



Towers Crescent Building B
Mike Synnott
Structural
Advisor - Parfitt



Technical Assignment 2
Alternate Floor System Designs

Executive Summary:

The purpose of this report is to take a more in depth look at the floor system of Towers Crescent Building B and compare it to 4 other alternative designs. The other designs are:

1. Steel composite beams spaced 10' O. C.
2. Noncomposite Steel beams
3. 2-way, flat slab with drop panels
4. 1-way slab with pan joists

The criteria looked at for the comparison of the systems was cost, floor thickness, and fire proofing.

The best design for Towers Crescent Building B was not the existing structure. The flat slab with drop panels would be the best design due to it's relatively low cost, at \$46,492, a drop in floor thickness by about 10", and having no need for fireproofing due to it being a concrete Structure.