URBAN PARKS
For Business Revitalization
By Brett Schlachter
ACKNOWLEDGEMENTS

I would like to thank all of those who have helped me in working on this project.

Special Thanks to...

My parents
Sean Rotar - Advisor
Chris Marlow - Professor
Joe Blalock - Professor
All of my classmates that contributed their thoughts to my design
ABSTRACT

HISTORY OF MUNCIE AND CURRENT SITE ISSUES

This project looks at the problems with Muncie’s downtown and proposes a design that will revitalize it through urban parks. Muncie’s downtown began to see businesses leave during the 1970s and 80s, when Muncie had two major events that affected its downtown. First, Walnut Street was converted to a pedestrian mall, eliminating any automobile traffic along it and essentially killing the retail of the downtown. The second major event was the installation of the Muncie Mall on the north end of Muncie, which began to take businesses away from the downtown and out to the mall.

In the 90s to 2000s, Muncie’s downtown began to slowly recovering from the devastation of the loss of businesses. However, as businesses began to move out in the 1990s, their vacant buildings were replaced with parking lots. This has lead to an overabundance of parking lots in the downtown.

Though Walnut has maintained its downtown style, the neighboring streets east and west of it, Mulberry and High, currently face mostly parking lots. Even though these streets are one block away, they have a completely different experience than Walnut. Most of these streets have poor sidewalk conditions and little destinations along them to get people to walk down them. As a result of this parking situation, most of the developmental land is tied up in privately owned parking lots, which means development only occurs when existing buildings become vacant.

The other key issue is a lack of public spaces throughout the downtown. There are no places to gather or draw people to the downtown. Even if people were walking around downtown, there is little shade or seating provided anywhere outside of the buildings.

DESIGN PHILOSOPHY

In order to solve these problems, a design philosophy was developed. After reviewing literature on the subject, an urban park was conceived as the solution towards the downtown’s problems. The idea behind this philosophy is that the park, people, and businesses are all connected in a cycle where they all benefit from the each other and if one is removed, it breaks the cycle. The cycle starts with the park providing activities and attractions for people. This will bring more people downtown to live and play. With more people living and visiting near the park, there will be a higher demand for goods and services to accommodate the increase of people. The businesses will realize the potential demand and move their retail near the park. The businesses, located next to the park, will help maintain it to keep people visiting it.
DESIGN CONCEPT

The main concept that followed this philosophy was incorporating multiple pocket parks connected along a pedestrian circulation system that looped throughout the downtown. These pocket parks form one larger linear park that becomes a landmark for the downtown.

Although these parks are relatively close to each other, they are designed to each have a different style and character to them. Each park will provide different amenities to attract a diverse amount of users and give different opportunities for people downtown. These parks, connected to form one linear park, will attract people with its variety of amenities to the downtown and help revitalize the businesses.
## Table of Contents

**Acknowledgements** --- i  
**Abstract** --- ii  

**Introduction** --- 6  

**Literature Review** --- 9  
- What Makes a Successful Urban Park? --- 10  
  - William H. Whyte Study on Urban Places --- 10  
  - Projects for Public Spaces Requirements for Great Parks --- 10  
  - Understanding a Small Park --- 11  
- Role of Trees in Urban Downtown Parks --- 12  
  - People’s Perception of Trees in the Downtown Setting --- 12  
  - Environmental Benefits of Trees to Buildings and People --- 13  

**Conclusion** --- 15  

**Identifying the Problem** --- 17  
- History - what it was --- 18  
- Current Site Issues --- 19  
- Community Feedback --- 19  
- Problem Statement --- 20  
- Significance --- 21  

**Design Process** --- 23  
- Overview --- 24  
- Goals & Objectives --- 24  
- Project Philosophy --- 24  
- Program --- 25  
- Vicinity Map --- 26  
- Site Inventory --- 28  
- Site Analysis --- 34  
- Precedent Studies --- 36
Design Solution --- 41
- Early Concepts --- 42
- Master Plan --- 46
- Wysor Park --- 48
- High Street Community Park --- 54
- Rivoli Plaza --- 60
- Patterson Park --- 66
- Engineering Drawings --- 72
- Conclusion --- 76

Appendix --- 79
- Appendix A Time Line --- 80
- Appendix B List of Figures --- 82
- Appendix C Bibliography --- 84
INTRODUCTION

BACKGROUND TO THE SITE
Muncie has not been afraid of testing new designs in its downtown, with a light rail system to a pedestrian mall. However, some of its bold ideas have worked against it. Though Muncie’s downtown is slowly increasing, it still needs an overall design concept to tie the downtown together and give it a plan for future development. Talking to residents of downtown, people have become accustomed to the current conditions of downtown. However, Muncie’s downtown is due for another bold design that can spearhead it back to its former prosperous state.

Muncie’s downtown is not the only one suffering from these problems. Many downtowns across the mid-west are seeing less people visiting them than even 20 years ago. Muncie’s downtown was chosen because of its close proximity, being able to visit the downtown regularly was extremely crucial to the design. It helped defined the downtown. It allowed for the understanding of the downtown festivals and events, it allowed for the understanding of who are users and what do they do, it allowed for the understanding for what were the niches of the downtown and what made the downtown special, and it allowed for the understanding of what were the real problems the downtown faced every day. This design could not be as complete without being able to visit the site often and record these factors.

BACKGROUND TO THE DESIGN CONCEPT
The idea of urban parks began after reading some articles about trees being used to help draw consumers to the downtown. After studying more, the value of the tree as a design element for business revitalization seemed to be a viable solution. It seemed to be the role landscape architects could take in spurring economic recovery.

After reviewing some case studies, the design philosophy began to form. Along with the value of trees for revitalizing businesses that were researched earlier, urban parks began to become the missing link that will bring people to the downtown. Campus Martius, a park in Detroit, was early inspiration for doing this type of project. Being able to jumpstart the rejuvenation of a downtown that was very influential to many people, with all of its historic past and its promising future, seem very satisfying. The linkage starts with the designer adding an urban park where one currently does not exist. The park will attract people currently not visiting the downtown and those currently visiting as well. With an increase of people visiting the downtown, the demand for new retail will follow and support the parks.

These ideas lead to the research of how to design a successful park. Since there are currently fewer people visiting the downtown than before, these parks will have to be carefully thought out to avoid failing and becoming an empty park. The bulk of the research on urban parks was studied in order to design these parks to prevent such failure. This research, along with case studies, has helped start the design process and create a bold design solution for Muncie’s downtown.
LITERATURE REVIEW

WHAT MAKES A SUCCESSFUL URBAN PARK? --- 10
  WILLIAM H. WHYTE STUDY ON URBAN PLACES --- 10

PROJECT FOR PUBLIC SPACES REQUIREMENTS FOR GREAT PARKS --- 10

UNDERSTANDING A SMALL PARK --- 11

ROLE OF TREES IN URBAN DOWNTOWN PARKS --- 12
  PEOPLE’S PERCEPTION OF TREES IN THE DOWNTOWN SETTING --- 12

  ENVIRONMENTAL BENEFITS OF TREES TO BUILDINGS AND PEOPLE --- 13

CONCLUSION --- 15
LITERATURE REVIEW

WHAT MAKES A SUCCESSFUL URBAN PARK?

