents will forge a strong connection not only with their environment, but also each other; a place where energy-efficient homes are built with respect for the land; a place where children play in safety and fresh, ripe produce is a short walk away.

Though some communities claim to be ‘green’, not all go to the lengths Cypress does. All of the homes feature daylighting, geothermal heating and cooling, passive solar design, solar- and wind-powered utilities and non-toxic building materials. They are built according to rigorous green building standards that not only sustain the land, but actually replenish it. In that way, they consider their community as being “beyond sustainable.”

### *iv. Conclusion:*

This case study makes real the definition of sustainability; it is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is an example of how professionals can design sustainably and affect a meaningful wholesale change within a community.



# Typological Research

## Case study two:

### *i. Introductory statement:*

On May 4, 2007, Greensburg was a declining farm community in south-central Kansas with a population of about 1,400. That evening, an EF-5 tornado touched down more than 75 times, killed 11 people, and destroyed or severely damaged 90% of the city. The storm left a trail of debris longer than 22 miles and wider than 1.5 miles. When it was time to rebuild, key leaders in Greensburg and Kansas expressed an interest in rebuilding as a model green community. The U.S. Department of Energy (DOE) was interested in what could be accomplished with technical assistance from DOE and its National Renewable Energy Laboratory (NREL). DOE's ultimate goal was not only to help Greensburg but also to demonstrate energy solutions that could be replicated elsewhere (Billman, 2009).

### *ii. Research findings:*

Cities around the world are forced to rebuild after suffering natural disasters, but the ways in which they cope can be quite different. When the initial shock of the tornado in Greensburg subsided and it was time to start rebuilding, the townspeople realized that they had been afforded an opportunity, a chance to turn a tragedy into a triumph. Similarly, at a time in which the community members of Wadena, Minnesota are plagued by disaster, there are opportunities to make the city better than it once was.

The fact that the U.S. Department of Energy and the National Renewable Energy Laboratory were on board to help this city pick up the pieces is one thing that sets this case study apart. NREL set several guidelines and recommendations for different aspects of the rebuilding process including energy solutions, residential redevelopment, and solutions for commercial and public buildings. Their goal was first and foremost to help the city of Greensburg, but also to create a model of sustainability that could be used elsewhere.



# Typological Research

## *iv. Conclusion:*

Greensburg's accomplishments in rebuilding green in the first two years after its destruction by a disastrous tornado are extraordinary. A small, rural community with strong leadership and committed citizens can indeed rebuild differently, with major improvements to energy efficiency, uses of renewable energy, and overall sustainability (Billman, 2009). This case study is a great example of a community in need coming together and making a meaningful change to their environment.

## Case study three:

### *i. Introductory statement:*

At 5:30 pm on March 29th, 1998, an F3 tornado hit St. Peter, Minnesota, a town of about 10,000 people located in eastern Nicollet County, and inflicted severe damage on much of the town. Gustavus Adolphus College, which sits on top of a hill on the west side of St. Peter, sustained heavy damage after taking a direct hit from the twister. Eighty percent of the windows on campus were shattered, and most of the major buildings on campus sustained damaged.

The chapel spire—a campus landmark—was snapped in half. The admissions office was destroyed, as was Johnson Hall, a small dormitory. The Lund Center for Physical Education and Health lost part of its roof, as did the tennis center. The football press box was blown from the top of the stadium bleachers, and the baseball dugouts were damaged. The tornado also uprooted more than 1,000 trees, almost completely denuding the campus. Gustavus students were on spring break at the time the tornado hit, so the campus was virtually vacant of students and there were no serious injuries or fatalities reported.



# Typological Research

As the tornado continued through St. Peter it caused more damage and destruction. St. Peter's Catholic Church and St. Peter Evangelical Lutheran Church were destroyed, as was the Arts and Heritage Center. The hospital was severely damaged and the library was hit, resulting in a loss of 25% of its books. Officials estimated 500 homes in St. Peter were destroyed, 1,700 more were damaged and more than 17,000 trees were lost. Many of the homes and trees that were destroyed in St. Peter were more than a century old. Debris from St. Peter that was sucked into the tornado fell back down to earth as far as Rice Lake, Wisconsin, over 130 miles away. In addition to the damage in St. Peter, the tornado also damaged or destroyed 60 homes and caused \$6.5 million in damage in rural areas. Altogether this tornado was on the ground for 18 miles and inflicted \$120 million in damage.

## *ii. Research findings:*

Just as in the Kansas case study, the people of St. Peter, Minnesota were left devastated by natural disaster and forced to pick up the pieces. This tornado, however did not ravage the entire city but rather lifted off and touched down in separate areas of the community. This leaves, arguably, a more challenging issue of reintroducing landscape and infrastructure that blends seamlessly with its existing surroundings.

The outbreak of storms broke many early-season tornado records for the state of Minnesota. The 14 total tornadoes in the state were the most to ever touch down on a single day in March. The F4 tornado was the strongest ever recorded in the state in March, and its 67-mile path was the longest tornado path ever recorded in Minnesota.

## *iv. Conclusion:*

Official U.S. government totals gathered in the months following the disaster stated that the tornadoes caused \$235 million in damage; however later estimates put the total much higher, including more than \$300 million in St. Peter alone. Additionally, more than \$800,000 in hail and downburst damage was reported over South Dakota, Minnesota and Wisconsin.





# Case Study Series & Typological Summary

As important as it is to understand each individual case study, it is just as important to understand how, as a whole, they can contribute to the understanding of the project at hand. The preceding studies were done to further understand cities destroyed by natural disaster, the effects of the disaster on the community, and the ways in which the communities rebuilt.

The level of destruction has an impact on how redevelopment is done. As with the St. Peter case, only portions of the city were destroyed while much of it remained intact. In this specific instance, it is important to understand how the infrastructure and landscape can blend with the existing urban fabric. In the Greensburg case study, the possibilities were much more vast because the city, in its entirety, was destroyed.

Sustainable developments are gaining popularity as more people are becoming aware of their effects on the environment. There are many examples, including the one shown in the typological research. They have shown up in places across the country, including Atlanta, Chicago, and Los Angeles. Those who live within them will testify firsthand the positive effects that come with it: a stronger sense of community within a unified, walkable environment.





# Historical Context

## Area Railroad History

“Wadena is one of many stations on Burlington Northern that owe their existence directly or indirectly to president Lincoln’s signing of the charter that created Northern Pacific on July 2, 1864” (Pioneer Journal, 1955).

There were several delays in getting work underway on laying track and the groundbreaking ceremonies were not held until February 2, 1870. The ceremony was held at present-day Carlton, Minnesota and construction began in July of that year.

‘Wadena’ was nothing more rolling hills and tree stands when tracklayers reached the location on September 15th, 1871. Before the year was out, however, a community called Union Creek was formed, though it did not draw large amounts of colonists at the time.

Organized by Northern Pacific for the sole purpose of creating towns, a site was platted in June of 1874 by the Lake Superior and Puget Sound Co. Shortly thereafter, the founders changed the name to Wadena after the old trading post located 15 miles east. Wadena grew so rapidly that it soon became the county seat.

Northern Pacific’s official guide reported the population of Wadena to be 1,100 by the end of 1882. NP brought several passengers and freight through the city during this time. According to the annual report for fiscal year ending June 30, 1883, 17,337 passengers had arrived at and departed from Wadena that year and 8,660 tons of freight were received, while 5,712 tons were shipped out.

Several immigrants detrained at Wadena with dreams of finding good land in the area and starting a new life. (Pioneer Journal, 1955)

The North Coast Limited, The Crack Northern Pacific Train, running through Wadena in 1903.

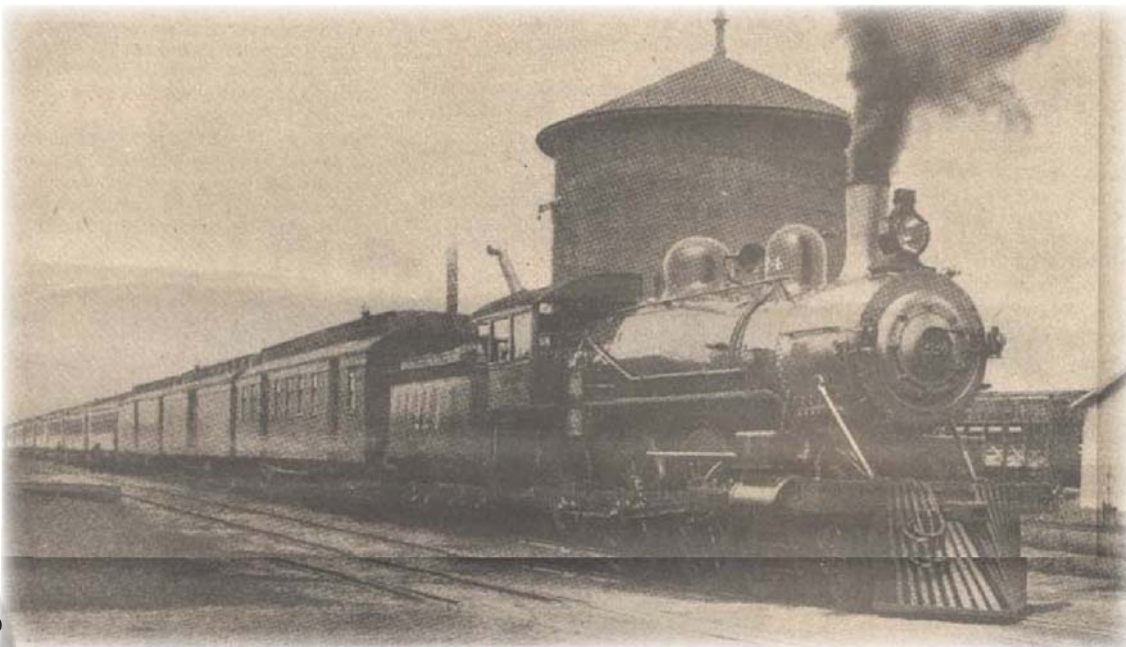


Image 3

# Historical Context

## Wadena & The Northern Pacific

“Since 1870, the Northern Pacific has been furnishing transportation facilities to Wadena. In those years, Wadena has become one of Minnesota’s outstanding cities and, while progress has been under way, the Northern Pacific has grown steadily, keeping always in advance of the needs of the great territory it serves” (Lloyd Paulson, 1949).

At that time NP was one of America’s leading railroads and contributed largely to the development of Wadena. Wadena and its territory in turn also contributed significantly to the upbuilding of the Northern Pacific.

Northern Pacific trains steamed into Wadena late 1871, and a village was born. Between 1855 and 1860, some 100 people lived here, settled about the time it earned its name from the old trading post of Wadena, located between the mouths of the Leaf and Partridge Rivers.

It is shown that among the Northern Pacific’s earliest patrons were the earliest settlers of Wadena.

Paulson recalls the ground breaking ceremony that took place the year leading up to Wadena’s settlement: “Construction of the railroad line, which was the first of the Northern transcontinentals, was stated with a celebration and the handling of a few wheelbarrows of dirt at Northern Pacific Railway Junction, (now Carlton, Minn.), on February 15, 1870. In June of that year, a contract was awarded for the construction of the Minnesota division and the work of actually building the line was started in July. The records disclose that the end of the track on September 15, 1871, was at Wadena.”

According to the Pioneer Journal, the first train from Duluth to Brainerd was operated as a special March 11, 1871 on the Northern. At that same time, construction continued westerly, so that by December of that year the tracks stretched as far as Moorhead. The first train through to Moorhead was operated on January 3, 1872. It is recorded, that in the winter of ’72 there was so much snow that little service was available on this line. (Lloyd Paulson, 1949)



# Historical Context

## Wadena's Namesake: Chief Wadena

The original Wadena was a trading post on the old Otter Tail trail, on the west bluff of the Crow Wing River in what is now the town of Thomastown. The former ferry-trading post was between the mouths of the Leaf and Partridge rivers.

J.V. Brower, who visited the place in 1863 and again in 1899, recorded that in the years 1855 to 1860 the population at the trading post was more than 100 people.

The buildings and road have disappeared, only cellar holes remaining to mark the spot. Shortly after the Northern Pacific railroad was built across the county in 1872, the county seat was located.

