West Bottoms in Three Parts 2022-23 KCDC Vision Study

In the 2022-23 Academic year, Kansas City Design Center Urban Design Studio has produced a catalytic vision study for the West Bottoms in partnership with SomeraRoad development firm and Unified Government of Wyandotte County/KCK Department of Planning and Urban Design. The purpose of the project was to build on the ongoing redevelopment project and infrastructure planning initiatives conducted by these two partner agencies and contextualize them into an overarching urban design concept for the area capitalizing on their momentum and leveraging their potential for a broader impact and change. In doing so the studio concentrated on three specific project areas: West Bottoms Warehouse District, I-70 viaduct connecting the two downtowns, and West Bank of Kansas River from Kaw Point to I-670 viaduct. Simultaneously, while focusing on urban design of the specific areas, the project aimed to explore the possibilities of their use as an armature for the generation of an interconnected transformative plan for the regeneration of the entire area and its constructive reconnection to its natural, cultural, and economic assets and its unique urban identity.
VISION
Create an idea of alternative and authentic urbanity that capitalizes on the found conditions of the place, embracing the extreme contrasts of its fabric, physical makeup and land use practices while establishing public realm and mixed-use infrastructure that binds it into a new whole.

GOALS
Mitigate natural and physical barriers of separation shared between KCK and KCMO by capitalizing on the West Bottom's geographical location.

Strengthen and develop additional modes of transportation.

Activate the riverfront as a destination to bring people to the area.

Create a unified urban fabric by capitalizing on the existing identity.

Create a mixed-use city by developing dross space as a public realm for future economic growth and activity.

OBJECTIVES
Identify potential public spaces that enhance the quality of life within the West Bottoms: using meticulous analysis.

Remediate existing brownfields in the areas of focus.

Repurpose existing infrastructure to allow for vehicular and pedestrian connections throughout the area.

Integrate a broadened public realm in an existing industrial area.

Stitch fragmented districts together through proposal of potential public spaces.
CONCEPTUAL DIAGRAMS

OVERALL CONCEPT

CONCEPT ELEMENTS
TRAFFIC
PROPOSED I-70 CHANGES
AREA 1
K C K
EXISTING AVAILABLE LAND: 1.59 ACRES
AMOUNT OF LAND GAINED: 14.19 ACRES
PROPOSED AVAILABLE LAND: 15.78 ACRES
OVERALL GOALS AND OBJECTIVES

- REDUCING INFRASTRUCTURE
- PROVIDING CONNECTIONS TO RIVER
- COMPLETING PEDESTRIAN LOOP
STRAWBERRY HILL
- Responding to Topography
- Defining City Edge
- Preserving Viewsheds
- Providing Public Space

RIVERFRONT DEVELOPMENT
- Providing Destination on Riverfront
- Extending City Public Realm
- Revitalizing Central Avenue
- Managing Stormwater

KCK AREA
KEY CONSTITUTING PARTS
STRAWBERRY HILL
VIEWSHEDS AND BUILDING BLOCK DEVELOPMENT STRATEGIES
STRAWBERRY HILL
MORPHOLOGY
STRAWBERRY HILL
BUILDING RESPONSE TO TOPOGRAPHY
STRAWBERRY HILL
VIEWS ALONG PROPOSED CITY EDGE
RIVERSIDE DEVELOPMENT
ACTIVATED RIVERFRONT
AREA 2
170
RECLAIMED PUBLIC SPACE
PROPOSED TRAFFIC CHANGES - AT GRADE
RECLAIMED PUBLIC SPACE AND RIVERFRONT

KCK CONNECTION
RECLAIMED PUBLIC SPACE
CONCERT LAWN
RECLAIMED PUBLIC SPACE
RIVERFRONT INTERACTION POINT
UPPER DECK
OVERALL PLAN
EXISTING CONDITIONS
I-70 is one of the main connections from KCK to KCMO. It sees a lot of traffic throughout the day, especially freight traffic due to the industrial use of the area.

REDUCE
The studio proposes removing traffic along the South side of I-70 as it is aging, provides opportunity for a better connection between two cities and the West Bottoms, and also has some bridge/ramp issues.

SERVICE ROUTE
The North side of I-70 will be transformed into a 2 lane service road. This will still allow for the major freights and trucks that are needed to service the area effectively with little negative impact.

STREET CAR
The studio is proposing a street car to encourage public transportation. This street car will provide a new connection from downtown KCK to the River Market with a couple stops along the transformed upper deck of I-70.

PEDESTRIAN PUBLIC REALM
The other half of I-70 will become a pedestrian trail and public realm which will include a variety of program and heavy green space. This will turn I-70 into a destination and provide much needed public space. The North side will be a bike trail connecting two cities.

PROPOSAL
The overall proposal will create a unique public space experience not found anywhere around the area. By repurposing the infrastructure of I-70 it will further activate future developments through pedestrian trails, green space, and public transportation.
UPPER DECK
CHARACTERISTIC VIEWS

POLLINATOR ZONE

CANOPY ZONE
STORMWATER MANAGEMENT

The stretch of the I-70 viaduct that could host the solar panels would be about 7,000 ft. long. The proposed streetcar would require 750,000 watts in order to make its daily trips. This would easily be able to be powered strictly by solar power.

Solar hours are an important factor when considering how much solar the panels will be able to collect. Kansas City has about 1,200 solar hours per year. The length of I-70 would allow for 4,200 panels to span across the deck. This would generate over 3,000,000 watts each day. The solar modules would produce an extra 436,800 watts.

I-70 COULD GENERATE OVER 3,500,000 WATTS OF POWER EACH DAY

I-70 GREEN INFRASTRUCTURE
PROPOSED 1-70 HOUSING
CURRENT & FUTURE HOUSING DEV.

Existing Units - 497 Units
Under Construction - 2,847 Units
I-70 Proposed - 200 Units
KCK Proposed - 1,066 Units
UNDERSIDE
VERTICAL CONNECTION MADDISON AVE
UNDERSIDE
COMMERCIAL ZONE

UPPER SIDE PEDESTRIAN PATH

RETAIL SPACE
RESIDENTIAL ZONE
RECREATIONAL PROGRAM INTERSECTION
RECREATIONAL SPACE
AREA 3

CORE
OVERALL PLAN
CORE AREA

SOMERAROAD SITE
Concept: Stitching

Relation to our project…

The street is the thread that holds the fabric together - the public spaces.

The thread has tangles that are lingering areas and knots that are stopping areas.
SPACIAL KNOTS

1. State Line
2. Westbottoms Flat
3. Sante Fe & 8th Street
4. Madison Ave

TYPOLOGY OF THE FOUND STREETSCAPES
1. State Line | Resting
2. Westbottoms Flat | Lingering
3. Sante Fe & 8th Street | Resting
4. Madison Ave | Resting

PROPOSED STREETSCAPE DEVELOPMENTS