February 8, 2004

This assignment will be presented in class on Wednesday February 15 @2PM

### Analysis of a Tower



Analysis of the past will help direct future design studies and ground innovation in solid construction techniques. Select an existing office tower from the list below, study its form, function and materials by redrawing and modeling an area of the buildings construct. Your job will be to draw one elevation and floor plan in CAD and build a 3D representation of one section detail through a corner or internal area of the tower by digital fabrication only. Capture as many photos as possible in particular of the buildings assembly system. The contents of this study will be used as a skeleton for façade and tower shape studies throughout the semester. Share findings wit the class on Wednesday in the form of a Power-point presentation.

**Towers**

1. John Hancock, Boston -          Pei Cobb Freed
2. Green Building, MIT -           I.M. Pei
3. Swiss Re, London, -            Foster
4. Hearst Tower NYC -             Foster
5. New York Times Building        NYC -Piano

## Draw:  Analysis

Develop a broad understanding of the tower by redrawing the buildings floor plan and elevation in order to extract tower content (stairs, elevator core, etc).  Speculation or guessing is highly acceptable, the closer the representation is of the existing building the more convincing speculative designs will be later in the course. Prepare a strong analysis in class do not stop short of the materials listed below.  Be sure to include the buildings name, date, location and if possible the cost. As part of your analysis try to find details of the curtain wall as sections or isometric drawings. You should consider presenting the following information as drawings or text:

1.      Structural System

   - Column size, slab thickness, material type

2.      Curtain Wall System

   - Materials,  assembly method, Sizes

3.      Building Core

   - Elevators, Fire stairs,

**4.      Drawings**

   Plans (Typical Floor & Lobby), Elevation or Section Drawing

**Present: Power-point Slides**

Power point in class  and Post power point on the MIT Server