WILLIAM H. WHYTE STUDY ON URBAN PLACES

William H. Whyte recorded excellent notes through his research on people’s habits around urban parks and how urban parks were successful. One of the notes he discussed was the location of the park. The location of what directly surrounds the park as well as how far away it is from its target users will determine whether people will visit the park. Whyte suggested that an effective market area is around 3 block radius (Orum 2010). Anything farther than that, people will likely not walk to the park.

Whyte also said that it is important to know the time when parks will be used. A park must be able to provide during important times of the day. Whyte notes that 80% of the total hours used in a park will be from 11am to 2pm (Orum 2010). This is when most parks are used during the day. This seems to say that parks serve as destinations during office worker’s lunch breaks. Whyte does not mention when the other 20% of the hours are used. They could be during the night if the park is design to have people at that time, or they could be during the early morning when people are going to work. Whyte also does not discuss the difference in times people visit during the week versus the weekend.

Last, a park should know who its main users are. Knowing who will be the users of the park will allow the park to meet their needs. Whyte says that the bulk of the users during the day will be office workers during their breaks (Orum 2010). It will be important to provide for those office workers needs. There might also be unique users around the site that will be using the park. For example, a nearby school would have children visiting the park after school.

Overall, Whyte states the most important key to the success of the plaza is the street. Busy street corners should be the entrances into the park. The parks should not be walled off, away from the street. Instead, Whyte argues, it should be hard to tell where the street ends and where the plaza begins. Rarely do people stand in an open area, instead they tend to stand within the flow of pedestrian traffic and by defined locations (flag poles, statues). (Orum 2010)

PROJECT FOR PUBLIC SPACES REQUIREMENTS FOR GREAT PARKS

The Projects for Public Spaces website listed their own criteria for what contributed to a successful park or plaza. They broke down what made a park successful into four main requirements: access & linkage, comfort & image, uses & activities, and sociability. (Projects 2009) These four categories were listed by several parks that they represented on their website. Though each park had a different design, a different set of problems, and a different surrounding context, they were all judged by these four requirements. When viewing each park, they described how each park met or did not meet those requirements. These requirements were rather broad, open to interpretation and are most likely not the main reasons why parks are successful or not successful. However, they are a good starting point when beginning to program and layout a park design.
UNDERSTANDING A SMALL PARK

Ana Forsyth writes in the book, Designing for Small Parks, about 12 different topics for designing small urban parks. The first four topics of the manual focus on what the author calls the fundamental issues of small parks. Those issues are size, edge, appearance, and naturalness. Figure 0.1 shows while a small park may lack the size of a large park, groups of small parks can act as a supplement to the large park. Figure 0.2 shows how small parks can be laid out on a grid while having no connection to one another, or they can connect to each other and lead to a larger park. Ana also stresses the appearance of the parks and their habitat values. Parks can be very natural or they can be very formal. The park should be designed with context to surroundings and the user’s preferences. (Forsyth 2005)

The second group of topics focuses on the natural systems of small parks and how they can lead to larger ecological systems. The systems include water, plants, wildlife, and climate & air. (Forsyth 2005) A park, no matter how urban, should consider some of these natural systems if not all. The design should look to incorporate the park with these systems if located nearby. The topics in group two are less relevant than the previous four given the context of Muncie’s downtown to these natural systems.

The last section focuses on human aspects, such as what kinds of activities can be held in a small park, what safety concerns are there with parks, and the problems with park maintenance. These aspects were broken down into activities & groups, safety, management, and public involvement. (Forsyth 2005)

This book was helpful because if focused on small parks. Because of their size, small parks must be designed differently than large parks if they are to be successful. This book, though, discusses most of the small parks around a residential setting, which was very noticeable in the natural systems section focusing on connecting to larger ecological systems. This will be more of a challenge in an urban park.
LITERATURE REVIEW

After gathering research from different sources about how to design successfully parks, there were some common points made among all of the sources. Connections to the park were the biggest issue. Whether it is to the street or along a linkage of other parks, allowing people to easily arrive to the park must be one of the main concerns when designing the park. Designing uses and activities that can fit the scale of the park, yet provide enough to keep people coming back is another crucial topic, especially dealing with a small park where space is limited. And finally, know the users. Providing for the expected users needs will help insure they will use the park.

After understanding how to design successful urban parks, trees were looked at in closer detail because they are key design elements of urban parks. Trees were studied for how they affect people’s perceptions of places and for their environmental benefits they have on surrounding businesses.

ROLE OF TREES IN URBAN DOWNTOWN PARKS
PEOPLE’S PERCEPTION OF TREES IN THE DOWNTOWN SETTING

One of the biggest benefits that people reported in their perception of trees was that trees reduced stress and made them feel calmer. Results from Hull (1992) and Wolf (2004) both recorded people’s responses stating they felt more comfortable in urban area that had trees. Responses used by participants in the survey discusses in Trees & Business (2004) included “softens store fronts”, “makes being downtown more pleasant”, and “makes downtowns more inviting”. Virginia Lohr, Caroline H. Pearson-Mims, John Tarnai, and Don A. Dillman wrote an article, How Urban Residents Rate and Rank the Benefits and Problems Associated with Trees in Cities, which ranks people’s responses to their positive and negative perceptions of street trees. One of the benefits that people stated was that “trees in cities make people feel comfortable”, which was ranked number 2 out of 7 benefits with a ranking of 3.56 out of 4. This article was extremely helpful in finding a possible hierarchy of elements that trees are most appreciated by. Considering how comfortable people are when they are on the site will be a top priority for my design.
Trees have rarely been associated with increasing consumers in a business district, but researchers have created surveys to see if there is a correlation between the two. Kathleen Wolf, a research director for the College of Forest Resource of University of Washington who studies street trees and their relationships with economics of business, says, “There is extensive evidence of psychosocial benefits from nature in cities, but the nature response research has focused on residential and recreational settings and reveals little about urban forest perceptions in retail and commercial districts.” (Wolf 2004)

When studying whether people’s perceptions affect where they shop, I found another good article by Wolf, Grow for Gold-Trees in the Business Districts. Much like Wolf’s other article, Trees & Business, this article details people’s perceptions of commercial areas, however, it goes into much more detail. The article covers a survey that was done to see if downtowns that include street trees are associated with better quality products. In the survey, people were asked to rate their perceptions of four different business districts, each differing in amount of street trees. The four perceptions were amenity and comfort, interaction with merchants, quality of product, and maintenance and upkeep. The results showed that amenity and comfort scored 80% higher with retail that had street trees and quality of product scored 30% higher with street trees and interaction with merchants, i.e. customer service, scored 15% higher with street trees (Wolf 1999).

