

Final Design

Due date: Thursday December 11, 2008

In addition to the tasks conducted in the intermediate design, the following issues must be addressed:

1. Finalize typical sections for the different foundations types, basement wall, and flatworks, showing pressure diagrams, forces, moments, etc.
2. Refine or correct the soil bearing capacity calculations. Bedrock at 29 ft, piers not exceeding 3 ft in diameter.
3. Refine or correct the foundation settlement paying special attention on the settlement associated with elastic response and consolidation
4. Assess the impact of side loads and dynamic loads on your foundation design
5. Design the foundation for the features not connected to the IBS building structures.
 1. Based on structural design, recommend the foundation type for the stairwells.
 2. Price the total foundation system for the structure.
 3. Finalize the foundation drainage system design. Include layout, grade, typical sections and sump details.
 4. Finalize recommendations for the site earthwork (excavation, structural fill, compaction, landscaping, pavement sub-grade)