Huron Riverfront Master Plan

Bridging the Gap, Making Connections

Student: Bryan Bland
Instructor: Ronald Spangler
Advisor: Meg Calkins, RLA, ASLA

Department of Landscape Architecture
College of Architecture and Planning
Ball State University
Muncie, Indiana
The location of this project was Ann Arbor, Michigan along the Huron River in a historically significant part of town that has received little attention as far as being an amenity for the community. Currently, this location sits stagnant with little activation of the riverfront and no response to the opportunity for economic development. The design solution was a riverfront master plan that focused on a community park located between the river and train station. The main purpose of the project was to provide an amenity for the neighborhood and complimenting the transit oriented urban infill development is focused along one street of the adjacent neighborhood. The main goals of the project were to create a node of activity in this area of town, to introduce the rest of Ann Arbor to this neighborhood, and to activate Ann Arbor in Southeast Michigan.
To my family, because without their support, none of this would have been possible.
A community park in Ann Arbor along the Huron River serves as an amenity to the city by connecting these neighborhoods with each other, along with serving the recreational users of the greenway, and is a complement to the transit hub that will bring more people through this area of the city.

This project displayed how a riverside park can impact a community at multiple levels; what kinds of benefits a park has on a neighborhood, a city, and a larger region. Elements of the project work together to create a master plan for this area of the city. Urban design areas complement each other as well as complement the adjacent development; both existing residential and a new mixed use development that is located immediately adjacent to the project site. The urban design portions work together with a re-designed and expanded transit station located on the existing site of the Amtrak Station. Along the river, a park will work to integrate the river with the city by creating an interface that provides a location for people to access the river and take advantage of the opportunities available from a river in an urban setting. One asset that the design really takes advantage of is the Washtenaw County Greenway that runs along the river; this is a great opportunity that attracts people to this area of the city. This combination of activities and land uses provide for a unique place to connect people within the city and connect the city with the region.

Issues addressed in the urban design of the project focused on how an area can be revitalized through certain design techniques. What kinds of mixed uses are appropriate for transit oriented design and urban greenways and parks? How are urban greenways and parks designed with social, economic and environmentally sustainable methods? What is social sustainability? What is economic sustainability? What is environmentally sustainable?

**PARK DESIGN + URBAN DESIGN + CONNECTION = MASTER PLAN**

**GOAL:** provide amenity to community  
**GOAL:** reactivate neighborhood  
**GOAL:** to unify the riverfront to create a large open space  
**GOAL:** serve greenway users, allowing them to access to the rest of ann arbor
Riverfront Park. Denver, Colorado

There are several similarities between Riverfront Park and this design project and it provided inspiration for my own design solutions. One main goal of this project is to make the connection between Commons Park on the Platte River and downtown Denver. The 16th Street Mall is a major spine of downtown Denver and has a pedestrian-oriented design that has provided a great amenity for the city. The design also includes a large pedestrian bridge that allows access over a light rail transit line but is also an icon for the project and is a visual terminus for the 16th Street Mall. This project provides great a great example of making connections within a city, how a city can activate its waterfront, and how urban design can be complemented by a park.

Fresh Kills Lifescape. New York, New York

This project is a great example of a landfill reuse with a contemporary design style that addresses a wide range of issues, from water quality, recreation areas, waterfront activation, and circulation for pedestrians, bikers, and automobiles. The different types of spaces created within the park provide for multiple experiences to be had by a large number of users. The project also successfully provides the opportunity for users to interact with the water by integrating wetlands, creeks, and other lowland areas. This contemporary design solution makes a statement for how landfills can be reused and transformed into a great asset for a community and to be inspiration for the entire profession.

Guadalupe River Park. San Jose, California

The Guadalupe River is a large open space corridor that serves multiple purposes both for the community and for the environment. The large linear park space created along the banks of the river function as a flood control element as well as a recreation area for the community. The landforms created along the river were a great inspiration for my own design solution because it successfully shows how the fluid qualities of a river can be reflected through the physical design of the land. This linear park space also provides some larger open spaces that allow for more passive recreation and public gathering. This riverfront park shows how an urban area can have a large open space corridor along a river and providing several different spaces that the community can use.
Problem Statement
What are the elements of a riverside community park that is incorporated with a greenway and an adjacent transit hub and how can these uses complement each other; executed using social, economic and environmentally sustainable principles?

Project Significance
This redevelopment area of Ann Arbor is going to function as an asset to a wide range of users; from residents of the adjacent neighborhoods, local citizens, greenway users, to commuters that are utilizing the newly expanded transit system. There is a need for activity in this area because this part of town is historically significant, as with many Midwest towns, along the river; on this site is where the economic heart of the city was originally located with mills, factories, and other warehouses that took advantage of the connective opportunities of the river. Historically, and still now, rivers are the physical connections between cities and the system of waterways creates a network of cities located on that river or any connected waterway. This is one major theme of the design, integrating the water into the park as a connective element; to connect the park with the river and to make connections within the park.