The name, Wadena, was transferred to the new site, which was 15 miles west of the original trading post.

“Wadena” is an archaic Ojibway word, meaning ‘little round hill’, according to the late Rev. J.B. Gilfillan. It probably referred to the rounded outlines of the Crow Wing bluffs at the Wadena ferry.

“Wadena” is also an often-used personal name among the Ojibway Indians. The eldest son of the last Gull Lake chief, (“Bad Boy”), was named Wadena; he lived on the White Earth reservation until sometime around 1925.



Image 4



# Historical Context

## Bitter County Seat Fight

County seat fights were a common occurrence among cities in the early days. Since Verndale was settled, a rivalry between the town and Wadena was in full force. The contest culminated in a bitter county seat fight of 1886.

The battle started many years before the decision was made, as early as 1879. Old PJ files stated: "E.E. Luce went to Verndale and, considering that he is a Wadena man, it is surprising that he was not entirely chewed up before he got out of that burg."

In an attempt to woo the county, Verndale built and donated a courthouse, with the condition that within a year after its acceptance, the county seat would be in Verndale. The gift was not accepted.

The days leading up to that November, 1886 election were brutal. It was considered unsafe for woman and children to go out in the streets due to fights and brawls that continued day and night. Both city hired men to stay in their respective voting precincts 30 days prior to the election. These outside "voters" practically ran the cities for the 30 days.

The decision revealed that Wadena had won by a majority of 474 votes. Verndale was not pleased, taking the decision to the Supreme Court. The ruling favored Wadena in August, 1887 only adding to the towns growing status. (Wadena Pioneer Journal, 1981)



Image 5

This building, intended as a gift from the citizens of Verndale to the county, became an opera house in Verndale for many years.



# Historical Context

## Long-standing Business

### Wadena Pioneer Journal

In 1981, the Wadena Pioneer Journal reached 104 years of service and became the oldest continuous business within the town. That business is still going strong today.

The Journal's first copies consisted of a 4-page, 7-column newspaper. Half of each weekly issue was devoted to news at large and various 'patent inside' features and the remaining four pages to local news, editorials and advertising.

The history of the Journal goes back more than a century and boasts a long list of notable writers. It was written in 1981: "...if the dauntless men who gave of their talents and unbounded energies toward the upbuilding of this newspaper could meet together and unfold their experiences, it would make a tale 'worth the telling'!"

The newspaper has operated under several different names and owners since its inception. It began as the Northern Pacific Farmer when founder J.E. Hall established it in Wadena. Prior to that, P.A. Gatchel started a paper in Wadena calling it the Wadena County Tribune. The Tribune was more of a land journal than a weekly reader however, since being founded by a real estate operator. When the owner decided that Verndale was a better home for the paper, he moved the County Tribune out of Wadena.

The Northern Pacific Farmer continued to be edited by Hall for several years until Whitney & Whipple bought the paper in 1880. Whipple retired from the business shortly thereafter and in 1883 Whitney was editor and sole owner but only for a short few months. He sold the paper to A.H. Bereman in 1883 who ran it for four years until his death in April of 1897.

J.E. Reynolds then became the owner changing its name to the Wadena County Pioneer. Under his ownership the newspaper became a thing of influence. The Pioneer to him was of much importance. Reynolds later became one of Minnesota's greatest and most prominent editors. He was also, for years, the editor of the Mankato Daily Free Press.

Reynolds conducted the paper until 1891, when he sold it to C.C. Eastman. Eastman ran the paper for 20 years with much success and marked ability. He absorbed the Wadena Journal then changing the name to the Wadena Pioneer Journal which it has been ever since. (Wadena Pioneer Journal, 1981)



# Historical Context

## Mason Bros. Wholesalers

Mason Brothers Company was established in 1920 by brothers Harold W. Mason and V.V. Mason and is one of the long standing businesses within the city of Wadena.

The original warehouse was located in the former West Hotel building, also formerly known as the Peterson-Biddick apartment. A new warehouse was built a few years after the company's establishment in 1923 just east of the original. The new warehouse was a three-story building built on the Northern Pacific right of way property with trackage to the north.

The business continued to thrive and grow until the entire warehouse burned down in a blaze June 18th, 1968. Business would resume two days later at a temporary location until a new warehouse could be constructed.

The replacement warehouse was constructed at the close of 1968 where the other burned down.

They were able to resume business at the newly erected warehouse in January 1969. The building, complete with offices, was comprised of over 42,000 square feet. In 1971, Mason Brothers was one of the first businesses in the area to install a computer.

In 1981, Mason Brothers Company employed 38 people and serviced approximately 125 stores within a 100 mile radius of Wadena.

The company is still one of Wadena longest running ventures at 91 years. Today, it services more than 200 grocery stores in Minnesota, North Dakota, Wisconsin, Iowa and Michigan. The original facility has gone through seven additions. It is now more than 185,000 square feet, housing more than 18,000 items and 18 dock doors for shipping and receiving. (Pioneer Journal, 1981)



Image 6

Pictured above is the old Mason Bros. wholesale grocery company in 1924. It was situated on Aldrich Avenue S.E. in Wadena from 1923 until fire destroyed it in 1968.





# Historical Context

## Wadena Devastated by Tornado

June 17 2010

This was supposed to be a happy day in Wadena.

With a grand parade scheduled for 7 p.m. and around 2,000 people expected to come home for an All-School Reunion, Thursday has been circled on a lot of calendars in Wadena for many months.

Now it will be remembered for a devastating tornado that ravaged the city. At 5:10 p.m., everything changed.

On Thursday night, Wadena-Deer Creek High School had extensive damage, including having a large chunk of the Wadena Community Center coming to rest on its roof. The city's pool was destroyed. The Wadena County Fairgrounds were heavily damaged. Headstones were overturned at the Wadena City Cemetery. At a press conference at 9 p.m. Thursday, Wadena County Emergency Management Director Scott McKellep said they haven't even started counting how many homes and businesses were damaged or destroyed.

"I do have a gentleman out trying to get counts ... and I haven't gotten that report back yet," he said.

The storm caused "extreme damage" in the city, according to Mayor Wayne Wolden.

"Thank God that no one has been killed," he said.

There were 20 people treated for mostly bruises and other minor injuries, said McKellep. Of those, three were admitted to the hospital and 17 were treated and released. One person had been unable to escape their residence after the storm.

"We've had one report of someone trapped in their home, and they have been freed," Dean Uselman, Wadena fire chief, said.

Uselman said seeing the town like this is tough to take.

"It's devastating," he said. "It's just complete devastation."

The Red Cross set up at the Wadena Armory to help people displaced by the storm, which was estimated at more than 100 as of Thursday night.

Tri-County Hospital was prepared for a quick airlift of survivors with heavy injuries, but it didn't happen.

"We did have one helicopter at the hospital on standby, and we had three at the airport on standby," said TCH Director of Nursing Kathy Kleen.

Wolden said there were many gas and water main leaks that crews are trying to repair, and Verizon cell phone service was down in the city.

Wolden said although there's not been official confirmation, he's certain it was a tornado that caused the damage. He made it through the storm in his basement, embracing his daughter.

"The sirens went off. I was in my basement, and I could hear the siren plain. It went, it stopped. But moments before the tornado hit, I heard it loud and clear," Wolden said. "I could hear the wind getting louder and louder.

"It sounded like a train," he said. "We just held each other. And we're OK."

McKellep said sirens were sounded and warnings were given prior to the arrival of the tornado.

"We had good advance warning from the Weather Service on this," McKellep said. "We were able to put out early notification to weather spotters and law enforcement in the area. ... It worked perfectly. It's a testament to those systems."

When Wolden emerged from his basement, Wolden said it didn't appear the damage was too severe — until he headed out to look around on his ATV.

"It's devastating," he said. "I broke down. I've never seen this before — people standing outside their homes in disbelief. But their lives are there. They're OK. It's property. It can be replaced."

Wolden said many people have been asking what they can do to help, and he said the best thing right now is just to keep your distance.

"We're really encouraging people to stay away if they're just coming to look at the damage," he said. "At this point in time, we're not asking for volunteers. That time will come."

Two emergency management trailers arrived to assist the city, and were stationed at St. Ann's Catholic Church and Wadena-Deer Creek High School. About 15-20 law enforcement agencies and 10 fire departments came to Wadena to help.

Wolden credited all of the emergency responders with doing a tremendous job.

"It's put people in action," he said. "I've never seen such a well-coordinated event."

And Wolden said the town of 4,300 will survive.

"Our community is tough ... we've got resolve." (Schultz, 2010)



# Historical Context Summary

## The Formation of the City - The Railway

To understand how the city of Wadena was formed is to understand its sense of place. This city was built around the railroad and it's a part of the culture as well as its livelihood. The importance of considering the function and use of this amenity is immense.

## Wadena's Namesake

Wadena's namesake is another story that gives insight into what this city is and who the people are. It is important to fully appreciate the history of the city and its people in order to make design/planning decisions that will impact its future.

## Wadena County Seat Fight

Wadena made its name when it won the county seat in 1886. The fight only added to the growing trends of the city, laying the foundation for a motivated, tight-knit community.

## Local Economy

When trying to find ways to boost the local economy, we must recognize businesses that were successful in the past. Along with the two that were highlighted in the research, there were several businesses that thrived for years and years in Wadena. Why were they successful? And how can that success be replicated?

## The Devastation

The June 2010 tornado is the catalyst that triggered council members along with Minnesota designers to affect a change within their city. Not only is there rebuilding to be done, but how can the rebuilding be done in ways that better the city in the long term? "Our community is tough..." says Mayor Wayne Wolden. And its people are more than ready for the challenge.



# Thesis Goals

*In each of the three environments in which my thesis project exists, I would like...*

## *i. Academic*

- ...to explore multiple aspects of landscape design, including zoning, master planning, community development, and residential scale design.
- ...to push the limits of sustainability into all phases of development, including planning, design, and final construction.

## *ii. Professional*

- ...to portray an extensive knowledge in sustainable concepts and theories.
- ...to show my dedication to 'green' methodologies in the support of environmental issues.

## *iii. Personal*

- ...to reveal possible career interests in the future.
- ...to create meaningful work that illustrates my graphic abilities for inclusion in a professional design portfolio.