Another topic that was studied was to see if street trees provided any commercial benefits towards businesses because of nicer amenities. Wolf (1999) presents findings from a survey to see if consumers are more likely to shop at stores that provided nicer amenities outside of the stores i.e. street trees. The survey’s purpose was to see if amenity values had a correlation with price values of a store. The survey asked participants to specify a price for 15 items in a basket. The items for street tree businesses were generally 12% higher than establishments that didn’t include street trees (Wolf 1999). This means that consumers are more willing to spend money at stores that have a higher amenity value. Another article, Treeconomics, by Linda McIntyre, discusses research done by Greg McPherson from the Center of Urban Forest Research which also recorded that people were willing to spend up to 12% more for goods and services near businesses with street trees, including paying for parking. However, the article does not go into depth on the method used to determine this amount. McIntyre’s article differs from Wolf’s article because she focuses more on an energy impact than a people’s perception impact. This article will help me back up my reasoning to include the use of street trees in downtowns for business revitalization.
LITERATURE REVIEW

ENVIRONMENTAL BENEFITS OF TREES TO BUILDINGS AND PEOPLE

When looking at ways to improve environment and energy benefits, street trees were cited as perfect facilitators. Lohr (2004) and Wolf (2004) found that many users of the streets noted an improved or at least perceived an improved environment. Lohr’s article showed that shoppers rated the shading and cooling that trees provide as the biggest benefit from street trees. People’s response in Trees & Businesses also displayed similar responses including “reducing heat radiation” and “shielding people from the rain”. Since this is a highly rated preference from trees, it should be one of the biggest design considerations when deciding where to layout trees along the street.

The information on the physical abilities of trees is well documented. Gene Grey and Fredrick Deneke wrote in the book, Urban Forests, about the ways trees can help improve areas environmentally. They provide many elements that trees affect including wind barriers, shading and cooling during the day, and heating at night. Figure 0.6 shows trees filtering solar radiation in an urban environment.

Figure 0.7 shows how a trees help cool buildings in the summer and help heating during the winter. Also, Bradshaw’s book, Trees in the Urban Landscape-principles and practices, talks about similar topics but goes into less detail about the different elements. Trees help cool and shade the areas below them by managing solar radiation and through evapotranspiration. Under the right conditions, trees can transpire 88 gallons of water a day.
LITERATURE REVIEW

The evaporation of water from leaves helps cool the air temperature around the tree. (Grey 1978) Trees in the Urban Landscape states that wind speed can be affected by street trees 20 times past the height of the tree. In urban areas, they may also be able to keep places 10-15°F warmer (Grey 1978). Having a good working knowledge of how trees operate and react to the surroundings in the downtown streets will help design the layout properly. I plan to use this knowledge to maximize these environmental elements to make the site as comfortable for shoppers as possible.

McIntyre's article offers less information about the types of methods or ways that trees affect the environment, but it focuses more on the data collected from street trees. While Grey and Bradshaw's books help demonstrate how trees react in the streetscape, McIntyre's article gives data on the benefits on streetscapes. Studies done by Greg McPherson recorded trees planted as windbreaks reduced annual heat savings by 10-12%. Perhaps the most important information for supporting my claims, McIntyre (2008) says that studies in 2005 done by Greg McPherson from the Center of Urban Forest Research have found that street trees in Minneapolis saved an annual amount of 6.8 million dollars in energy cost and 9.1 million dollars in storm water treatment cost. Furthermore, another study by the center of Urban Forest research showed that street trees in Modesto, California had a profit return of 1.89 dollars in benefits for every dollar spent. This total amount sums up all the factors that contribute to income from trees. This further supports that implementing street trees into a downtown to help revitalize businesses.

CONCLUSION

These studies have helped explain the elements needed to design an urban park. The sections on street trees have helped explain their roles in downtowns and how they can be utilized in an urban park as a major design element for drawing people to the downtown. The studies have provided the foundation from which the design philosophy, project program, and design concepts & solutions are based on.
IDENTIFYING THE PROBLEM

HISTORY- what is was --- 18
CURRENT SITE ISSUES --- 19
COMMUNITY FEEDBACK --- 19
PROBLEM STATEMENT --- 20
SIGNIFICANCE --- 21
IDENTIFYING THE PROBLEM

HISTORY - What it was

In order to understand the current problems of Muncie's downtown, one must understand the events that have lead towards its current issues.

In the 1920s, Muncie's downtown was the thriving center for its community. It had many shops and attractions. One of the main amenities was the light rail system, which ran to Indianapolis. Figure 1.1 displays an aerial of downtown Muncie in the 1920s.

In the 1960s and 70s, popularity of the automobile had begun to increase. As the result, the downtown began reacting to that popularity by displaying their facades with large billboards to attract customers in fast moving automobiles. Figure 1.2 shows businesses along Walnut displaying large advertisement signs on their store fronts.

In the 1970s and 80s, Muncie had two major events that affected the downtown. First, Walnut Street was converted to a pedestrian mall, eliminating any automobile traffic along it and essentially killing the retail of the downtown. The second major event was the installation of the Muncie Mall on the north end of Muncie, which began to take businesses away from the downtown and out to the mall. Figure 1.3 shows the pedestrian mall down Walnut.

In the 90s to 2000s, Muncie has been slowly recovering from the devastation of the loss of businesses. As businesses began to move out, their vacant buildings were replaced with parking lots. Figure 1.4 shows a parking lot along Walnut Street located next to the Blue Bottle. Knowing how the downtown has transformed over the decades from the 1970s to present has helped in the understanding of current site issues.
CURRENT SITE ISSUES

Through site inventory and analysis data, key site issues were identified. The site contains an overabundance of parking lots on every block. Though Walnut contains mostly store fronts facing it, the neighboring streets east and west of it, Mulberry and High, face mostly parking lots. Even though these streets are one block away, they have a completely different experience than Walnut. Figure 1.5 and Figure 1.6 show two images taken at intersections along Mulberry and Walnut.

As a result of this parking situation, most of the developmental land is tied up in privately owned parking lots, which means development only occurs when existing buildings become vacant.

There is also a lack of public spaces throughout the downtown. There are no places to gather or draw people to the downtown. Even if people were walking around downtown, there is little shade or seating provided anywhere outside of the buildings.

COMMUNITY FEEDBACK

Feedback from residents as well as community meetings allowed for different perspectives on the problems in downtown. Through interviews, different topics were discussed such as safety at night, and lack of amenities. One issue that was mentioned by two residents was the lack of downtown character away from Walnut. They both felt that the downtown was growing slowly yet still had a long way to go. They felt that the current parking condition was the most immediate issue that should be addressed.

