IPRO 339: Adapting Shipping Containers to Create Affordable Housing

Midterm Presentation Summer 2009

Statement of the Problem

- Temporary Olympic Housing.
  - Approximately 17,000 people.
- Permanent Affordable Housing for the City of Chicago.
  - Affordable housing solutions for low income residents.
- Showcase sustainability.

Current Semester

- Focus on allocating and optimizing land use.
  - Olympic Housing relatively new goal.
- Recommendations have been incorporated.
  - Chicago Lot
  - Building Heights
  - Sustainability
- Some past research and work has been shelved due to shift in focus.

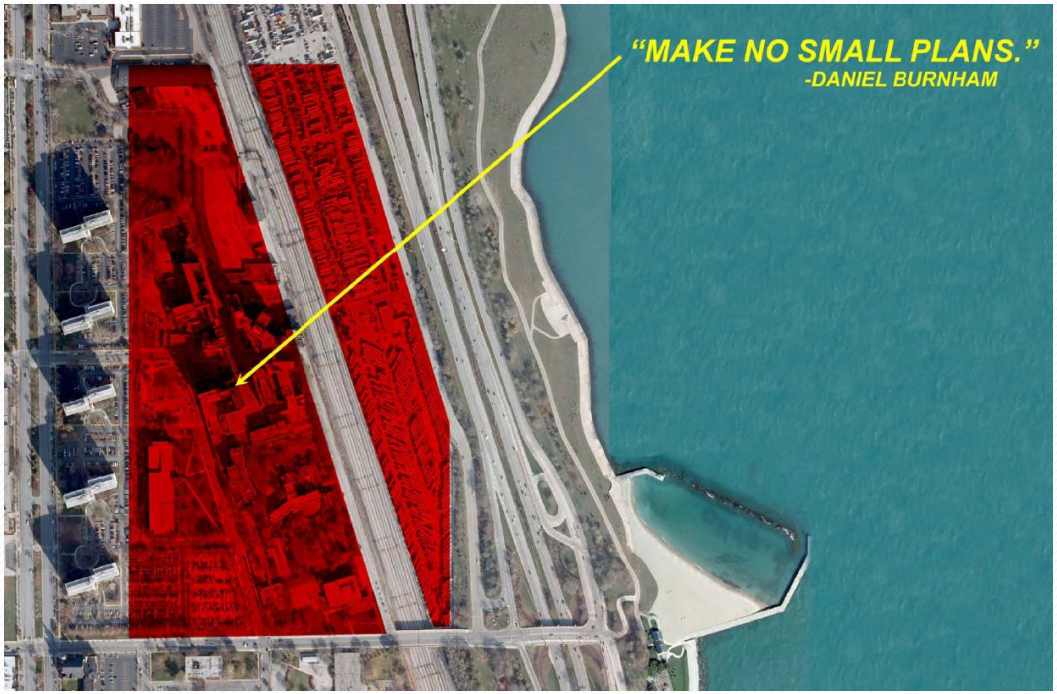
Organization of the Team

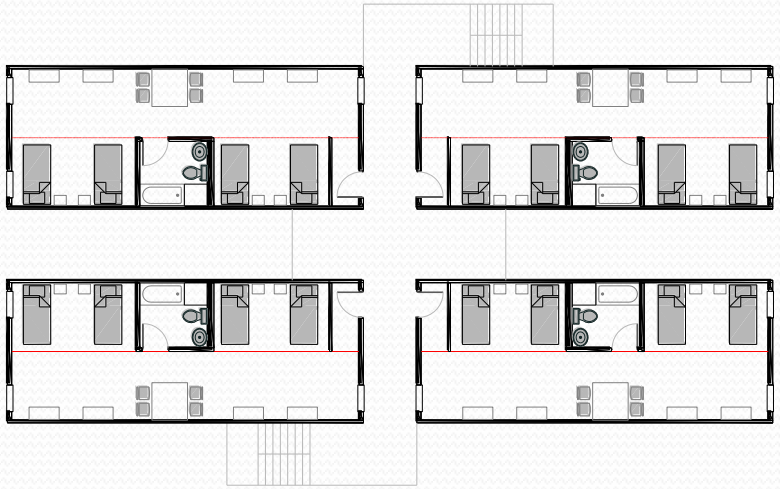
Design Architecture	Engineering	Presentation	Quality Control
Specht, Cassandra	Roseen, Michael	Silvestre, Ivan	Pyciak, Mark
Garcia, Anna Ribot	Kucher, Rostislav	Rahman, Raihan	Dunn, Michael
Pedersen, Erin	Gregory, Nicole	Park, Lucas	Ahsan, Saad
Park, Ji Ae	Gibbons, Jennifer	Lima, Nancy	
LaBuda, Timothy	Anderson, Aaron	Bais, Rajiv	
Jacobson, Joel			
Chan, Ronald			