# Site Analysis

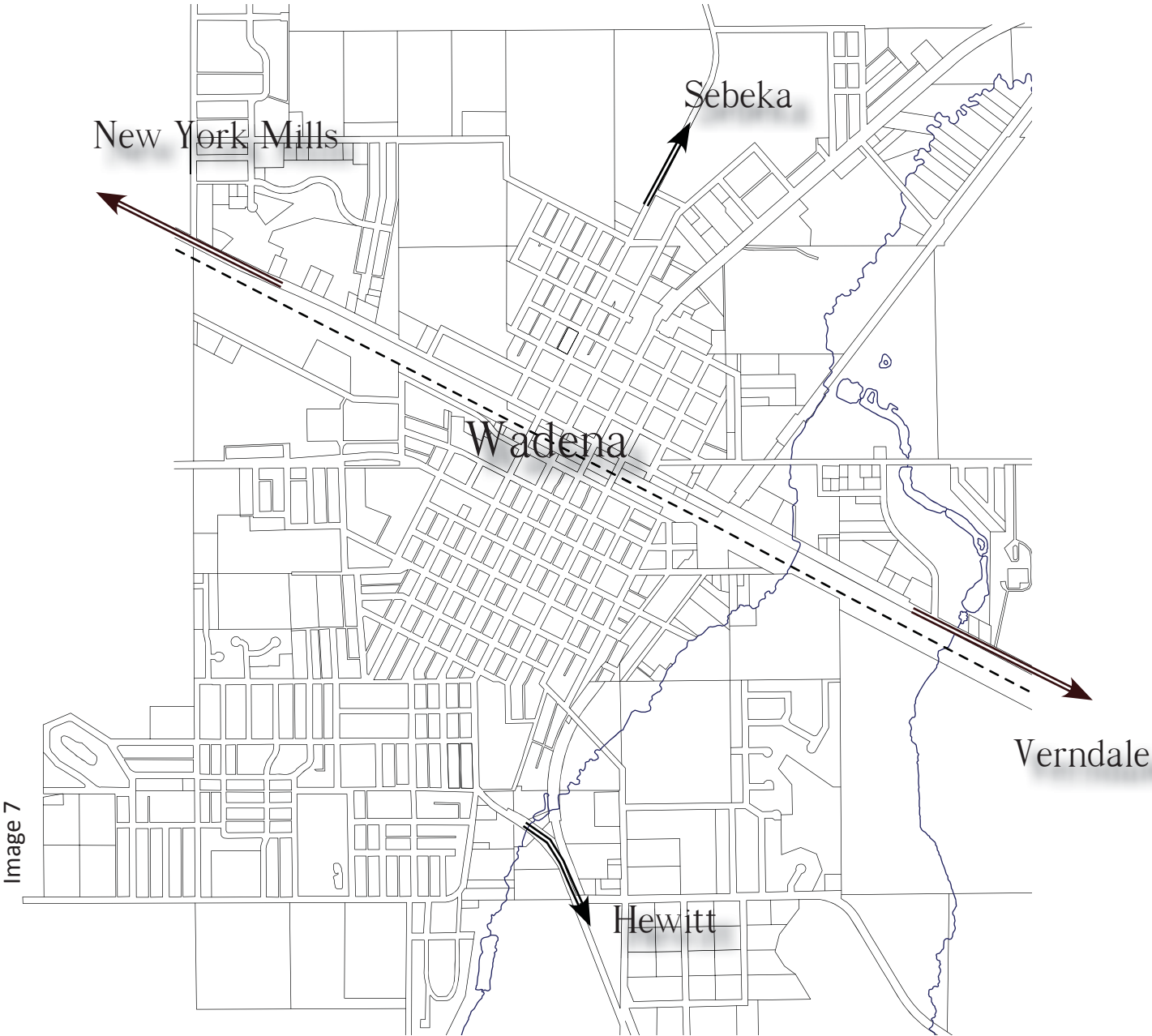


Image 7

*Located at the convergence of two major routes (10 and 75), Wadena is a 5.2 square mile plot of land located approximately 90 miles southeast of Fargo, ND. With a population of approximately 4,300 people, Wadena is the county seat of Wadena County with neighboring towns that include New York Mills, Sebeka, Verndale, and Hewitt.*



# Site Analysis

## Wadena - Green Network

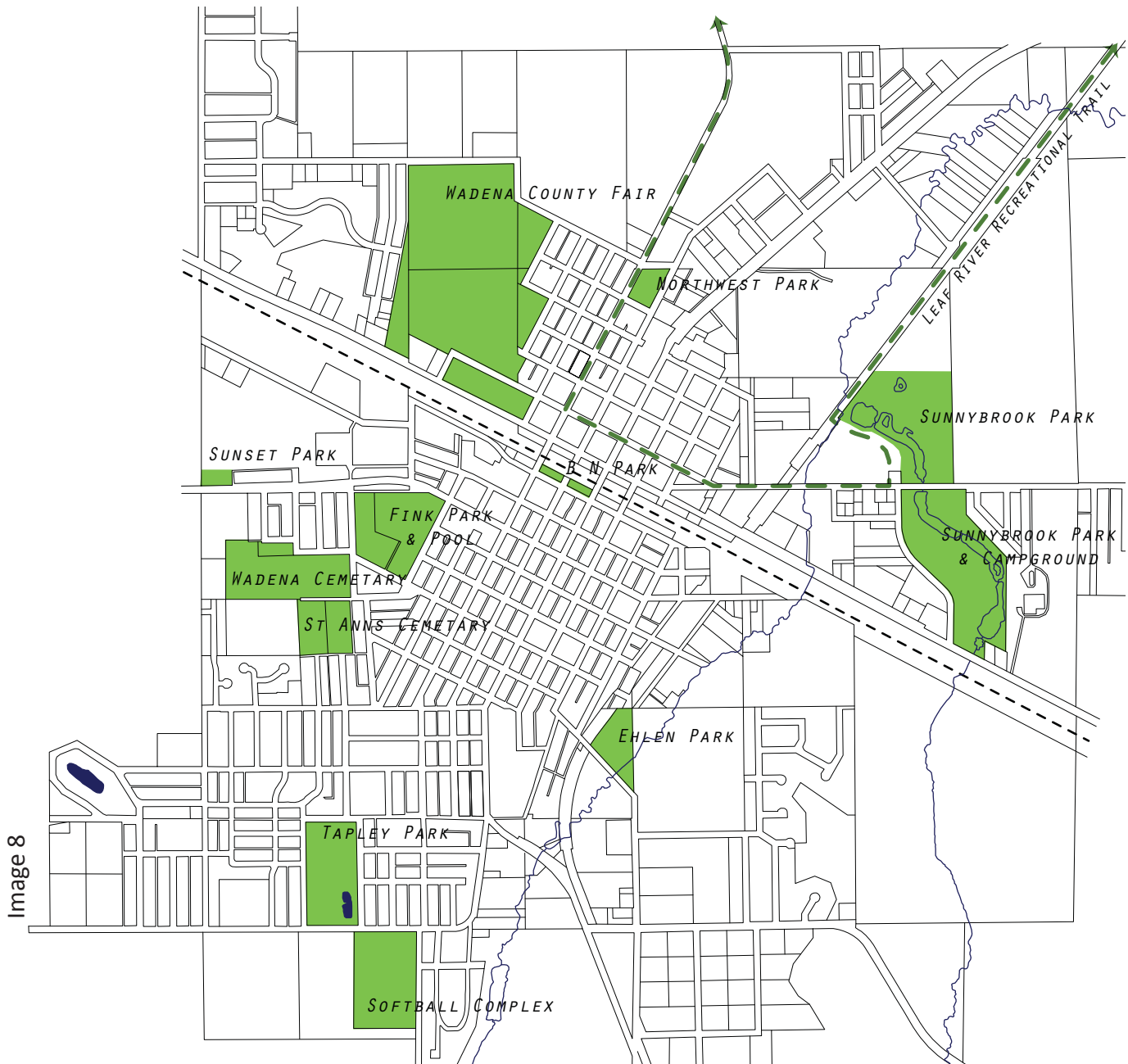


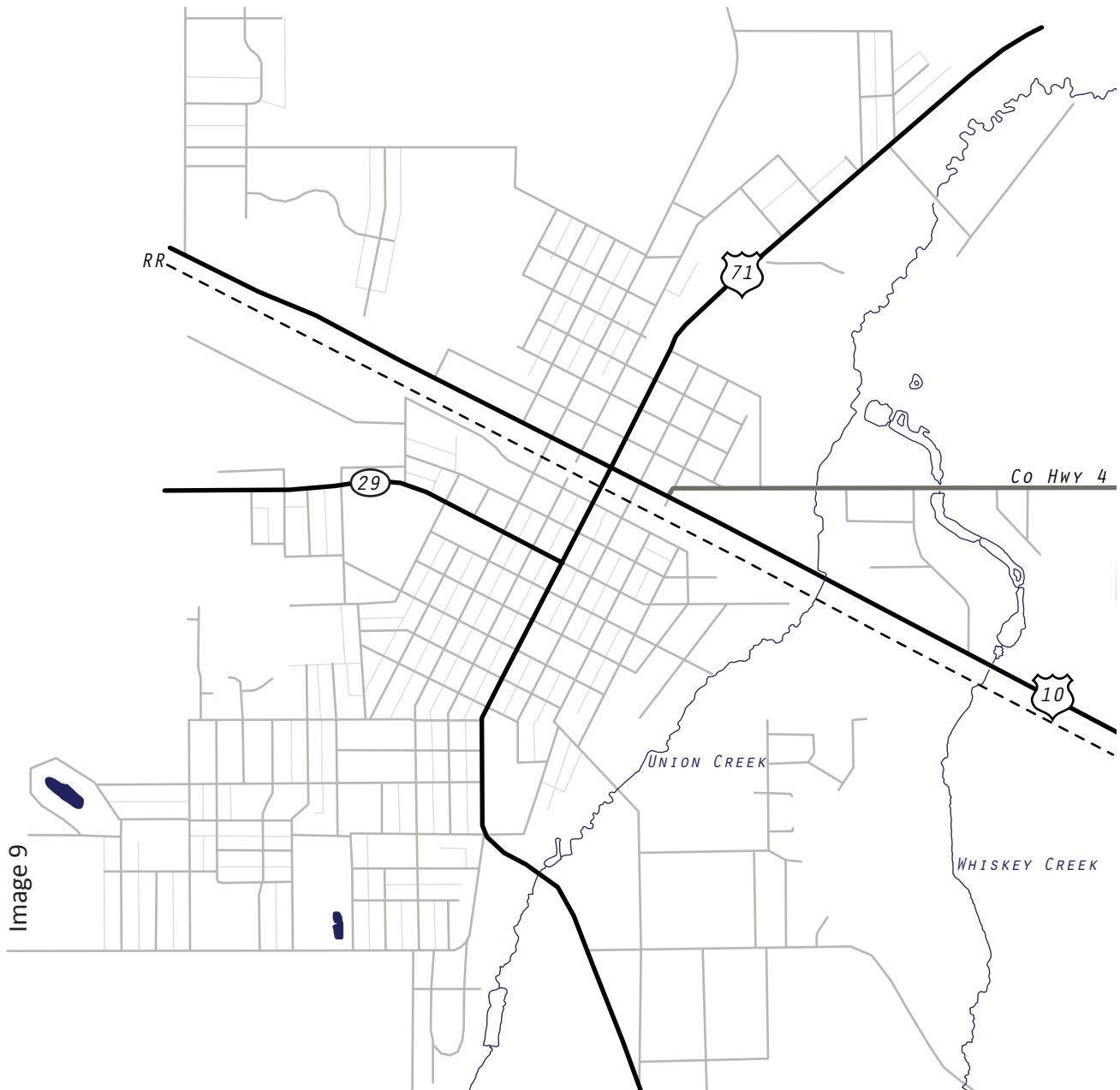
Image 8

*Wadena is known as the City of Parks, but outside of the 'Leaf River Recreational Trail' there is real disconnect between them. Finding a way to implement another trail system or greenway could help to make the 'green fabric' more cohesive.*