During a downtown meeting, the parking situation was addressed and the suggestion of shared parking as a method for dealing for parking was brought up. This was taken into account when moving through the design process. Other community meetings were broader than the downtown meeting, and allowed for a larger range of opinions. During a MAP (Muncie Action Plan) meeting, one of the most important rated qualities needed was amenities for Muncie. This feedback from the community will be considered and addressed in the design.
IDENTIFYING THE PROBLEM

PROBLEM STATEMENT

In response to the increased usage of automobiles over the past 50 years, downtown Muncie has shown an increase in parking lots and a decrease in building footprints. With the addition of the Muncie Mall and the conversion of Walnut Street to a pedestrian mall, many businesses began leaving and their abandoned buildings became parking lots. As a result, this has left Muncie’s downtown with an abundance of parking lots. People have become accustomed to having these parking lots as necessary things but instead parking lots do not contribute any economic aspect to the city. Figure 1.7 shows the increase in parking lots in the downtown from the 1960s to 2007. Figure 1.8 and Figure 1.9 show existing parking lots through the downtown.

While Walnut Street has maintained its downtown character, the neighboring streets have more views of parking lots than building fronts. This design solution proposes revitalizing and expanding the commercial district beyond Walnut Street by incorporating streetscape enhancements and developing urban parks to bring more people back to the downtown.

Figure 1.7. Parking Diagram

Figure 1.8. Existing intersection of Walnut & Charles

Figure 1.9. Existing parking lot between two buildings
IDENTIFYING THE PROBLEM

SIGNIFICANCE

The development of urban parks in downtowns can spearhead the growth and revitalization of surrounding businesses by bringing people to the area. Urban Parks are attractive social destinations. They help raise property values and are considered aesthetically pleasing. An urban park that has improved the surrounding businesses has been proven in previous projects such as Campus Martius Park in Detroit, MI. The urban park was located in a major intersection in downtown Detroit, a city that has had more economic struggles than many other U.S. cities. The park has rejuvenated its downtown core and become the city’s center.

Urban parks become significant to near-by residents because they act as escape destinations from the urban surroundings. They are significant to visitors because of their amenities and activities they provide. They are significant to businesses because they bring more people to the area, creating more demands for shops, restaurants, and apartments.

Even though parks are known for providing environmental benefits, the benefits towards business growth and revitalization are less known. Adding more urban parks and green spaces may seem like an obvious objective to Landscape Architects, Horticulturalists, and others in associated fields. However, arguing their importance to others outside of the associated fields can be challenging due to other issues and speculations about parks (i.e. funding). Therefore, this project can serve as a precedent for using urban parks in other downtown revitalization projects.

Figure 1.10. Campus Martius Park

Figure 1.11. Campus Martius Park

Figure 1.12. Campus Martius Park
THE DESIGN PROCESS

OVERVIEW

At the beginning of the design process, two questions were asked in order to understand what directions to take with the site: “What are the problems with the site?” and “What is the site telling you to do about those problems?” Three main problems were identified:

- There is a lack of public space
- There is an overabundance of parking lots
- There is a loss of the downtown character.

From these main problems, goals and objectives were derived.

GOALS & OBJECTIVES

From the main problems that were discovered, goals and objectives were developed to help identify solutions to these problems.

- Increase parks and public spaces
  - Utilize spaces from existing parking lots
- Revitalize and extend the downtown out from Walnut
  - Increase infill of mix-use buildings
  - Increase walkability out from Walnut
  - Create a coherent streetscape design
- Improve the parking functionality and aesthetics
  - Shared parking
  - Street parking
  - Parking garage

PROJECT PHILOSOPHY

The diagram to the right represents the philosophy behind the project. The park, people, and businesses all benefit from the each other and if one is removed, it breaks the cycle:

The park provides activities and attractions towards people.

With more people living and visiting near the park, there will be a higher demand for goods and services. The businesses will realize the potential demand and move their retail near the park.

Figure 2.1. Design Philosophy Diagram
After reviewing the history of the downtown, a program was started to prevent these habits (buildings being torn down and parking lots paved over top) from continuing through this design. The program listed below will be followed in every design concept.

Parking
In order to create more room for urban spaces, parking lots will have to be more efficiently located to maximize the parking while minimizing the space they take up. Parking is dealt by three methods. The first method is to use shared parking. This means having different types of users use the same parking lot during different times of the day or week. This solution assumes there is an agreement between the current lot owners and the users of the prior lot that is being moved. The best example of this is using the current church parking lots in the downtown. During the week, these parking lots are empty; they are only full when the church is having mass or other events. This allows for open or office parking to use these lots during the other hours of the day. Understanding the daytime and nighttime uses as well as week and weekend uses allows for these parking lots to be shared by different businesses.

The second solution to parking is to increase street parking. This will provide more people parking in front of the businesses. It will also slow traffic on the street as well. No roads will be widening to provide street parking, but existing driving lanes will be converted into street parking.

The third option is to add a parking garage that blends in with the surroundings. The parking garage will help provide parking for any existing parking lot that was not covered in the above two solutions as well as compensate for any new parking demands from the increase development.

Existing Buildings
Another guideline that was set for the project was to not tear down any existing building no matter if it fit with the surrounding context or not. Instead, renovations of building facades were suggested as an alternative. It is a more sustainable and affordable method and it would avoid tearing down more buildings in downtown.
VICINITY MAP

Figure 2.2. Vicinity Map

VICINITY MAP - Muncie Indiana
Figure 2.3. Aerial Map
Figure 2.4. Building Inventory
This diagram focused on what were the important destinations on the site. Destinations that people visited to shop, eat, or socialize. Bars, restaurants, and retail stores were marked as nodes. They were places that people want to go to. Places or objects that were deemed special because of their function or their history were considered landmarks. Landmarks are prominent visual features. Walnut and Charles streets were found to have the most nodes. Mulberry contained the least amount of nodes and landmarks.
LANDUSE DIAGRAM

For the land use study, the uses were grouped into three categories: commercial, residential, public facilities. This study was done to understand where people are working, living, and playing.

Residential - - - - - - 102,410 sf
Commercial- - - - - - 304,480 sf
Public Facilities- - - 69,760 sf
SITE INVENTORY

For the parking study, the lot uses were broken up into three main types of parking. Open parking allows anybody to park. Office parking is designated for office users only. Reserved parking requires permission to use the lot. From the research, it was discovered that open parking makes up very little of the actual parking in downtown.

Figure 2.7. Parking Lot Use Diagram

PARKING LOT USE DIAGRAM

For the parking study, the lot uses were broken up into three main types of parking. Open parking allows anybody to park. Office parking is designated for office users only. Reserved parking requires permission to use the lot. From the research, it was discovered that open parking makes up very little of the actual parking in downtown.