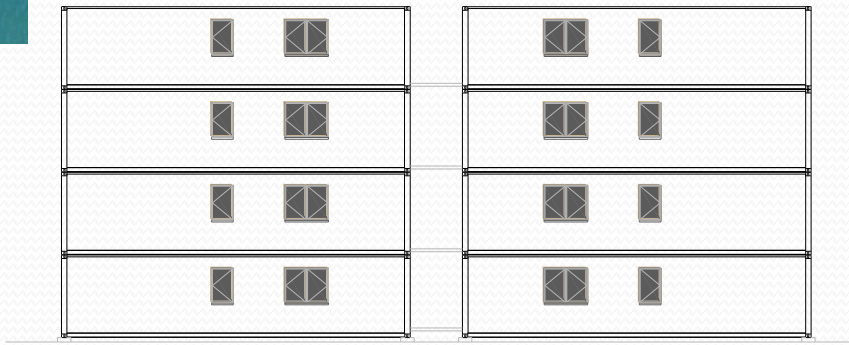
Ethical Considerations

- Understanding needs of low-income residents.
- Distinguishing between cheap and affordable to ensure the conditions are livable.
- Using local materials and labor from USA.
- Is this housing solution going to effectively increase the standard of living?
- Honesty in assessing fundraising needs.

DESIGN BUILD SUBGROUP: Progress

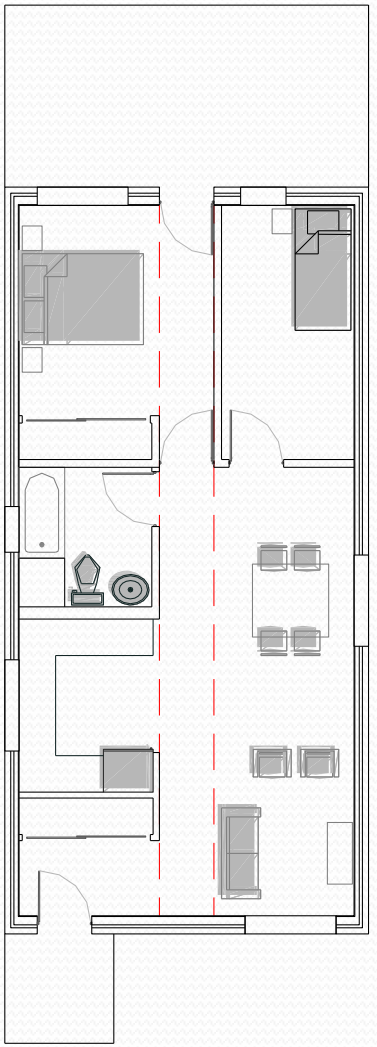






- Olympic Housing
  - Located on Michael Reese Hospital Site