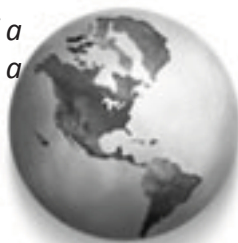
# Site Analysis

## Wadena - Gray Network



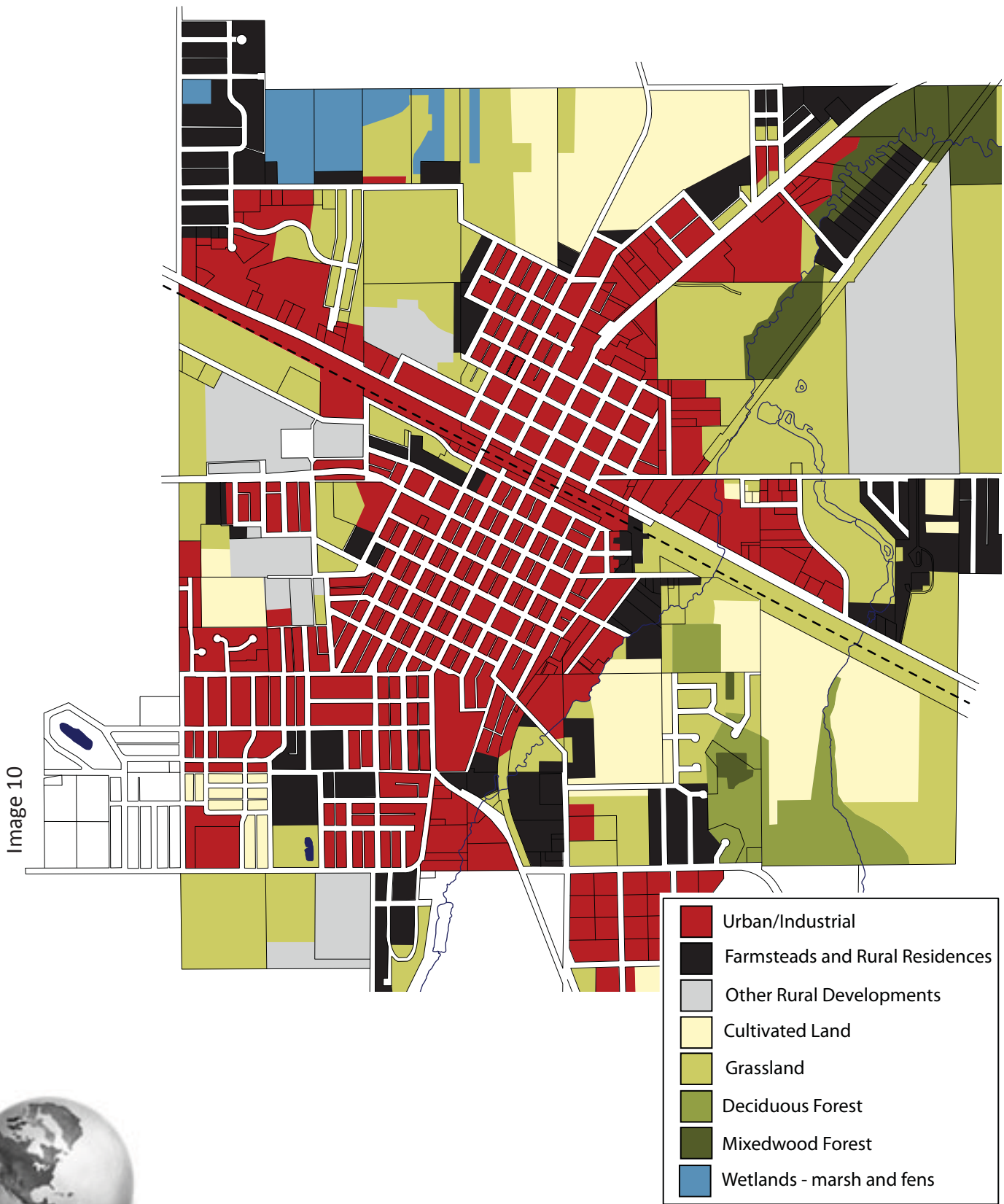
*Wadena is built around the convergence of two major roadways: Hwy 10 and Hwy 71. Just south of that convergence lies the downtown corridor, though there is no clear indicator of its location.*

*One factor that has the potential to harm Wadena's future growth is the proposal of a highway 10 bypass around the city. An alternative to this that has been discussed is a multi-lane, through-city route.*



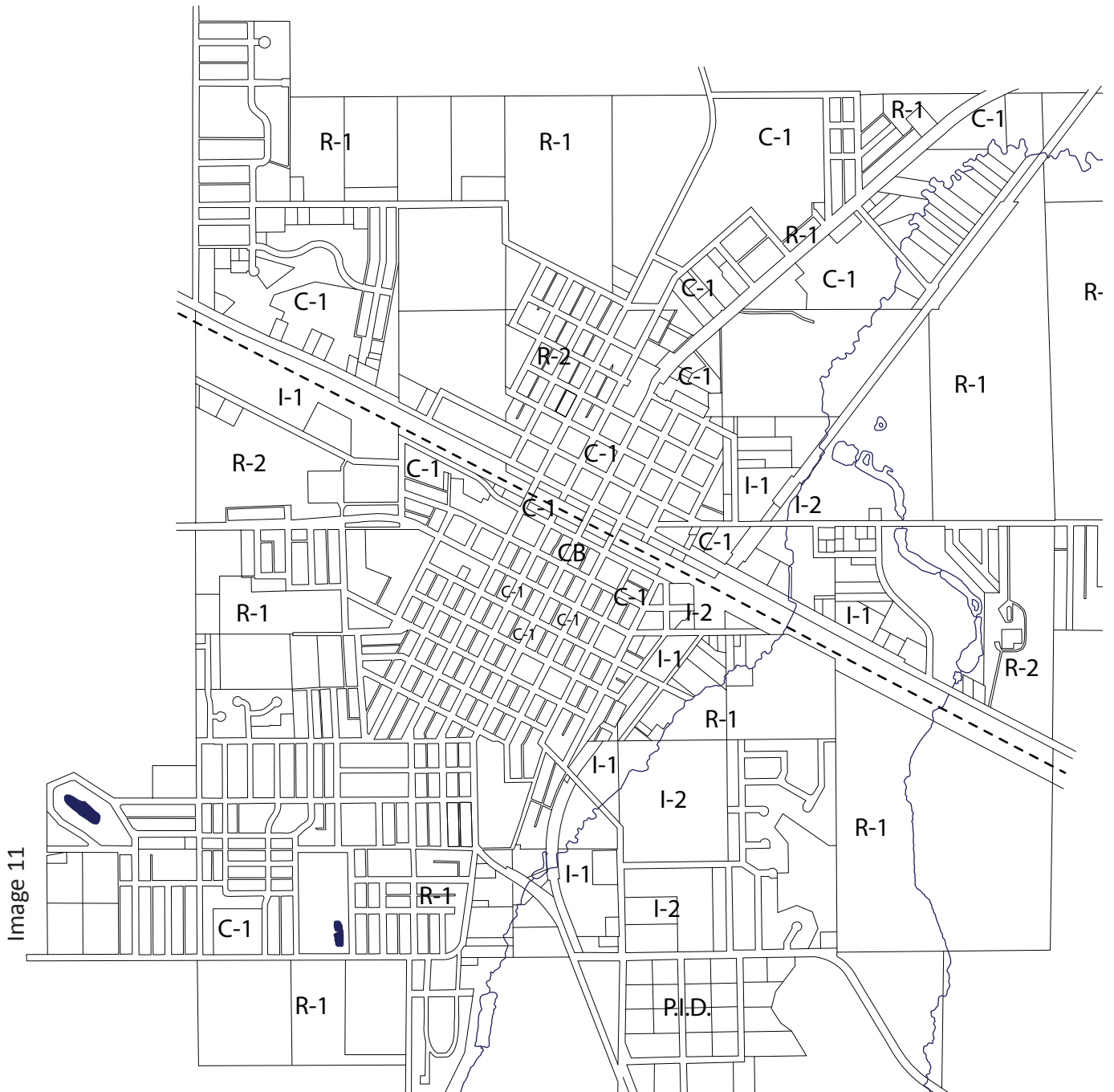
# Site Analysis

Wadena - Land Use Map



# Site Analysis

## Wadena - Topographical Info



*In order to make recommendations for the future growth of the city, it is valuable to understand how the city's land is being utilized at present. To plan for sustainable growth, a designer would like to see more tendencies in inward proliferation than outward expansion.*





# Site Analysis

## Wadena - Tornado Damage

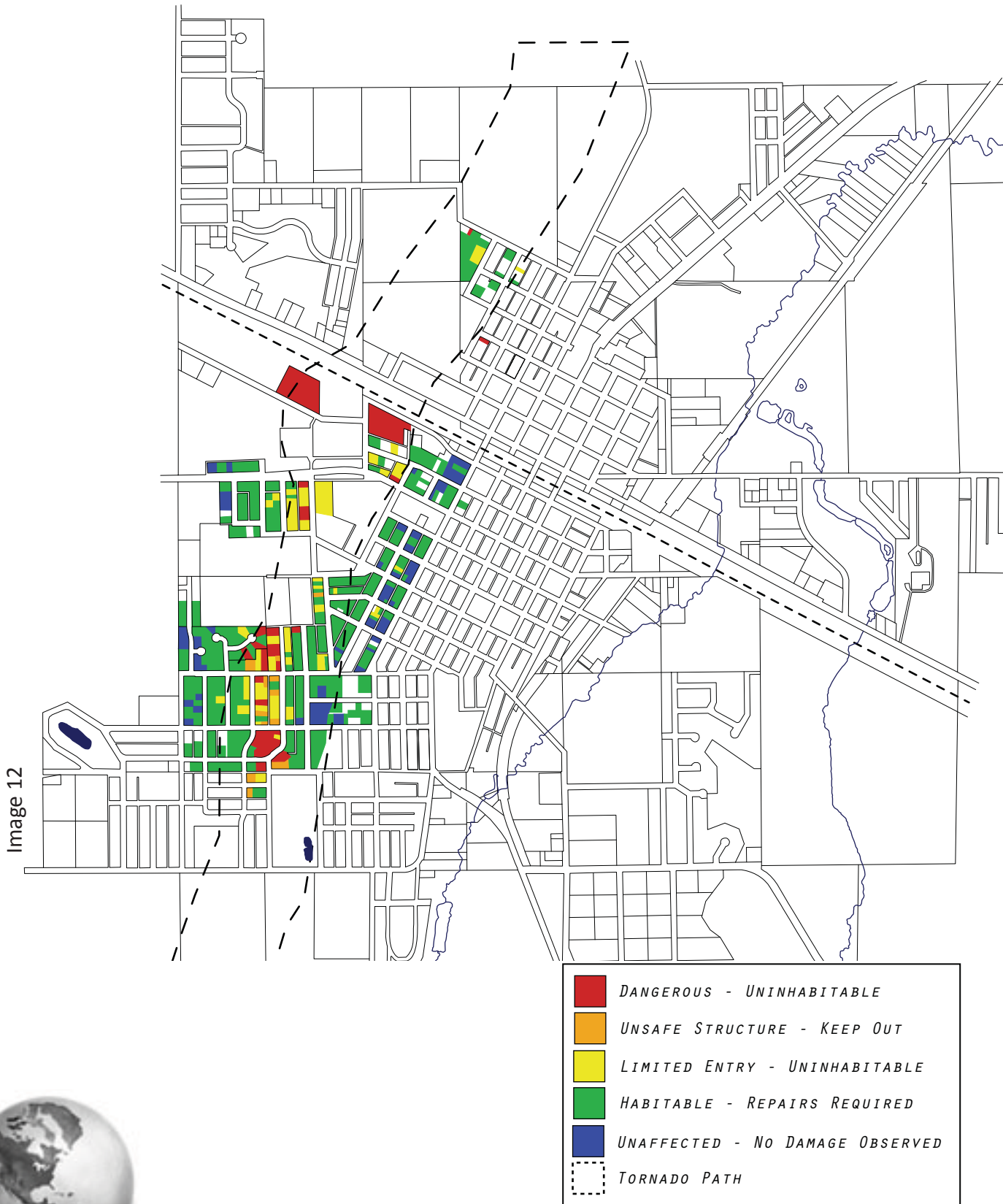


Image 12



# Site Analysis

## Minnesota Design Team: Wadena, MN

After attending a community luncheon and brainstorming session in Wadena to gain some local insight into the problems the city faces, I was fortunate enough to be invited back by the Minnesota Design Team to take part in the design phase of the project. We discussed the results of the community brainstorming session and addressed local concerns facing the city.

### Wadena sketches a future look

Among the many communities hit by the powerful spate of tornadoes on June 17, Wadena sustained the most damage. The twister blasted through the town's west side. Buildings were blown apart, the school was damaged and hundreds of trees were destroyed. Now a so-called "emergency" meeting of the Minnesota Design Team is trying to help Wadena residents design a new town.

The Design Team co-leader Michael Lamb says the losses occurred on the west side of town, where the fairgrounds, pool, ice arena, community center and high school were located:

"The fairly well preserved main street is very impressive. Essentially it wasn't touched by the tornado. But once you get to the west side of town, it's pretty incredible the amount of damage that was done."

The Minnesota Design Team, or MDT, is a group of architects, landscape architects and planners who have experience working with other towns. There are 300 members who volunteer to visit a few towns a year.

Over two and a half days the team spends time with people in the town, and not just its leaders. The team wants to make sure that as many different people are involved, so towns have to show that churches, schools, seniors and farmers will participate.

Once people have provided their ideas of what they value and what they want preserved or changed, the MDT makes up 18 - 25 display boards with colored hand drawings. These the town gets to keep as guideposts toward a new look. Even if the town isn't redesigned completely, the conversation helps break down some barriers, according to Wadena councilman Don Niles.

"Probably the main point of enthusiasm is the new opportunities to collaborate that were completely impossible before the tornado. This is not a disaster that anyone would wish for but now with the clean slate we have an incredible opportunity to look at green technologies..."

The MDT volunteers its time, but the travel and materials usually cost \$4,000. Fewer cities have asked for designs over the last few years because they've had limited resources to make changes. (Lebens, 2010)



# Growth Analysis

## Interview: Mayor Wayne Wolden

### Economic Inquiry

*1. What kind of changes have you seen in the economy in the last three years?*

“Wal-Mart came to our community about 5 years ago and has changed our community in a way that is not quite yet known. In one way, they drive traffic our way which gives our community a chance to “catch” new customers. In another way, they pirate business from other locally owned businesses. It is hard to say if our economy is any better or worse than other communities.”