The urban infill developments will function as an additional attractive element to this area, uses that will boost economic activity in an area that currently has very little commerce. Mixed use buildings will allow for a more diverse type of activity to exist in this area by providing space for businesses, office space which provides the opportunity for more jobs in the area, as well as residential space combined that allows for a more efficient living style. The development areas will act as a spine for activity in this neighborhood that will attract those from outside the immediate area as well as an amenity for local residents by providing them conveniences that do not currently exist here. These parts of the project will interface with adjacent mixed use development by complementing the planned uses and adding new types of commercial activities that will provide more amenity land uses that will add to the revitalization of the entire area.

Project Goals
The overall goal of the project was to link and make connections on multiple levels; within the region, within the city, connect neighborhoods, and to unify the park space. This piece of land represents a void in the fabric of the city that has created a barrier between two parts of the city; a revitalization of this area will bridge the gap. Another major goal of the project was attraction; to bring in users from around the region, around the city, and from the greenway into the park, and into the downtown. The greenway is a great amenity that will bring users through this site and the park design will serve as an attraction that will bring users across the river, into the park, over the tracks, and then continue into the rest of the city. There are amenities located in the city, but this project also places amenities directly adjacent to the park that will serve as a more convenient location for businesses that complement recreational users of the river and greenway.

Site Issues
The site does have some inherent problems that are associated with any riverfront project site, such as a poorly treated riverbank with little activation with the existing parks, and this is one main reason for the project to exist. There are also two major barriers present, one being the Broadway Street Bridge and the other being the railroad right of way that is a major vertical obstacle that needs to be traversed. The Broadway Street Bridge poses an issue to the park space located along the river because it is a large physical barrier that does not permit users from conveniently going to and from each side of the bridge to each park space. These major issues have inspired the major goals of the project, and have provided the best opportunity for creative design solutions.
AMTRAK TRAIN LINE BETWEEN CHICAGO AND DETROIT
CLOSE PROXIMITY TO DETROIT AND SUBURBS
ATTRACTS PEOPLE FROM AROUND THE ENTIRE REGION
ALONG HURON RIVER WITH GREENWAY

HISTORICAL CENTER OF ANN ARBOR

MANY ADJACENT NEIGHBORHOODS

CLOSE PROXIMITY TO DOWNTOWN

BETWEEN U OF M CENTRAL AND NORTH CAMPUS

CONVENIENT FREEWAY ACCESS
67 acres of open space, 29 acres in phase one

Project Summary
This area of Ann Arbor is centrally located and has great opportunities to connect with the adjacent vibrant neighborhoods along with making connections regionally. The project included several different pieces that are integrated together into an overall master plan for this area of the city. There is an urban design portion along Depot Street on the southwest end of the site along with additional mixed use infill development along Wall Street that is located north of the river on the east end of the site. The remainder of the site is park space that links the two open spaces on either side of the Broadway Bridge and on both sides of the Huron River. The combination of these project pieces reactivates this area of Ann Arbor and helps to unify the waterfront land along with make connections within the city and within the region.

Park Design
The park design of this project incorporated 29 acres of open space that is located along the Huron River between the Argo Dam on the northwest corner of the site and extending to the Broadway Street Bridge. This park serves as an intermediary between the adjacent neighborhoods on both side of the river that are currently very disconnected. The park serves greenway users in multiple ways by allowing them to access the new development along Depot Street, as well as access to the rest of downtown Ann Arbor. This is a major node along the greenway as a starting/ending point or as a resting location with facilities that cater to all users, including those walking, running, biking or in canoes or kayaks.

• Infill mixed-use development on the north side of Depot Street

• Mixed use and residential development across from train station
  Existing tavern will be remain at current location
  Other businesses to be accommodated in new space or relocated
  Parking located in center of block

• Expanded train station on the current site
  A new parking structure on the existing surface parking lot

• Two storey residential townhomes at the end of Depot Street
  Parking located at rear of building

• Plaza located adjacent to train station
  Access to park via new pedestrian bridge/ramp and stairs
  Tree canopy, seating areas, water feature

• Streetscape improvements that will create a more pedestrian friendly atmosphere
  Widening the sidewalk to accommodate street furniture
  Additional street trees and sidewalk plantings
  Unique paving to designate this as a pedestrian area
10 acres of infill, 6 acres focused along depot

Urban Design
The urban design portion of this project will incorporate just over ten acres in two separate locations, with about six acres of that being focused around Depot Street between the Broadway Bridge and North Main Street.