Office -------- 780 spaces
Reserved ------ 508 spaces
Open --------- 194 spaces
Total --------- 1544 spaces

DESIGN PROCESS 31
SITE INVENTORY

This diagram notes the condition of the sidewalks on site in terms of how walkable they are. Characteristics considered included the width of the sidewalk, the amount of cracks and bumps (which would affect people in wheel chairs), how safe it was to walk, both at night (because of lighting) and day (condition), and general aesthetics of the sidewalk. The best are marked in red, the worst are marked in yellow, and orange in between the two. The study had a correlation with the Nodes & Landmarks diagram, with better sidewalks located next to the most of the nodes.
The vehicular study looked at three major concepts about the roads through the downtown. First, it looked at direction because all the streets on the site were one way lanes. Second, it looked at widths of the roads, with wider roads displayed by having wider arrows. Third, it looked at intensity and importance of the road. The roads that were major access routes to the downtown were colored a red-orange and the minor roads colored a blue-purple.
Figure 2.10. Site Analysis
SITE ANALYSIS

1. Opp.-Historic Civic Theater could connect to surrounding
   Con.- Huge parking lot takes away from building

2. Opp.-Gateway from MITS to downtown and Ivy Tech
   Con.- Wall divides MITS from downtown

3. Opp.-Can be a backyard space for apartments
   Con.- Busy streets will be noisy

4. Opp.-Close to MITS and High St Church gives it easy access
   Opp.- Main entrance from the west can make it a gateway
   Opp.- Can become a backyard for apartments
   Con.- Heavy Traffic makes it hard to cross High St

5. Opp.-Possible gateway from the south to the north
   Con.- Road is tailored to automobiles; it has mostly parking lots and multiple driving lanes
   Con.- Sidewalk makes street less walkable

6. Opp.-Can become an edge on southern part of downtown
   Opp.- Space can have a connection to restaurants
EMERALD NECKLACE- BOSTON, MA

The Emerald Necklace in Boston is a series of parks connected to each other designed by Franklin Olmsted. These parks were first examined as the larger whole instead of any particular park. Together, these parks help form a pedestrian and ecological circulation network through parkways and waterways that has made the park a landmark destination for people of Boston and tourist visiting. Though each park has its own individual name, together they became something bigger under one name.
The second aspect looked at was these parks were so close and connected yet they each brought a different style and amenity to the city that separated them from each other. Though the scale of the Emerald Necklace is larger than Muncie’s downtown, these two ideas studied were heavily influenced in the design of the project.
A case study that was important to the project was small urban parks. These pocket parks were studied because of their similar scale. Paley Park in New York was originally a vacant lot used for parking in the early 1960s. The design was successful in creating an outdoor room within New York City. It was removed from the flow of traffic, enclosed and sheltered from the noisy street. Today it is one of New York’s most famous small urban parks. The Projects for Public Spaces organization listed on their website why this project works:

“For one, it is located directly on the street so that people are attracted to look in and enter. It has good, reasonably priced food, as well as moveable chairs and tables that let people be comfortable and have some control over where they sit. A waterfall provides a dramatic focal point and a reason to enter the park; its noise blocks out the sounds of the city and creates a sense of quiet and privacy. There’s adequate shade in the summer from the trees, though they allow a beautiful dappled light to pass through their leaves.”
GREENACRE PARK - NEW YORK, US

Greenacre Park is another small urban park that is very similar to Paley Park. The result is another successful park that was transformed from a vacant lot to a thriving community park, despite its small size. The Projects for Public Spaces also had this to say about why the project is successful:

“1. It is located directly on the street so that people are attracted to look and to go in
2. There is good, reasonably priced food.
3. There are movable chairs and tables so people can be comfortable and can have some control over where they sit.
4. A waterfall provides a focal point and a dramatic reason to visit the park and its noise creates a sense of quiet and privacy.
5. There is shade in the summer from the trees yet their thin structure allows a beautiful dappled light to pass through.
6. Overhead heat lamps on the upper level heat the park in cool weather.”
THE DESIGN SOLUTION

EARLY CONCEPTS --- 42
MASTER PLAN --- 46
WYSOR PARK --- 48
HIGH STREET COMMUNITY PARK --- 54
RIVOLI PLAZA --- 60
PATTERSON PARK --- 66
ENGINEERING DRAWINGS --- 72
CONCLUSION --- 76
CONCEPT 1 - Walnut’s main axis concept

Concept one focused on a Walnut Street as the main axis of downtown. It is where the most successful activity occurs. The growth and development were to come from the streets that ran perpendicular to it, Main St, Jackson St, Adams St, and Charles St. The small Urban Parks were surrounded by the new growth and development, similar to how Paley Park and Greenacre Park were designed. This allowed for an east-west park connection through the site. However, this concept did not address the need for infill along Mulberry Street.
The second concept looked at the existing parking lots as a possible secondary connection system that connected multiple small urban parks surrounding the downtown businesses on Walnut. The growth and development were to start along side of these parks, facing High and Mulberry Streets. This project was heavily influenced by the emerald necklace concept, while still using some concepts of Paley Park. However, this concept lacked park visibility from the street.
Concept three focused on massing the new building development to entire lots in order to obtain larger space for urban parks. This concept looked to fill the smaller gaps around buildings and left the larger lots for park development. This strategy would allow for larger park activities and more views of the park from the street. However, it lost the multiple park connections that were present in the other concepts.
The final concept combined elements from all three and focused on the big idea of multiple pocket parks connected along a pedestrian circulation system. This idea was sprung from a downtown meeting where one of the members had talked about the “supportive nature of the businesses to survive”. He explained that businesses would advertise their events in other businesses stores. Using that morphology, the parks connected along this circulation system will help support businesses all along the system and each park will help supporting each other.
Figure 3.5. Master Plan
MASTER PLAN

Goal 1 - Add parks and public spaces
Four pocket parks were designed within selected parking lots and were connected through a pedestrian circulation system. The parks are unified by similar architecture and site furnishing throughout the site. Signage will inform people about the local businesses and allow them to advertise themselves. The signage will also display a map of the entire park system as well as the entire park and how it connects as a whole.

The parks will also have a connection through special events and festivals. The main festival will be the art walk on the first Thursday of every month. The park will become the art walk and will allow the art to be displayed for an entire month, to help promote local artists and to give others more time to visit them. The parks can also be used to hold multiple concerts and other events for Muncie Gras. Figure 3.6 shows the park system.

Goal 2 - Revitalize and extend the downtown out from Walnut
Infill starts along the new pedestrian circulation system. The majority of the infill develops along Mulberry and Main streets to help extend the downtown to streets that currently contain views of parking lots. Retail and apartments develop along the edges of the parks where parking lot spaces stood before.

A Community Center was placed along High and Jackson streets adjacent to the MITS station. Finally, a new government building mimicking the architecture of the old court house was added next to the existing county building and a clock tower reaches over both buildings to replace the former landmark back to the downtown. Figure 3.7 displays the new infill.

Goal 3 - Improve the parking functionality and aesthetics
Shared parking was added to the surrounding parking lots. Shared parking means two or more user groups use the same parking lot at different times of the day. A parking lot can be an employee parking during the day and an open lot at night. Two of the biggest parking lots used for shared parking are the High Street United Methodist Church and the First Merchant’s Bank.