*2. What connections do you see between the local economy and that of the area?*

“As the economy goes, so goes Wadena. I think everyone is more careful with their money and with the price of gas on the rise, I think people will stay closer to home to shop.”

*3. What are your economic strengths and weaknesses as a community?*

“Strength, we have a lot of local businesses and most everything that shoppers need without driving 50 miles. Weakness, we are only 50 miles from significant shopping opportunities.”

*4. What economic development activities in the community do you know of?*

“The WDC is very aggressive and is working with many business opportunities.”

*5. Are there any outside resources used for economic development?*

“Yes, Initiative foundation, Region 5, DEED, Federal granting agencies.”

*6. Has any building or construction taken place in the last three to five years? Homes, public features?*

“Yes, many buildings. With the tornado there will be many, many more.”

*7. What new businesses do you know about?*

“Wal Mart, multiple relocations and improvements.”

*8. What future opportunities do you see for the town?*

“There are lots available in our industrial park. The city just tore down an old elevator next to the railroad tracks. We are working with a business to move in there at this time.”

*9. How do people invest in this community? Money, time, ideas?*

“There are many opportunities to invest in Wadena.”

*10. How has the tornado affected the local economy?*

“It has created a boom in some ways and bust in others. Construction has been great, extra dollars for things that are “nice” to have has been a little short.”

(W. Wolden, personal communication, March, 2011)



# Growth Analysis

## Interview: Councilmember Jeanette Baymler

### Economic Inquiry

*1. What kind of changes have you seen in the economy in the last three years?*

“I have seen two businesses in Wadena fail. One a car agency and a grocery store. Both are sadly missed.”

*2. What connections do you see between the local economy and that of the area?*

“We rely on the small neighboring towns for retail sales.”

*3. What are your economic strengths and weaknesses as a community?*

“The strengths are that we are the largest town in the area and still have a variety of business. The weakness is that people never seem to understand that if our town is going to flourish they should shop here. Most of the stores will order whatever you want but not many people take advantage of this.”

*4. What economic development activities in the community do you know of?*

“The city has a very active development director.”

*5. Are there any outside resources used for economic development?*

“Region 5.”

*6. Has any building or construction taken place in the last three to five years? Homes, public features?*

“Due to the tornado there has been a lot of building. Many houses, 3 businesses, a school and a community center.”

*7. What new businesses do you know about?*

“A used furniture store and a clothing store.”

*8. What future opportunities do you see for the town?*

“The city is trying to get into the state bonding bill to rebuild the community center and add an indoor pool.”

*9. How do people invest in this community? Money, time, ideas?*

“The Wadena development association is active in looking for new business. There have been many public meetings to learn about new ideas.”

*10. How has the tornado affected the local economy?*

“We are in a building boom. When spring comes there will be a lot of building.”

(J. baymler, personal communication, March, 2011)



# Design Work

## Community Master Plan



- HIGHWAY 10 PROJECT/DOWNTOWN
  - HIGHWAY 10 REBUILDING PROJECT
  - ENTRANCE TO DOWNTOWN
  - DOWNTOWN HUB/BUILDING GUIDELINES
  - MURAL WALKWAY
- RESIDENTIAL INFILL PROJECT
  - HOUSING DEVELOPMENT
  - COMMUNITY GARDEN
- WADENA 'MEMORIAL' GARDEN



# Design Work

## HIGHWAY 10 REBUILDING PROJECT

### BYPASS ALTERNATIVES:

#### ALTERNATIVE 'A'

- Avoids wetlands
- Least residential and business relocations
- Less noise impact on concentrated population areas
- Most construction

#### ALTERNATIVE 'B'

- Impacts more wetland areas than other bypass options
- More residential and business relocations than 'a' but less than 'c'
- Location outside city and developed areas, reducing visual and noise impacts

#### ALTERNATIVE 'C'

- Visual and noise impacts on subdivision
- Complete redevelopment at US 71
- Removal of many residencies and businesses
- Economic benefits in construction costs
- Closer access to downtown

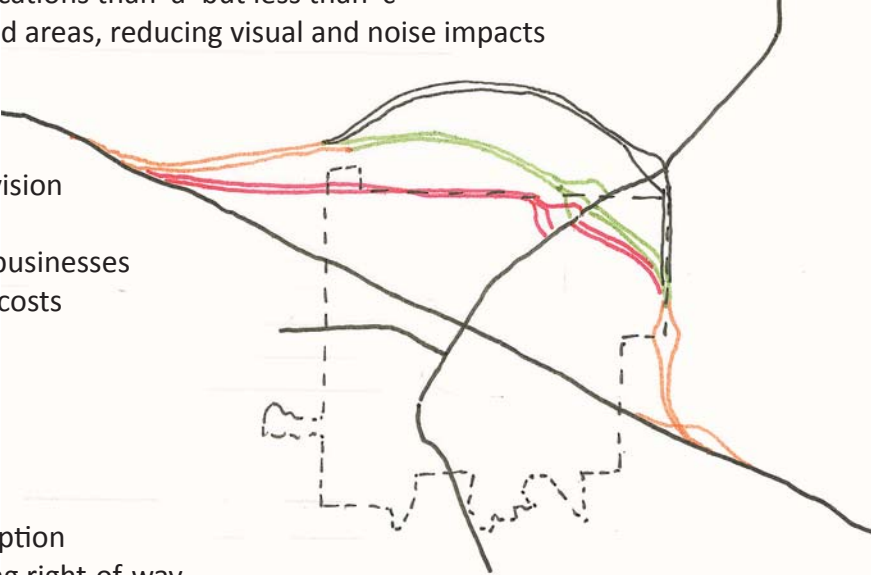


Image 14

### THROUGH-TOWN 4-LANE

- Avoids any residential relocations
- Most business relocations of any option
- Reduced costs due to use of existing right-of-way
- Increased noise and traffic delays with volume increases
- Minimal wetland impacts
- Loss of tax base to the city with the widening of the roadway between existing alignment and railroad

NO BUILD \*

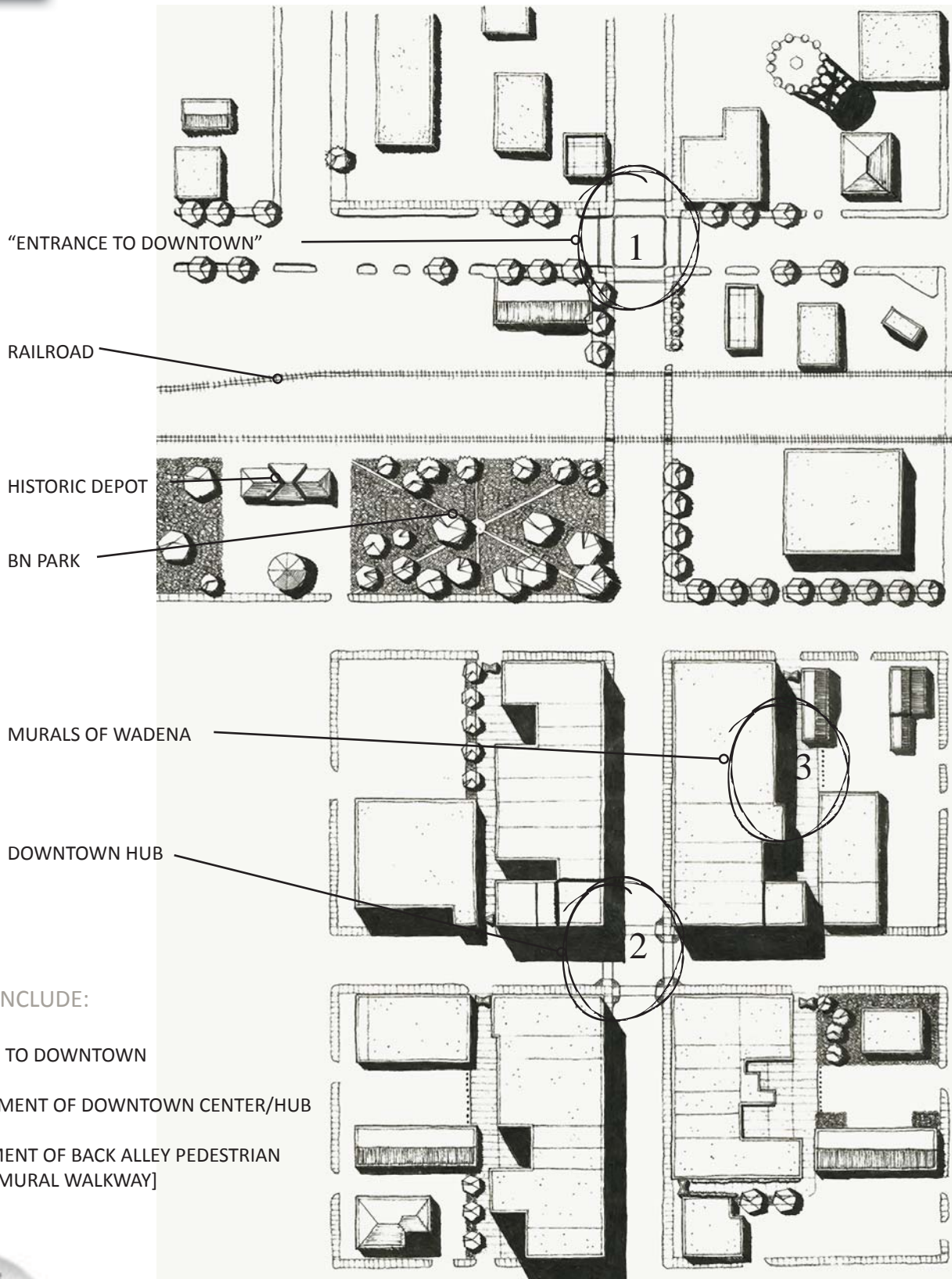
- ALTERNATIVE 'A'
- ALTERNATIVE 'B'
- ALTERNATIVE 'C'
- COMBINED ALTERNATIVE ALIGNMENTS

\* HIGHWAY 10 2-LANE IMPROVEMENT ALTERNATIVE



a

# HIGHWAY 10 PROJECT/ENTRANCE TO DOWNTOWN



"ENTRANCE TO DOWNTOWN"

RAILROAD

HISTORIC DEPOT

BN PARK

MURALS OF WADENA

DOWNTOWN HUB

## PROJECTS INCLUDE:

- 1. ENTRANCE TO DOWNTOWN
- 2. ESTABLISHMENT OF DOWNTOWN CENTER/HUB
- 3. DEVELOPMENT OF BACK ALLEY PEDESTRIAN WALKWAYS [MURAL WALKWAY]

Image 15

1/64" 