DESIGN BUILD SUBGROUP: Progress



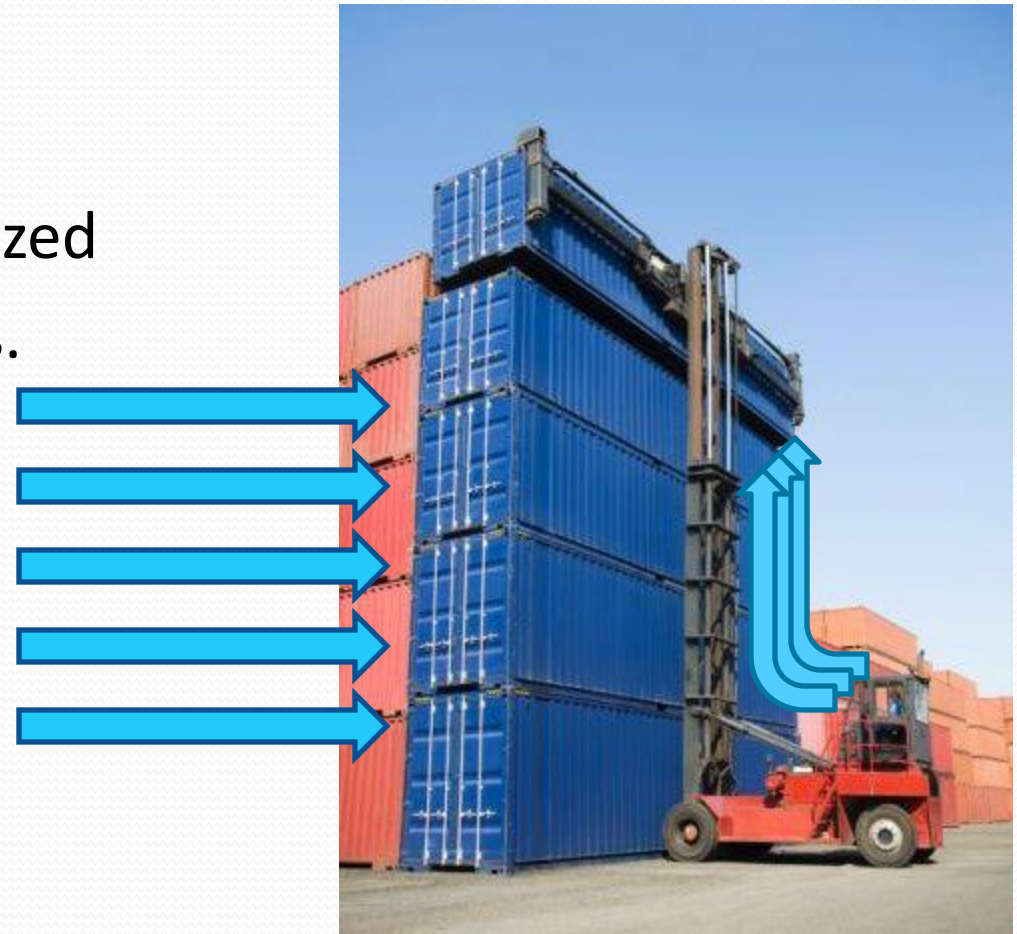
- Affordable Housing

ENGINEERING SUBGROUP Project Goals & Progress

- Build a sustainable complex to house about 17,000 Olympic athletes.
- Make the complex work structurally.

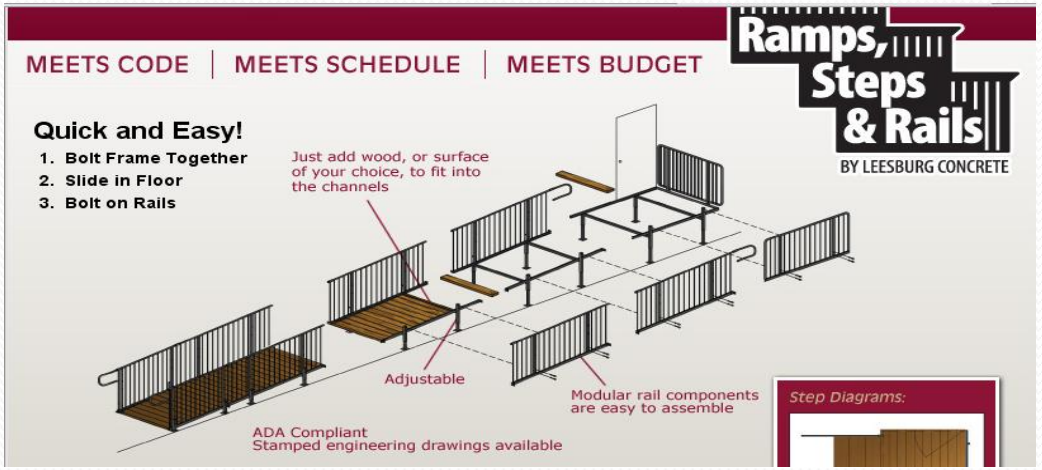
ENGINEERING SUBGROUP Challenges & Obstacles

- Determine whether wind load and uplift will be a structural concern.
- Finding cost effective solutions for individualized MEP and HVAC systems.



