**Design Statement**  
**ID 860**

*PROJECT TITLE: BRIDGEPORT INNOVATION CENTER*

**- PROBLEM**

The assignment called for an institutional building located in the northwest portion of the Bridgeport neighborhood in Chicago. This project is a continuation of a previous semester’s redevelopment plan in the same area. The program requirements called for a “Place for Making”; a building that would be, due to its place in the community, hybrid in nature.

The given site, located on the Eastern edge of the aforementioned Bridgeport Redevelopment Plan, is long and slender, with two very opposite conditions on the Northwest and Southeast faces. To the Northwest is the Southern branch of the Chicago River and a planned riverwalk that runs the length of the neighborhood. The Southeast has less ideal conditions: the CTA Orange line and I-55 are immediately across the street from the site, sitting on a berm 15’ above grade.

**- SOLUTION (DESIGN CONCEPT)**

The solution, dubbed The Bridgeport Innovation Center, is a 113,000 SF co-making and co-working facility. The building seeks to build a community of creators within Bridgeport and the greater Chicago area by providing a platform for making, innovating, and community involvement. In response to the long, slender site, the building takes the shape of a 540-foot-long continuous manufacturing hall with spaces for fabrication, prototyping, electronics and a micro-factory for small production runs.

Inspiration was taken from historical production floors, where a centralized “control room” was often elevated above the working floor so that administrators could observe the production process. Likewise, rather than interrupt the continuous manufacturing floor, co-working programs in the Innovation Center are lifted from the space to be suspended from the ceiling. Where the historical relationship between the elevated programs and the manufacturing floor used to be one between employer and employee, in the Innovation Center it becomes the relationship between making with your mind and making with your hands.

In response to the site, the building is entirely one-directional, prioritizing the riverfront while sacrificing its southeast side as “servant space”. Less-desirable program elements such as mechanical spaces, vertical circulation, and toilet rooms are stacked along that edge and serve the more important co-making and suspended co-working spaces. The building’s portal frame truss structure also responds to this asymmetry, using the SE side of the building as a large shear wall in order to minimize structure size along the NW side. By treating the river as its front face and utilizing the riverwalk as community event space, the Bridgeport Innovation Center expresses the Chicago’s River’s industrial heritage in a new light through the shared spirit of making.
In order to intensify the visual effect of the suspended co-working program, the required program elements are atomized into individual boxes. These “component program” elements are serialized and display function and number on their exterior. The specific, sometimes quirky, uses in the components each support a larger, more general use. These general usage zones are placed within a hierarchy, with public community functions towards the more active plaza on the West end of the building and more private functions towards the less active East end. At the center of the building, the height of the suspended catwalk and program dips significantly over the Prototyping and Electronics zones on the manufacturing floor. This achieves two purposes. The first is to create a curve for the eye to follow that accentuates the hanging program when viewed from the building’s north face. The second is to help break up the continuous 540-foot sight line across the manufacturing floor.

In contrast to the completely glass Northwest face, the Southeastern facade is heavy and solid. This precast concrete brise soleil shelters the offices and other “servant spaces” from harsh summer sun. A set of 5 precast panels are arranged to create a pattern across the elevation. These panels are mounted to a steel frame, which is held in place between the vertical, cast-in-place ribs. A continuous 10” edge width is maintained at the top, bottom, and vertical rib edges, visually connecting the brise soleil with the blade-like roof overhang on the northern face.
BRIDGEPORT INNOVATION CENTER

Manufacturing Platform

The Bridgeport Innovation Center is a 113,000 SF comaking and coworking facility at the Northeast end of the Roots + Seeds redevelopment plan. The building seeks to build a community of makers within Bridgeport and the greater Chicago area by providing a platform for living, making, and innovating. The building features a long, 540 foot long continuous manufacturing hall with spaces for fabrication, prototyping, electronics and a small microfactory. The office programs, rather than interrupt that manufacturing floor, are lifted from the space to be suspended from the ceiling. The building is one directional, prioritising the riverfront while using the southeast wall to house less desirable program elements such as mechanical and toilet rooms. By utilizing the riverfront as it’s community event space, the Bridgeport Innovation Center can share its spirit of coworking and comaking with the local community.
The 540’ long continuous manufacturing floor is roughly organized into four zones. These are lowered to the waterfront level, roughly 12’ below grade.

Community and coworking programs are lifted above the manufacturing floor and suspended from the ceiling.

The north face of the building is designated as “servant” space. The less desirable programs located here serve the manufacturing floor and suspended spaces.

Suspended program is accessed by a network of catwalks. Vertical circulation between floors is located along the servant wall.

A simple portal truss structure trades thickness along the South side of the building for maximum lightness along the north.