# 1

## HIGHWAY 10 PROJECT/ENTRANCE TO DOWNTOWN ENTRANCE DISTINCTION

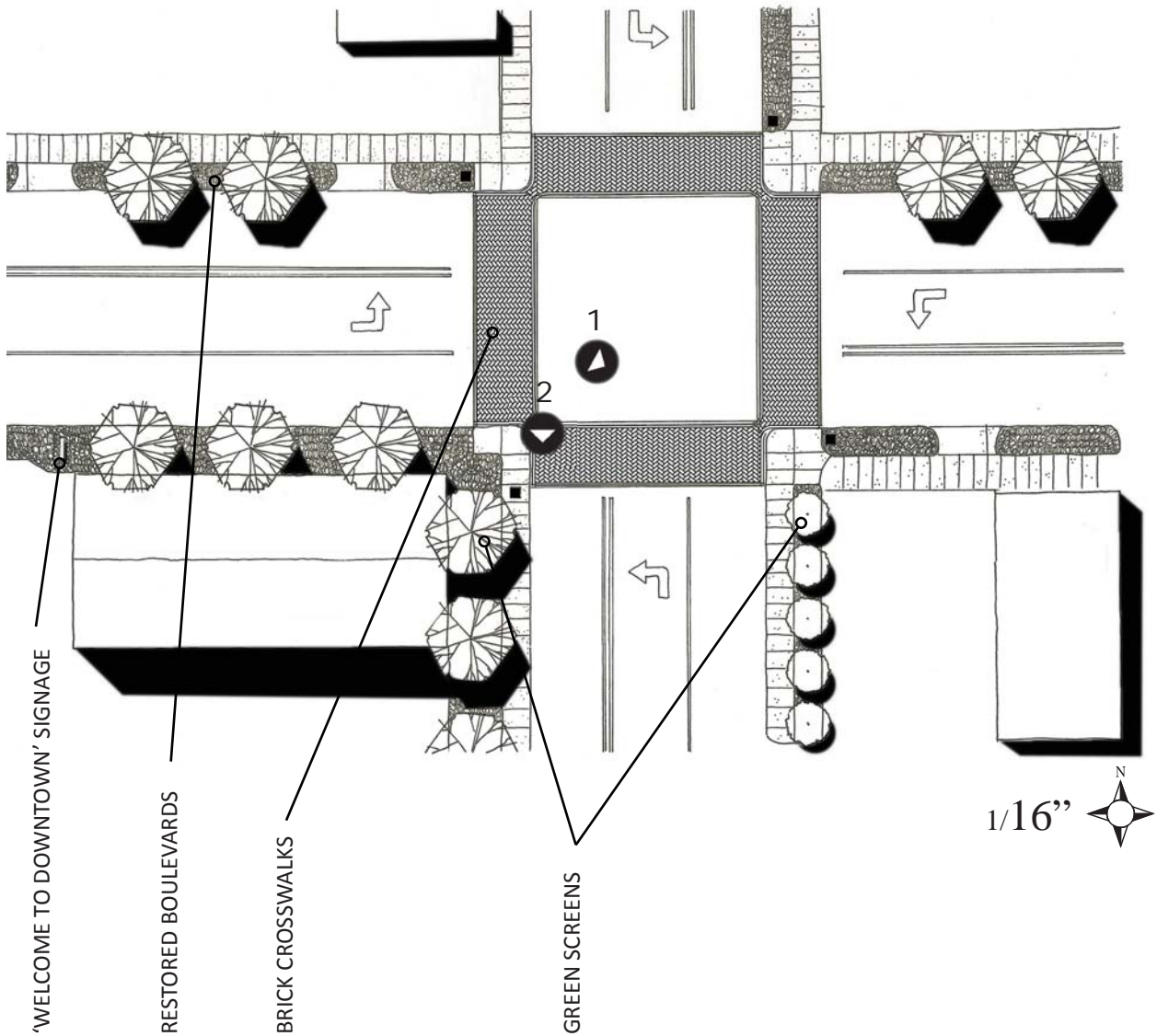


Image 16

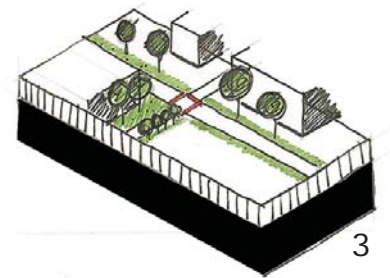
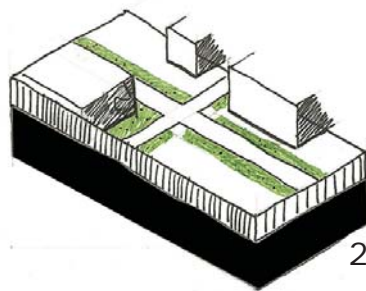
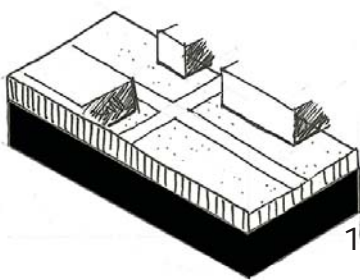


Image 17





# HIGHWAY 10 PROJECT/ENTRANCE TO DOWNTOWN

## ENTRANCE DISTINCTION



Image 18

1 ENTRANCE PERSPECTIVE ONE



Image 19

2 ENTRANCE PERSPECTIVE TWO



# 2

## HIGHWAY 10 PROJECT/ENTRANCE TO DOWNTOWN DOWNTOWN HUB/DEFINING ITS CHARACTER

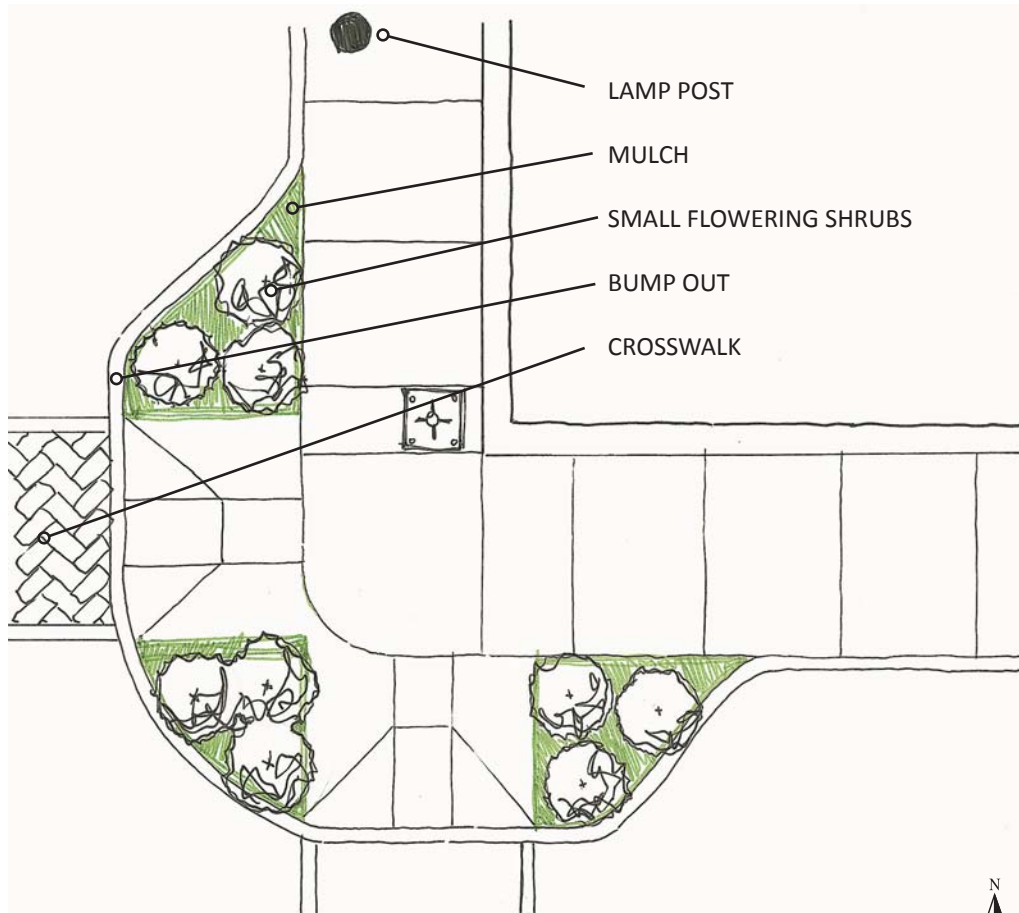


Image 20

CENTRAL DOWNTOWN BLOWUP 1/4"



Image 21



# HIGHWAY 10 PROJECT/ENTRANCE TO DOWNTOWN

## DOWNTOWN HUB/DEFINING ITS CHARACTER

### WADENA DOWNTOWN BUILDING DESIGN GUIDELINES

- ARCHITECTURAL CONTINUITY OF “TOPS” BETWEEN BUILDINGS
- ARCHITECTURAL TREATMENT OF THE “TOP” WILL BE DESIGNED TO CREATE A SENSE OF DISTINCTIVENESS/SHOWCASE CLASSIC ARCH. DETAILS
- “MIDDLES” WILL CONSIST OF A ‘COMPLETE’ AWNING DESIGNED TO ACCOMMODATE SIGNAGE IN AN ATTRACTIVE MANNER
- SIGNAGE AND AWNINGS COMPLEMENTING TO ARCHITECTURE
- BASE IS LARGELY TRANSPARENT

