

# ARCHITECTURAL DESIGN

## LEVEL ONE STUDIO, FALL 2005

4.125

TRF 1-5PM

JAN WAMPLER

ALAN JOSLIN

WITH

DAVID WHITNEY – CONSULTANT OF STRUCTURE AND CONSTRUCTION

CHRISTOPHER B. DEWART – BUILDING INSTRUCTOR

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### SUMMARY OF ASSIGNMENT #2: “A PLACE FOR THE HOMELESS”

**Theme:** Two serious predicaments, expanding daily, currently plague our society; 1) the lack of affordable housing and protection for those people falling out of the security of our economic system, and 2) the overabundance of waste flowing from an economic system of disposable consumption. This studio exercise looks to use the second to assist the first. Students in groups of 5 or 6 will Design and Build creative solutions for the temporary sheltering of those without homes, using standard materials from the piles of waste typically discarded daily from MIT and other readily accessible local sources, as well as inexpensive new materials of general availability.

**Program:** The success of the design shall be based on the following criteria,

- 1) Size: No larger than 6'x6'x 6' (height)
- 2) Function: Providing for the inhabitant a secure place to sleep and to keep his/her belongings, where protection from the elements can be found and/or just simply a “home base” where time can be spent.
- 3) Structure: An ability to withstand the force of storm winds without collapse.
- 4) Thermal and Moisture Protection: An ability to keep the inhabitant comfortable and dry in a broad range of weather, temperature and internal humidity conditions, through waterproofing, insulation, heating, and natural ventilation.
- 5) Transport: An ability to easily dismantle, move and reconstruct the shelter without the inhabitant having to rely on the use of any outside vehicle or physical assistance, other than a shopping cart and their own simple construction skill.
- 6) Image: The construct shall transform “junk” into a crafted and beautiful shelter that provides dignity to its inhabitants.

**Schedule:** Friday, September 16

Introduction to the Problem

**Schedule:** Friday, September 16

(cont.)

Students form teams of 4 or 5 members drawn from both sections.

Friday, September 23 thru Sunday, September 25 (9pm)

Representatives of the homeless share needs and challenges.

Marco Marraccini to present references of temporary shelters and the extraordinary handling of “ordinary materials”.

Chris Dewart presents available “kit of parts”, their characteristics and the associated working processes.

Teams begin “serious” brainstorming of ideas and convert into rough sketch model form.

Teams to present rough sketch model, for review and sign-off, to the Faculty on Sunday evening (9pm)

Team to assemble a material list and review with Chris Dewart and the Faculty to determine source of each material, which studio member shall be responsible for the acquisition of each, and within what time frame.

Monday, September 26 through Wednesday, September 28

Materials to be acquired by designated team members, TA’s and Faculty on Monday.

Students, within their groups, shall prefabricate the shelter within the shop.

Thursday, September 29

By 4pm, students are to have transported their shelters in shopping carts and erected them in the designated area of the Kresge oval (rain or shine). Critics will judge the designs awarding 1<sup>st</sup> place and runner up prizes.

5pm, a Celebration. The work will be open to the public, as well as to Representatives from the City of Cambridge Social Services and MIT.

Good luck and Good fun to all.