Street parking was added along High and Mulberry Streets to help slow traffic, and to bring street parking to the new store fronts. Last, to accommodate any new needed parking, a parking garage was added on top of an existing parking lot on the corner of Jefferson and Adams Street. Figure 3.8 shows the new parking added.
Figure 3.9. Wysor Park

Scale
0 100ft 400ft
WYSOR PARK

Wysor Park, located at the corner of Main and Walnut Street, is named after the former Wysor Building that was located on the site before it was a parking lot. The name is to respect the historic identity of the space.

Context

Wysor Park is bordered by the MITS bus station to the west, shown in Figure 3.10. The Ivy Tech students have classes in the Patterson Building to the east of the park, Figure 3.11, and to the north and south, government and other public buildings reside.

Goals

Create an easy and direct access to the downtown from the MITS Bus Station. Currently, the parking lot is blocked off by a fence and a small retaining wall to prevent people from crossing into it, shown in Figure 3.12. With the new Wysor Park, entering the park from the MITS bus station is encouraged and will create a defined path that directs public transportation users to the downtown.

Provide an outdoor room.

There are multiple government buildings that employ many people around the site, as well as Ivy Tech students and professors, high school students, local residents, and MITS riders who could benefit from having an outdoor space to eat during their lunch break or to wait for the bus. Vecino’s coffee shop can use the site for people to sit and drink their coffee.
WYSOR PARK

Two pathways were created along the north and south edges of the park. This quickly directs all of the people heading north and south. These paths surround the outdoor room. Crosswalks were added to the MITS bus station to direct pedestrian traffic through these pathways.

The outdoor room is centralized in the park. The north and south sides are framed by a line of trees that align with the existing trees across the street. The trees are accompanied by planters and seating that help create the edge that defines the two different spaces—the outdoor room and the two pathways leading to the downtown.

An overhead structure was provided to help enclose the space much like an outdoor room. The structure does not provide a complete cover but allows some penetration of the sun. In the central area of the park is a water feature to attract people and to provide a calming interesting feature.

How Wysor Park helps local businesses
Businesses nearby would benefit from people such as the Ivy Tech students using the MITS and traveling through the park. Locals or people working nearby can buy food from a local shop and eat it in Wysor Park. The outdoor room will likely increase patronage at Vecino’s. New development will fill in the empty north east corner of Walnut and Main with a view of the park.

Wysor Park - outdoor room
This section shows the outdoor room with an overhead structure framed by the trees and planters and the pathways from the MITS bus station. The section looks east towards the Patterson building after exiting the MITS.
Wysor Park - connection to MITS

This section demonstrates the transition from the Mits bus station into Wysor Park. The fence and wall that blocked the pathway are removed so that the bus station and the park have a quick transition.
**WYSOR PARK**

**Wysor Park** - relaxing in Wysor Park

Figure 3.16 and Figure 3.17 illustrate before and after looks how the existing parking lot can be transformed into an outdoor room with people eating and drinking coffee.
Figure 3.17. Wysor Park-After Perspective
HIGH STREET COMMUNITY PARK

Figure 3.18. High Street Community Park
HIGH STREET COMMUNITY PARK

High Street Community Park is named after the High Street United Methodist Church. This park took on a community atmosphere since it was located near the church and the MITS bus station.

Context
High Street Community Park is surrounded by the High Street United Methodist Church and the MITS bus station to the west and north. A new High Street Community Center will be added in the vacant lot to the north-west. To the east are retail, shops, and bars with residents living above. The Old National bank's parking lot faces the south end of the park.

Goals
Create a community park.
Since the parking lot is surrounded by a Church and a public transportation station, having a community park nearby would allow for people to easily reach the park from the bus station. The church could use the park to hold events. The new High Street Community Center would benefit from having the park space adjacent to it for community activities as well.

Provide an outdoor space for the retail along the park.
Outdoor seating for some of the retail is provided in the fronts along Walnut Street. However, this limits the sidewalk width immensely and reduces the space for available seating and pedestrian circulation, as shown in Figure 3.20. The backs of the buildings are right along the alleyway that runs through the site and separates the parking from the buildings, as shown in Figure 3.21. This goal looks to provide some larger outdoor space for the retail and free up the sidewalk for more pedestrians.
HIGH STREET COMMUNITY PARK

The west side of the park was devoted to an open green park with its curvilinear sidewalks framing the park and opening it up to the church and the new community center. The large space is very open, making the entire park visible from anywhere in the park. This was done to allow parents to watch their children play from the seating located in the park. The large area allows for many people to occupy the park at one time for community events held by the church or community center.

The alley way was extended from the back of the building and moved to align with the road that accesses the MITS Bus station. This allowed for the businesses to have an extended outdoor space to sell food and provide seating. The extended outdoor space is located directly on the main path that connects all of the parks together. The backs of the buildings will be converted into another store front and become an inviting edge to the park. The businesses will have one side devoted to people and the other to automobiles entering from Walnut.

How High Street Community Park helps local businesses

The retail located on the same block as the park will benefit from people walking through the parks along the main pathway as well as people using the park. Businesses can sell their food and merchandise to the people walking by and occupying the park. Community activities that are held on the open lawn will bring more people to visit downtown.

High Street Community Park - transition through park

This section shows the transition between the retail and its outdoor seating on the left and the open community lawn on the right. The transition in between includes the relocated alleyway and seating shaded with trees.
Figure 3.23. High Street Community Park - Detailed Enlargement
HIGH STREET COMMUNITY PARK

Figure 3.24 and 3.25 illustrate before and after looks at how the existing alleyway can become a street front space for the businesses to attract pedestrians to eat, shop and relax.

**Highstreet Community Park** - walking along the outdoor retail

Figure 3.24 and 3.25 illustrate before and after looks at how the existing alleyway can become a street front space for the businesses to attract pedestrians to eat, shop and relax.
Figure 3.25. High Street Community Park -After Perspective
RIVOLI PLAZA

Figure 3.26. Rivoli Plaza

Horizon Convention Center
Ivy Tech

Old National Bank

Heorot

The Artist Within
Toys Forever

Chase Bank

Back Stage Bar

Murray Jewerlys Cassella’s Kitchen

Muncie Town Center

White River Landing

Fickle Peach

Mutual Bank

Two Johnnys

Scale

0 100ft 400ft

60  DESIGN SOLUTION
RIVOLI PLAZA

Rivoli Plaza is named after the former Rivoli Theater that was located a block north of the plaza. It was chosen because of its historic significance to the area as well as the existing outdoor movie shows that are projected onto one of the buildings in the plaza.

Context
Rivoli Plaza is surrounded mostly by retail, restaurants, and bars to the North and South ends of the plaza. There are some studio lofts on the second and third floors of the southern buildings. Two banks border the east and west sides of the plaza.

Goals
Enhancing the existing outdoor movie experience.
For Friday Fun Night in the eastern parking lot, an outdoor movie is shown on the north side of the parking lot along the Back Stage Bar’s blank white facade. The building’s facade is shown in Figure 3.28. This goal looks to enhance the experience by giving the outdoor movie a defined space and integrate it into the design.