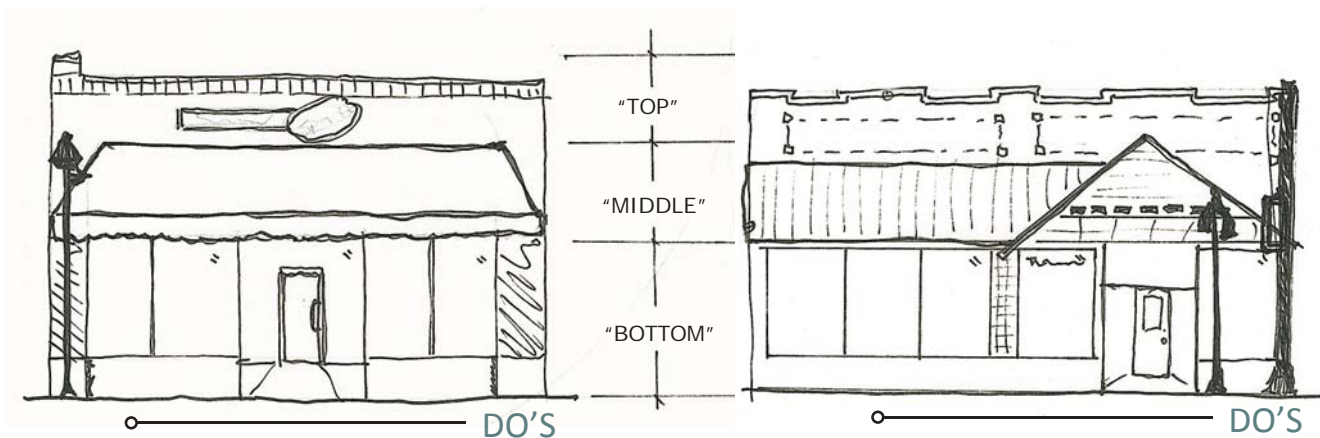


Image 22

# 3

## HIGHWAY 10 PROJECT/ENTRANCE TO DOWNTOWN MURAL WALKWAY

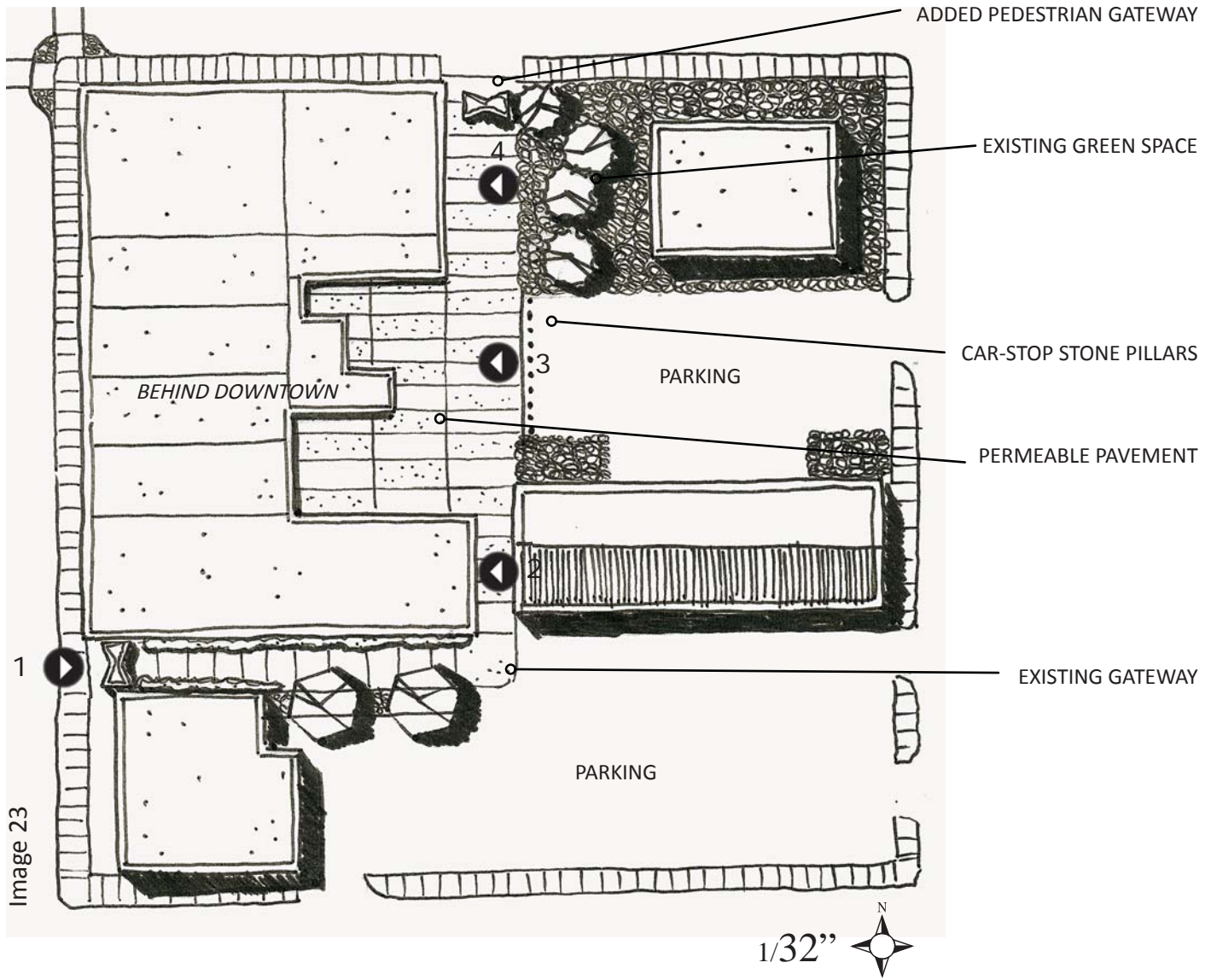


Image 23



# HIGHWAY 10 PROJECT/ENTRANCE TO DOWNTOWN BACK ALLEY MURAL WALKWAY

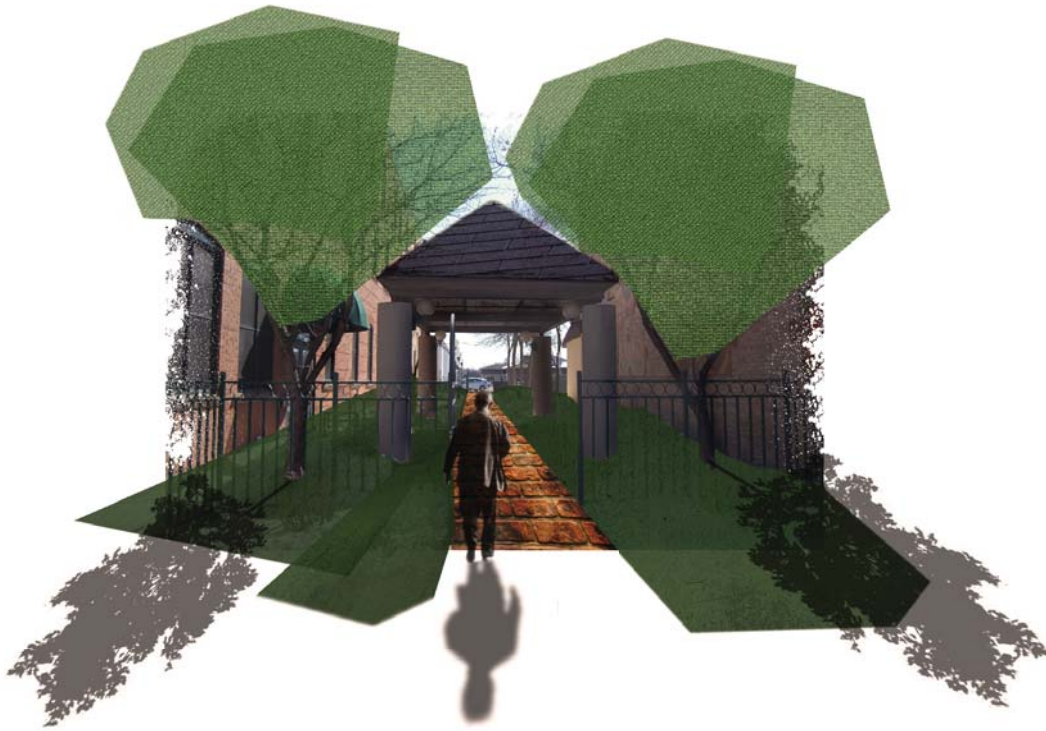


Image 24

1 ALLEY ENTRANCE PERSPECTIVE ONE



Image 25

2 MURAL PERSPECTIVE ONE



HIGHWAY 10 PROJECT/ENTRANCE TO DOWNTOWN  
BACK ALLEY MURAL WALKWAY



3 MURAL PERSPECTIVE FOUR



4 MURAL PERSPECTIVE THREE





# RESIDENTIAL INFILL PROJECT

## INFILL PROGRAM

- **FRONT GARDEN SPACES**
  - Replacement of turf space with garden space
- **COMMUNITY GARDEN**
  - Varied plot sizes
  - Tool shed
  - Composting space
  - Gathering area
- **MIXED LIVING**
  - Varied price points
  - Multi-generational
  - Neighborhood oriented
  - Healthy, active living
  - Sustainable
- **ADDITION OF SIDEWALKS**
  - Promote walkability
  - Child safety
- **REPLACE BOULEVARD TREES**
  - Minnesota "tree city"
- **ALLEY GREENWAY**
  - Connecting neighbors
  - Connection to Tapley Park & Cemetery

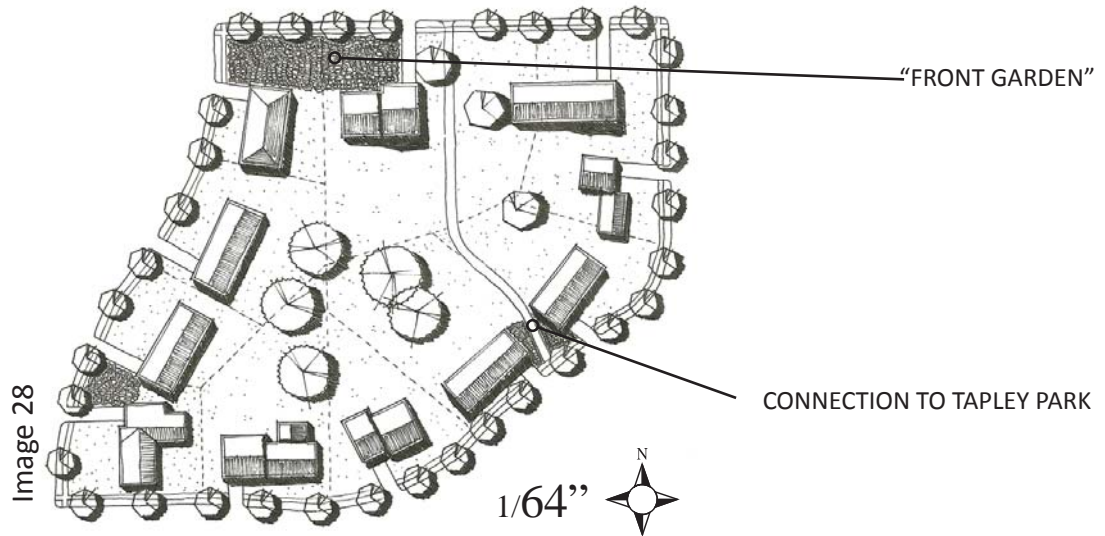
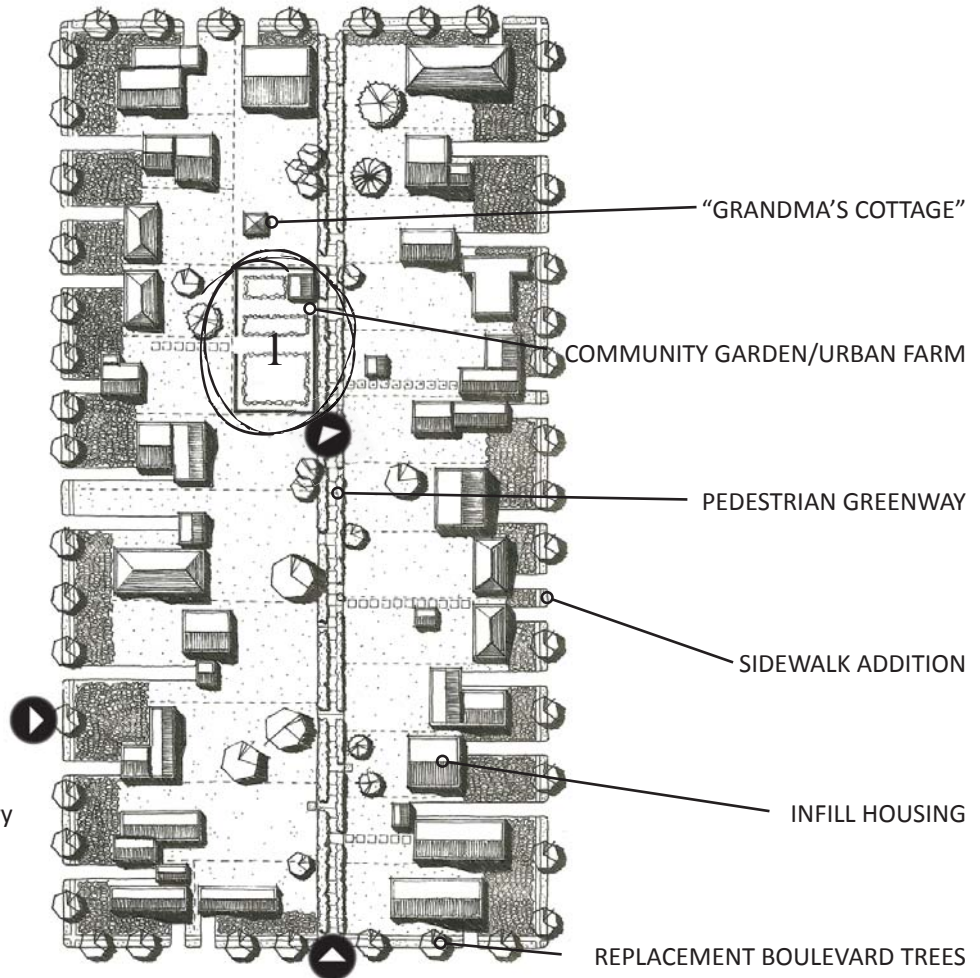


Image 28

1/64"