ENGINEERING SUBGROUP
Future Work & Conflicts

- ADA accessible lift and its structural effects.
- Making the deconstruction and transportation of housing simple and cost-effective.



Presentation Group: Progress & Goals

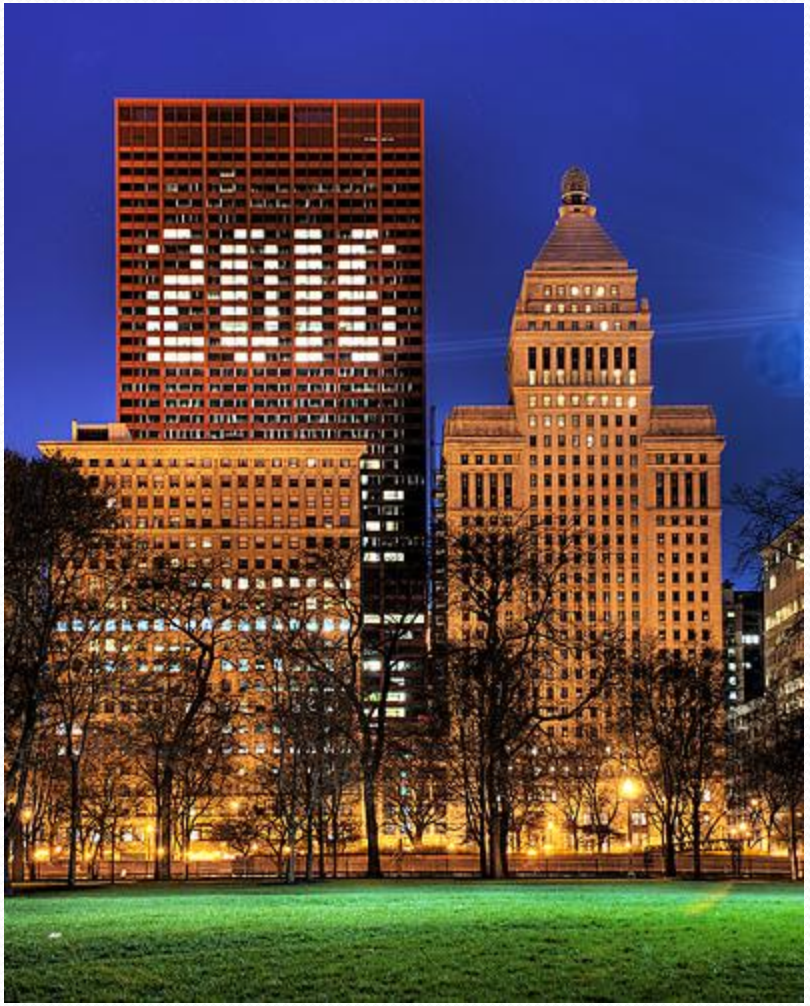
- Mission – Funding and organize an Olympic Village built using Forty Foot Equivalent Units (FEU).
  - If these units or homes, are then sold, the individual buying the home, would then be paying for the Olympic Village.
- Goals – Work with local Chicago-based companies to create a model of our Olympic Unit, Cost of Model approx. 25,000 dollars.
  - We have meet with several companies, of which one is interested in helping with funding, J.C. Restoration.
  - Another, Complete Trucking, is interested in helping with transportation.

Presentation Group: Obstacles and Solutions

- Obstacles
  - Due to a depressed economy, getting companies interested in donating is difficult.
- Solution
  - We build a marketing plan, focused on a basic target audience using familiar interest.
- Future problems
  - If we raise the needed amount, getting space on IIT has been a problem, and recruiting professional laborers to complete construction.

Conclusion

- The Olympic Unit
- Green Options
- Housing 17,000 athletes
- Sustainability
- Transition from Olympic Village to Low Income Housing



Questions?

Thank you