Design for large activities/events.
Since this plaza is located at the southern most block of the downtown, it can become an edge of the downtown where larger events could happen.

Connect the plaza to the surrounding buildings.
Many of the buildings touching the plaza do not face it. This goal looks to strengthen the relationship between the buildings and the plaza.

Create one plaza from two parking lots.
Currently, the existing parking lots are separated by Walnut, a very important street, yet still would be easy for pedestrians to cross. Creating a unified park from the two parking lots will prevent Walnut from being a barrier.
RIVOLI PLAZA

The outdoor movie experience was enhanced by providing a lawn amphitheater surrounded by retaining walls and an art wall structure. These help define the space and separate it from the people walking by or through the park.

The lawn amphitheater also was designed with a stage to allow for small concerts or outdoor performances, and larger groups of people. It can also provide a space during festivals such as Muncie Gras. During the winter months, the amphitheater could be converted into a skating rink to provide winter activities. During special times of the year, Charles Street from High to Mulberry could be closed and the plaza would extend to the street to accommodate larger events.

Old National bank on the west side of the park has an arcade that runs along the side of the building. The arcade helped form the grid off which the park is based. Windows were added to other buildings to create views into the plaza.

The art wall structure, which was designed to incorporate art and the art walk into the park, was mirrored on both sides of Walnut Street. The row of trees that follows the arcade of the building on the west is mirrored on both sides of Walnut as well. This was done to visually display a coherent plaza.

**How Rivoli Plaza helps businesses**
With movies and large events being held in the plaza, businesses nearby will benefit from the visitors buying food or gifts. The new restaurant will benefit from the multiple night/evening activities at the park, such as the movie theater, concert, or ice skating. The outdoor eating will likely increase patronage to the restaurant as well.

**Rivoli Plaza - western plaza**
This section shows the transition through the western part of the plaza. It shows the different pathways divided by the trees and planters as well as the art wall structure. The relationship between the restaurant’s outdoor dining room and the park are displayed as well.
Rivoli Plaza - eastern plaza

This section demonstrates the transition through the eastern part of the plaza. The sloping outdoor amphitheater is shown along with the transition between the amphitheater and art wall structure.
Rivoli Plaza - exploring the art display wall at night

Figure 3.33 and 3.34 display before and after looks at how the existing building can turn its store front and the parking lot can become a great art walk gallery. Even at night, the experience walking through the plaza is exciting and interesting.
Figure 3.34. Rivoli Plaza - After Perspective
Figure 3.35. Patterson Park
PATTerson Park

Patterson Park is named after the existing Patterson building that is located on the same block. The Patterson building is a historic building on the block.

Context

Patterson Park is bordered by the backs of apartment buildings to the west, shown in Figure 3.36. To the north and north west are the backs of retail shops and the Ivy Tech students in the Patterson Building. To the east and south east are large scale corporate banks, shown in Figure 3.37. To the south is the parking lot used by Chase bank.

Goals

Design a place that becomes a backyard space for residents downtown

Currently, the existing parking lot serves as the main entrance into the apartment buildings. The parking lot also has views of the backs of some of the other retail buildings, large scale banks, and dumpsters. The design of this park was to appeal to the residents of downtown and hide some of the unappealing surroundings, yet allow the park to be open to visitors walking around the parkway that connects all the parks together.

Provide different rooms within the park to allow for multiple users on the site.

With the park looking to appeal to different downtown residents and visitors, the park should be able to provide different spaces to allow people to pick spots in the park that were more private and some that were more open. The park also needs to provide a larger space for an outdoor class room for the Ivy Tech students in the Patterson Building.
PATTISON PARK

The park is buffered from the street and people walking down the sidewalk by hedges and trees to contain the space yet still allow for people to view in. People can enter the park from all corners, yet the largest opening faces the apartments. Near the building, small shrubs and perennials were planted to liven the backs of the apartment buildings. In the center of the park is a small lawn space for people to play with their pets or relax and escape from the urban surroundings.

The hedges and trees that buffered the park from the street also create small corridors that allow people to choose more private places to sit. The open lawn in the middle serves as a large area for an outdoor classroom or for larger groups of people to come and socialize.

How Patterson Park helps businesses
With the new park located next to apartments, the property value of those apartments will increase due to the appeal of having a outdoor space adjacent to their homes. This will likely lead to more people moving and shopping downtown for their needs and wants.

Patterson Park- different pockets
This section shows how different corridors were created by the use of hedges and trees. The hedges create a buffer from the street while still allowing for views into the park. The hedges and trees also define the smaller corridors as well as the open green space in the middle.
Figure 3.40. Patterson Park - Detailed Enlargement
Figure 3.41 and 3.42 display before and after looks at how the existing parking lot can be transformed into a backyard for the people living downtown.

**Patterson Park** - strolling through one of the small pathways
Figure 3.41 and 3.42 display before and after looks at how the existing parking lot can be transformed into a backyard for the people living downtown.
Figure 3.42. Patterson Park - After Perspective
PATTERSON PARK Planting Plan - Scale 1”=30’

<table>
<thead>
<tr>
<th>Deciduous Trees</th>
<th>Botanical/Common</th>
<th>Container</th>
<th>Size</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>Acer rubrum/ Red Maple</td>
<td>B &amp; B</td>
<td>2&quot; Cal</td>
<td>9</td>
</tr>
<tr>
<td>AS</td>
<td>Acer saccharum/ Sugar Maple</td>
<td>B &amp; B</td>
<td>2&quot; Cal</td>
<td>4</td>
</tr>
</tbody>
</table>

| Shurbs          |                                   | 5 gal     | 2'    | 296  |
| T               | Taxus sp/ Yew                     |           |       |      |
| FV              | Forsythia Vernalis/ Forsythia     | 3 gal     | 1'    | 9    |

| Perennials      |                                   | 3" pot    | 1'    | 587.49 sq ft |
| H               | Hemerocalis sp. / Daylilly        |           |       |      |
RIVOLI PLAZA Outdoor Amphitheater Grading Plan - Scale 1"=20’
CONSTRUCTION DOCUMENTS

ART WALL STRUCTURE Plan Scale 1”=10’

ART WALL STRUCTURE Elevation Scale 1”=10’
SEATING/PLANTING DETAIL

Plexiglass Panels

SIGNAGE DETAIL - Scale 3/4" = 1'

Machine Bolt
CONCLUSION

To reiterate, Muncie has not been afraid of testing new designs in its downtown, at one time possessing a light rail system to a pedestrian mall. However, some of its bold ideas have not worked well, even being detrimental to it. Though Muncie's downtown was slowly recovering, it still lacked an overall design concept to tie the downtown together and give it a plan the future development to occur. Unfortunately it seemed that Muncie had become accustomed to its condition. Muncie's downtown was due for another bold design that can spearhead it back to its former prosperous state.

