**Process Engineering Proposal #1 from GP Vivienda**

**Background and Need**:

GP vivienda is the largest division of Grupo GP, Mexico’s largest privately owned construction conglomerate, specializing in the development of master planned housing communities.  As one of Mexico’s premier home builders, GP vivienda successfully combines experience with excellence at a grand scale, having raised multiple communities of over 1500 acres and over 100,000 homes in their 30+ years in business.

As of today, each of our 25+ active developments has its own 300+ m2 warehouse with all of their required materials. However, we are transitioning into a single distribution center, managed by ourselves, that would deliver materials to each development “Just in Time.” Effectively, reducing waste to a minimum.

**Project Outline**:

This project is important, highly visible, and your recommendation will be implemented. In order to make a solid recommendation your team will need to look at the following main aspects:

1)     - Ideal design, layout, and size of the DC.

2)      - Decision on how many trucks must be bought, and the optimal vehicle route each one should take to supply our 25+ developments.

**Some Relevant IEMS Courses**:

313, 381, 382, 383