Pivot doors along the length of the building allow the manufacturing floor to open to the riverfront trail and use it as a community event space.

**COMPONENT PROGRAM**

**OFFICE AND COWORKING**

**HEALTH AND WELLNESS**

**COMMUNITY**
+20.6M Level Plan (2nd Floor Level)

South Elevation

Longitudinal Section

Ground Floor Level

Riverfront View

Print doors along the northern double glazed tension facade open to house community events along the waterfront.
EDUCATION

2017 - present  Illinois Institute of Technology (IIT)  |  Anticipated graduation date: May 18, 2019  
College of Architecture  
Master of Architecture (Advanced Standing)  |  GPA 4.0/4.0

2001 - 2006  Korea National University of Arts (KARTS)  
School of Visual Arts, South Korea  
Bachelor of Architecture

PROFESSIONAL

06.2018 - 08.2018  Skidmore, Owings & Merrill  |  Washington D.C, United States  
Summer Intern  -  Project Design Idea development, Rhino modeling, 3D Printing for Phisycal model, Revit and Autocad Drawing  
for Schematic Design phases: MONTGOMERY COUNTY JUSTICE CENTER (2018)

01.2010 - 08.2014  Tomoon Architects & Engineers  |  Seoul, South Korea  
Project Designer  -  Project Lead Designer for a variety range of design phases including competition projects, schematic design, design development and Construction Documentation. Typical responsibilities include project design, primary systems, concept design, space planning, consultant coordination, and team management. Winning competition entries include: The Korea Teachers Pension Head Office (2011), Sejong International High School (2009)

07.2009 - 01.2010  Studio UNITS UA  |  Seoul, South Korea  
Freelancer Architect Designer  -  Developed thorough understanding of design requirements or client and provided major input in developing a design for Youngin House and building performance strategy relative to assigned task or area of responsibility for New Headquarter for Shinyoung Securities.

02.2006 - 12.2008  architecture studio hANd  (Principal: Junsung Kim)  |  Seoul, South Korea  
Junior Designer  -  Project Designer  -  Junior Designer as well as Project Designer for a variety range of design phases including competition projects, schematic design, design development and Construction Documentation. Typical responsibilities include project design, development of concept design, project management with rendered 3D models, AutoCAD Drawings.  
Representative Projects include: Mimesis Art Museum (2009), Mimesis Art House (2009), SSIkim Artmill House (2008)

ASSOCIATION & LICENSE

2006 - present  KIRA (Korea Institute of Resister Architects)  
Licensed Architect  |  South Korea

HONORS / AWARDS

Summer 2018  First Place, Ben Johnck Award in the 2018 Chicago Award in Architecture student competition  |  AIA Chicago

Spring 2018  Nagle / Hartray Scholarship  |  IIT scholarship

Spring 2018  Brothers Finfer Scholarship  |  IIT scholarship

Fall 2018  Best In Year M.Arch second year  |  IIT 2018 Open House Award

Fall 2017 - Spring 2018  The Morgenstern Scholarship  |  IIT scholarship

Fall 2008  Collaboration with "Alvaro Siza" & Carlos Castanheira for Mimesis Art Museum

Fall 2001 - Fall 2004  KARTS Scholarship of the dean’s list

ACADEMIC

2001 - 2006  Academic Association of Wood Structure Design, Korea National University of Arts

2002  A Student representative of Academic Association, Korea National University of Arts

PUBLICATIONS / EXHIBITIONS

09.2011  The Korea Teachers Pension head Office in Archdaily, Concept, CA, & Architecture & Design Competition Vol 88

2001 - 2005  Featured Studio projects for UA Design Book  |  Korea National University of Arts

COMPUTER & OTHER SKILLS

3D Modeling  |  Rhino 3D, Grasshopper, Sketchup

Physical Modeling  |  3D printing, Laser cutting

Drafting  |  AutoCAD, Revit

Rendering  |  3ds Max Mentalray render, Rhino Vray render

Others  |  Photoshop, Illustrator, InDesign, After Effects, Microsoft Office
Group Project Explanation

PROJECT TITLE: BRIDGEPORT INNOVATION CENTER

- Group Member
  1. The applicant (ID 860)
  2. Graham Bowman
  3. Keigo Yamazaki

- The Role Description of the applicant (ID 860)
  : Proposal of concept design idea / Developing Design/ Plan and Section Drawing / 3D Modeling / Rendering perspectives

AGREEMENT

I agree to the following:

1. I agree to the role description of the applicant(ID 860) as described above.

2. I agree that the CWA award will only address the Applicant(ID 860) and the other members cannot claim this award as their own.

Graham Bowman

Keigo Yamazaki