# RESIDENTIAL INFILL PROJECT

## INFILL COMPONENTS



Image 29

1 ALLEY PERSPECTIVE



Image 30-32

2 FRONT GARDENS





# 1

## RESIDENTIAL INFILL PROJECT COMMUNITY GARDEN

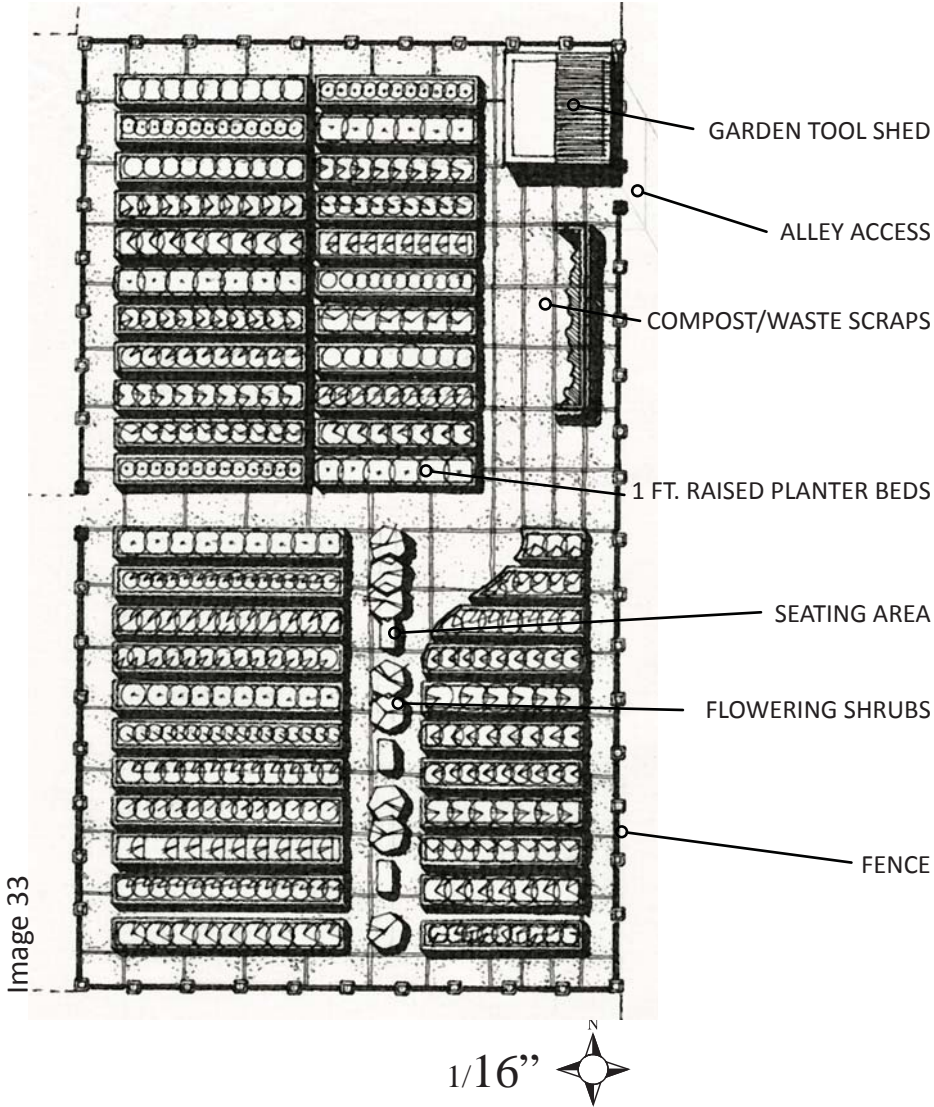


Image 33



Image 34



PHOTO BY CINDY NAAS

Image 35



PHOTO BY LAURA FORD

Image 36

### 3 COMMUNITY GARDEN SPACE



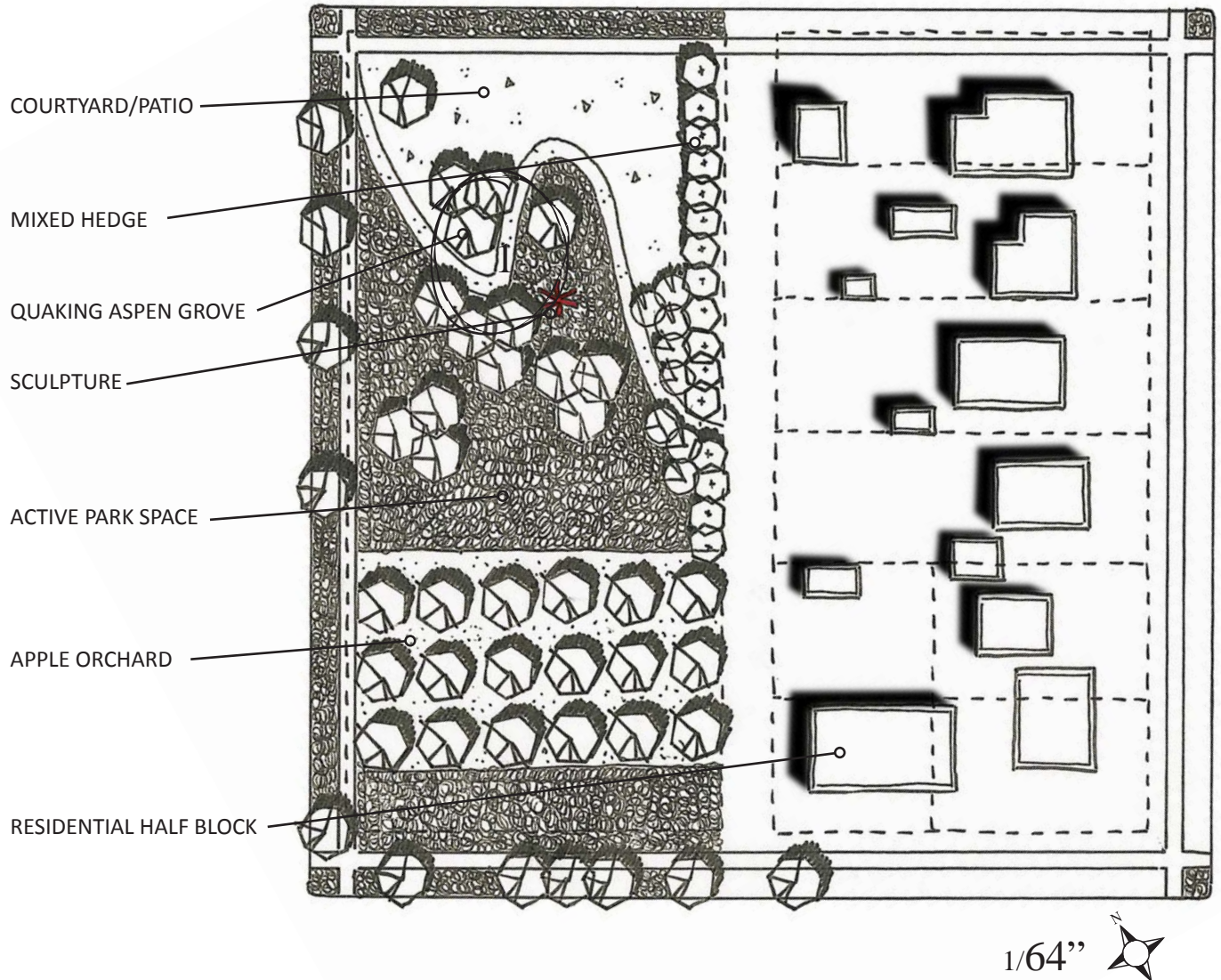


Image 37

### GARDEN PROGRAM

- **COURTYARD**
  - School break out space
  - College lunches
  - Cut through walkway
- **ENVIRONMENTAL ART PIECE**
  - Art fair associated with school
  - Rotation schedule
  - Recycled materials from tornado?
- **ACTIVE PARK SPACE**
- **QUAKING ASPEN GROVE**
- **ORCHARD**
  - Community involvement
  - Children sharing an apple with teachers
  - Church bake sales
  - School lunches (apple crisps, etc.)
- **SUBTLE**



# 1

## WADENA 'MEMORIAL' GARDEN COURTYARD/QUAKING ASPEN GROVE

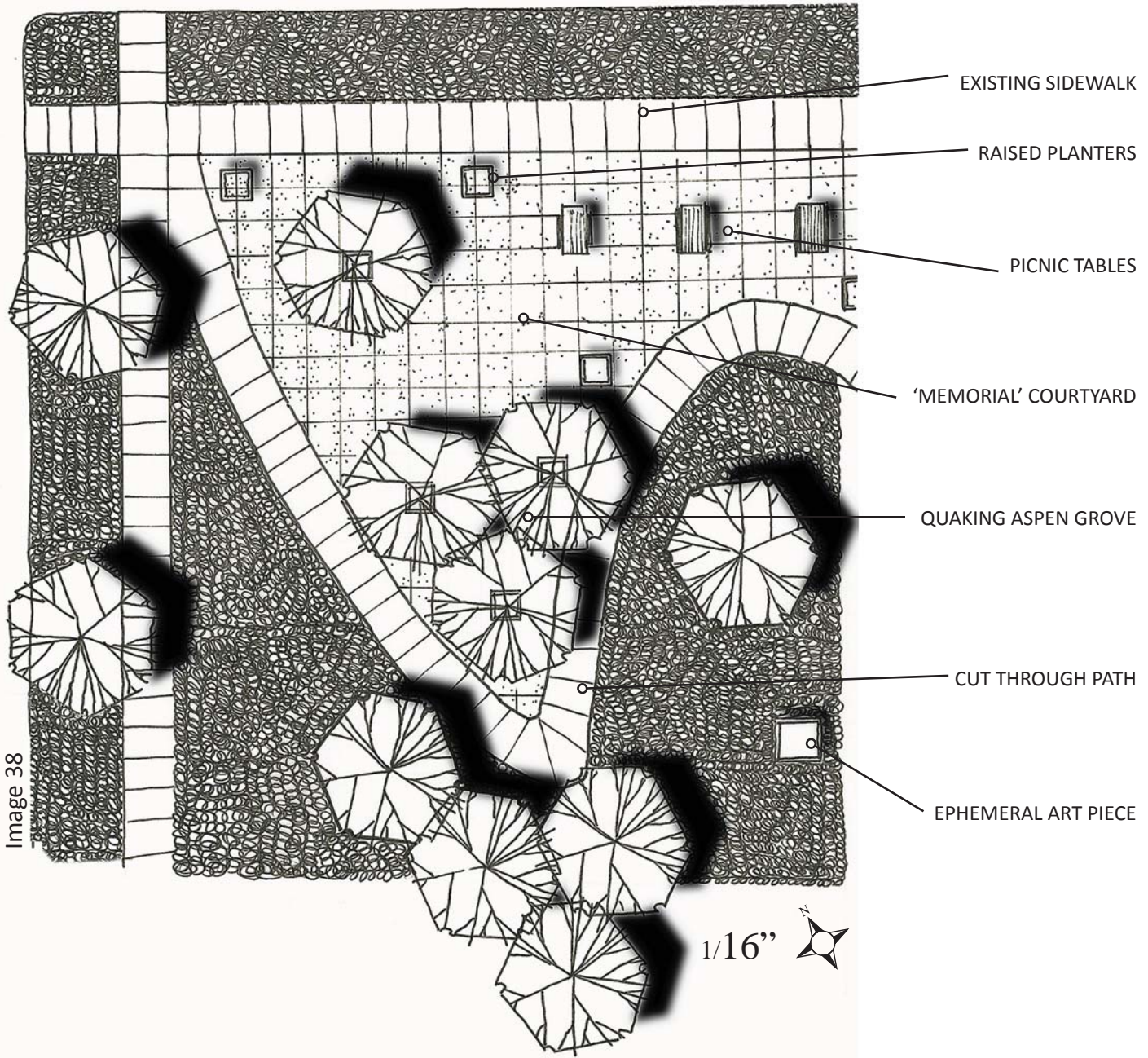


Image 38



WADENA 'MEMORIAL' GARDEN  
COURTYARD/ORCHARD



Image 39

1 ORCHARD PERSPECTIVE



Image 40 - 42

2 LAND ART PIECE EXAMPLES



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Image 1

Image created by Adam Jones.

Image 2

Image created by Adam Jones.

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## Image 6

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## Image 7 - 29

Images created by Adam Jones.

## Image 30 - 32

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## Image 37

Image created by Adam Jones.

## Image 38

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## Image 39

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## Image 40 - 42

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“We derive strength and vitality from each other and from the diverse communities we serve.”

-NDSU



# Previous Studio Experience

LA 271: Fall Semester 2007

Instructor: Kathleen Pepple

Kennedy Court: Park Design -- Fargo, ND

Walster Hall: Campus Design -- Fargo, ND

LA 272: Spring Semester 2008

Instructor: Mark Lindquist

Streetscape Design: Euclid Avenue -- Winnipeg, CA

Pioneer Park Redesign -- Valley City, ND

LA 371: Fall Semester 2008

Instructor: Stevie Famulari

Fargo Dike Project: Dike West -- Fargo, ND

Symphonic Alley: Broadway Alleyway -- Fargo, ND

LA 372: Spring Semester 2009

Instructor: Kathleen Pepple

Sustainable Residence: Prairiewood -- Fargo, ND

Battle Lake Project: Lions Park -- Battle Lake, MN

Community Garden: A Design Charrette -- Fargo, ND

LA 471: Fall Semester 2009

Instructor: Mark Lindquist

Master Planning: Park Avenue -- Portland, OR

Site Design: Sculpture Garden -- Portland, OR

LA 472: Spring Semester 2010

Instructor: Stevie Famulari

Phytoremediation: Acid Canyon -- Los Alamos, NM

Hesco Design: Living Wall -- Fargo, ND

LA 571: Fall Semester 2011

Instructor: Catherine Wiley

Sheyenne National Grasslands: Bison Enclosure

Sheyenne National Grasslands: Grassland Revitalization