In response to these problems of increased usage of automobiles over the past 50 years, followed by the increase in parking lots and decrease in building footprints, this design solution proposed revitalizing and expanding the commercial district beyond Walnut Street by incorporating streetscape enhancements and developing urban parks to bring more people back to the downtown. The goals of this project looked to increase parks and public spaces, while improving the parking functionality and aesthetics and overall revitalizing and extending the downtown out from Walnut. The main concept that accompanied this solution incorporated multiple pocket parks connected along a pedestrian circulation system that looped throughout the downtown. These pocket parks form one larger linear park that becomes a landmark for the downtown. They helped connect the downtown and support existing business while allowing for other new businesses to develop and flourish along the parks. Along this linear parkway, four uniquely different parks were design to provide amenities to the local residents and visitors to the downtown. The variety of uses found in the different parks will attract a wide range of users from residents living downtown to people involved in church activities to students to local bands and artists.

In order to thoroughly complete this design, there is an assumption that this project would meet zoning codes stated by Muncie and Delaware County. The design followed the zoning ordinances for parking as closely as it could without affecting the integrity of the design. The source for funding this project was not specified and is assumed that it would be possible to fund this type of project. Last, in order for this project to work, there is an assumption that all people affected by this project would be willing to sacrifice any current land (mostly parking lots) in order to help provide the area for this design to function.
APPENDIX

APPENDIX A Time Line --- 80

APPENDIX B List of Figures --- 82

APPENDIX C Bibliography --- 84
<table>
<thead>
<tr>
<th>Task</th>
<th>Weeks 1-2</th>
<th>Weeks 3-4</th>
<th>Weeks 5-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Inventory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Precedents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concept Drawings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master Plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detail Enlargements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sections</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perspectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Drawings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meet with Advisor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weeks 7-8</td>
<td>Weeks 9-10</td>
<td>Weeks 11-12</td>
<td>Weeks 13-14</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 0.1 - Small park/Large Park - (Forsyth 2005) --- 11
Figure 0.2 - Small park connections - (Forsyth 2005) --- 11
Figure 0.3 - Survey-many trees - (Wolf 2005) --- 12
Figure 0.4 - Survey-some trees - (Wolf 2005) --- 12
Figure 0.5 - Survey-no trees - (Wolf 2005) --- 12
Figure 0.6 - Trees in urban environment - (Grey 1978) --- 14
Figure 0.7 - Trees heating and cooling buildings - (Grey 1978) --- 14
Figure 1.1 - Muncie 1920s - (Deeg 2010) --- 18
Figure 1.2 - Muncie 1970s - (Deeg 2010) --- 18
Figure 1.3 - Muncie 1970s-80s - (Deeg 2010) --- 18
Figure 1.4 - Muncie present --- 18
Figure 1.5 - Mulberry and Jackson intersection --- 19
Figure 1.6 - Walnut and Jackson intersection --- 19
Figure 1.7 - Parking Diagram - (Teagarden 2008) --- 20
Figure 1.8 - Existing intersection of Walnut & Charles --- 20
Figure 1.9 - Existing parking lot between two buildings --- 20
Figure 1.10 - Campus Martius Park <http://pps.org> --- 21
Figure 1.11 - Campus Martius Park <http://pps.org> --- 21
Figure 1.12 - Campus Martius Park <http://pps.org> --- 21
Figure 2.1 - Design Philosophy Diagram --- 24
Figure 2.2 - Vicinity Map - (Google Earth Map) --- 26
Figure 2.3 - Aerial - (GIS Map - Ball State University Library - Map Collection) --- 27
Figure 2.4 - Building Inventory --- 28
Figure 2.5 - Nodes & Landmarks Diagram --- 29
Figure 2.6 - Landuse Diagram --- 30
Figure 2.7 - Parking Lot Use Diagram --- 31
Figure 2.8 - Sidewalk Condition --- 32
Figure 2.9 - Vehicular Study --- 33
Figure 2.10 - Site Analysis --- 34
Figure 2.11 - Emerald Necklace <http://www.emeraldnecklace.org/static/filelib/EmeraldNecklaceMap.pdf> --- 36
Figure 2.12 - Paley Park <http://pps.org> --- 38
Figure 2.13 - GreenAcre Park <http://pps.org> --- 39
Figure 3.1 - Walnut Main Axis Concept Diagram --- 42
Figure 3.2 - Loop System Concept Diagram --- 43
Figure 3.3 - Massing Concept Diagram --- 44
Figure 3.4 - Final Design Concept Design --- 45
Figure 3.5 - Master Plan --- 46
Figure 3.6 - Park System --- 47
Figure 3.7 - New Infill --- 47
Figure 3.8 - New Parking --- 47
Figure 3.9 - Wyser Park --- 48
Figure 3.10 - MITS Bus Station --- 49
Figure 3.11 Patterson Building --- 49
Figure 3.12 Fence and Wall Barrier to MITS station --- 49
Figure 3.13 Wysor Park section Outdoor Room --- 50
Figure 3.14 Wysor Park - Detailed Enlargement --- 51
Figure 3.15 Wysor Park section Connection to MITS --- 51
Figure 3.16 Wysor Park - Before Perspective --- 52
Figure 3.17 Wysor Park - After Perspective --- 53
Figure 3.18 High Street Community Park --- 54
Figure 3.19 High Street United Methodist Church --- 55
Figure 3.20 Outdoor Seating blocking circulation --- 55
Figure 3.21 Alleyway and backs of buildings --- 55
Figure 3.22 High Street Community Park section Through Park --- 56
Figure 3.23 High Street Community Park - Detailed Enlargement --- 57
Figure 3.24 High Street Community Park - Before Perspective --- 58
Figure 3.25 High Street Community Park - After Perspective --- 59
Figure 3.26 Rivoli Plaza --- 60
Figure 3.27 Mutual Bank from west parking lot --- 61
Figure 3.28 Back Stage Bar --- 61
Figure 3.29 Side of Toys Forever --- 61
Figure 3.30 Rivoli Plaza section West Plaza --- 62
Figure 3.31 Rivoli Plaza - Detailed Enlargement --- 63
Figure 3.32 Rivoli Plaza section East Plaza --- 63
Figure 3.33 Rivoli Plaza - Before Perspective --- 64
Figure 3.34 Rivoli Plaza - After Perspective --- 65
Figure 3.35 Patterson Park --- 66
Figure 3.36 Backside of Apartment Buildings --- 67
Figure 3.37 First Merchant's Bank --- 67
Figure 3.38 Dumptsers next to tattoo shop
Figure 3.39 Patterson Park section Through Park --- 68
Figure 3.40 Patterson Park - Detailed Enlargment --- 69
Figure 3.41 Patterson Park - Before Perspective --- 70
Figure 3.42 Patterson Park - After Perspective --- 71
BIBLIOGRAPHY


Gorman, James, “Residents’ Opinions on the Value of Street Trees Depending on Tree Location.” Journal of Arboriculture 30(1) (January 2004): 36-44.