• Pedestrian bridges will allow access into the park from the greenway
  Bridges are integrated into the park circulation system

• System of canals, boardwalks, paths, and islands along the river
  Bridges and boardwalks make the connection between the shore and small islands
  Docking locations also integrated within this system

• New landforms along river reflect island forms
  Small retaining walls located at intersections of the berms and pathways

• Small pavilions with tables and benches located along the river

• Hardscape plaza located adjacent to new parking structure with a connecting pedestrian bridge
  Pedestrian bridge/ramp and stairs allow access in and out of park
  Decomposed granite as ground-plane material
  Tree canopy, seating, and a water feature

• Living green wall along train tracks buffers the right of way
  Panels alternate plant material and historical displays
Figure 1.3: Site Inventory

- Parks and open space along the river
- Greenway along the river
- Traditional neighborhood street pattern
- Amtrak train station
- Future lower town development
- Commercial areas on both sides of site
Figure 1.4: Site Analysis

Analysis Map

Link new development with old
Attract Greenway users
Unify the Riverfront

Mixed Use Development
- Bring activity to neighborhood
- Blend with adjacent houses
- Complement transit station
- Create unified streetscape
- Make pedestrian friendly

Relocate Utility Company
- Creation of new park space
- Unify waterfront open space
- Amenity to neighborhood

Transit Hub
- Accomodate increased commuter rail traffic
- Encourage use of rail transit
- Node of redevelopment
- Bring people through neighborhood

Bring Economic Activity to Neighborhood

Residential Development Provides Alternative Housing Option

Streetscape Improvements for Pedestrian Safety

Expanded Train Station, Delivers People to This Area

Reclaim Land for Public Use to Unify Waterfront Parks

Connect with the Greenway
Points of Access

Major Entry Points for Park Users

Opportunities for Connections
Figure 1.6: Obstacle Diagram

BENDS + OBSTACLES

ON-SITE PHYSICAL BARRIERS

FOCUS POINTS ALONG STREET RIVER
The design process began with examination of the surrounding areas of the city and what currently exists in the neighborhoods around the project site. The site was then looked at to see why there has been little consideration for this area and why there is a lack of activation along the waterfront; this is one of the main issues addresses by the design solution. The park spaces along the river front were unified to act as a link across this void in the city. To unify the park as one, the design used water as a consistent element that was integrated into the park design in a way that worked to blur the line of what is park and what is river. This objective was achieved through creating a system of canals and wetlands along the river edge with islands in non-linear forms that reflect the fluid form qualities of a river. These forms were then continued in the design of the landforms that provide some change in topography throughout the park and provide some undirected open space where exploration is encouraged to experience this area of the park. The link between the park and the urban area of the project was achieved by creating a pedestrian bridge over the train tracks. This bridge provides an opportunity to create a design element that serves a functional purpose as well as a contemporary icon for the design. A system of ramps and stairs will provide for the access over the tracks and as an elevated pedestrian space the will be an overlook for the entire city. These elements combined create a unified design that will connect people on many different levels.

Site Context
The site is located centrally in Ann Arbor, just north of the downtown and west of the University of Michigan medical center. There is transportation infrastructure also located very close to the site; Amtrak train tracks and station located within the site boundaries and a freeway is less than a mile, with easy access. The northern site border is created by the Huron River which is the major water source in Washtenaw County and runs through the northern part of Ann Arbor.

Site Location
The site is 67 acres located along the Huron River and includes several great amenities that provide opportunities to integrate these elements in a design. The Washtenaw County Greenway follows the path of the river which brings this great trail system directly through this site and provides an opportunity to make a connection with the town. My focus for this project was to include 30 acres that lay to the west of the Broadway Bridge, one part being between the Huron River the railroad right-of-way that is 24 acres, the other six acres are between the right-of-way and Depot Street as well as one block that is between Summit and Depot at the Broadway Bridge.

CHALLENGES:
what is a park?
what is a riverside park?
what is a park in ann arbor?
why is it a park?
who is it serving?
what is a plaza?
what is a plaza in ann arbor?
why is it plaza?
what is “supposed” to be there?
Figure 2.1: Concept Plan
REDESIGN OF RIVERBANK TO CREATE ISLANDS, CANALS, AND WETLANDS

PEDESTRIAN BRIDGES ALLOW ACCESS FROM GREENWAY INTO THE PARK

NEW LANDFORMS REFLECT FLUID FORMS OF RIVER

PATHWAYS MAKE DIRECT CONNECTION TO GATHERING NODE

BRIDGE/RAMP ALLOWS ACCESS OVER TRAIN TRACKS; CONNECTING PLAZAS

TOWNHOME RESIDENTIAL DEVELOPMENT

INFILL MIXED USE ALONG DEPOT STREET
master plan

Figure 2.2: Master Plan
Redesign of riverbank to create islands
system of islands, canals, and wetlands to bring river into the park; blur the line
pedestrian bridges allow access from greenway into the park
docking locations provided within canals

New landforms reflect fluid forms of river
brings new forms into park design of this area
playful and relaxation function
exploration encouraged

Pathways make bold contrast to fluid forms
make direct path to gathering node
paths direct circulation but not restrictive

Plaza allows gathering or relaxing
forest of trees provides unique character, blur the line
open and closed spaces
tables, chairs, benches
water feature brings river into the plaza

Living green wall to buffer from tracks, flows into plaza
historical panels will alternate with planted panels

Bridge/ramp allows access over train tracks; connecting plazas
becomes elevated space that is more than just a bridge, viewing point
major design piece of neighborhood

Other plaza smaller, urban scale
forest of trees; open and closed
water feature links with river and plaza

Expanded train station to handle increased commuter traffic
parking structure to accommodate additional users; elevated link

Townhome residential development
link with existing homes
infill mixed use to revitalize building stock of neighborhood
increased economic activity
complement commuters, greenway users, and residents
ISLANDS + LANDFORMS

NEW ISLANDS AND LANDFORMS REFLECT FLUID QUALITIES OF RIVER

DIFFERENT FORM LANGUAGE BRINGS NEW ELEMENT INTO PARK DESIGN

MODIFICATION OF WATERFRONT CHARACTER, MAKES EXAMPLE OF DESIGN
Figure 2.4: View of Boardwalk
Figure 2.5: Cut/Fill Diagram
CIRCULATION

CIRCULATION SYSTEM MAKES BOLD CONTRAST AGAINST LAND-FORMS

ALL SYSTEMS ARE INTEGRATED; BRIDGES, BOARDWALKS, WALKWAYS

FLOW OF PATHS DIRECT TRAFFIC TO AND FROM ACCESS NODE TO RIVER

EXPLORATION BEYOND PATHWAYS ARE ENCOURAGED
Figure 2.7: Boardwalk Section
Figure 2.8: Riveredge Section
Figure 2.9: Berm Retaining Walls
access node
Bridge/Ramp/Stairs
- allows access over train tracks
- all accessibility systems integrated; ramp is ADA accessible
- elevated areas become vantage point for users to see new park and unified riverfront

Forest of Trees
- brings qualities of nature into the plaza
- provides for shade, as well as some open areas
- plantings integrated with bridge to create unique experience as walking amongst the trees

Water Features
- brings qualities of river into plaza
- step fountain located in park plaza as larger feature of attraction
- at-grade canals bring in character of new canals at river edge of new park

Seating
- different kinds of seating spread around both plazas; sun and shade
- benches, tables, and chairs provide for choice of seating option
- allows for social interaction and gathering

Decomposed Granite
- ground plane material in park plaza to keep park character; softer texture than hard pavers

Unit Pavers
- will serve as paving for depot street plaza; a typical character of urban plaza

Green Wall
- will act as buffer to protect and screen train tracks from park
- living/planted green panels and historical display panels will alternate

Mixed Use Building
- store fronts will address the depot street plaza

Connection with Garage
- access allowed to and from garage into park plaza
INTEGRATION OF STAIRS AT RAMP LANDINGS

FACING PAGES SHOW LIGHTNESS OF DESIGN

STEEL SUPPORTED STRUCTURE ALLOW THINNER CONCRETE WALKWAY

TRANSPARENT RAILINGS ADD TO LIGHTNESS
NEW CHARACTER OF DEPOT STREET

CONSISTENT FACADE OF BUILDINGS

NEW STREET PLANTINGS

NEW PEDESTRIAN CROSSINGS

PLAZA INTEGRATED INTO URBAN FORM

Figure 3.6: New Depot Street
CHARACTER OF DEPOT STREET PLAZA

INTEGRATED BRIDGE/RAMP/STAIRS WITH LIGHT DESIGN

SEATING PROVIDED AMONG FOREST OF TREES

COMFORTABLE SCALE OF MIXED USE BUILDING

HARDSCAPE PAVING
A vibrant city must be a connected city; both with its region and with itself.

A vibrant city must have people interacting.

For people to interact they must be connected.

People must be allowed to interact with the open spaces that are present in the city.

This site is a very important piece of land in the fabric of Ann Arbor, and it is a piece of land that has been ignored by the city and development groups of the area. It is geographically centrally located within Ann Arbor, is the location of the original industry that was vital in founding the city. The location is also bordered by two major neighborhoods that are home to a very important population of the city, a population that is living close to many resources that the city offers. This design helps to make the connection to the river, and connection to the greenway, a connection of neighborhoods, it connects Ann Arbor within Southeast Michigan, connects the neighborhood with the rest of the city, and most importantly connects people within the city.