APPENDIX C

STUDY FRAMEWORK QUESTIONNAIRE
0. 0 CASE STUDY SELECTION PROCESS

0.1 Organizational/Building Match

The goal of this section is to identify organizations which have comparable building programs to the State of Wisconsin.

0.2 General Building Type

- College, Classroom
- College, Dormitory 2-3 story
- College, Dormitory 4-8 story
- College, Laboratory
- College, Student Union
- Community Center
- Garage, Parking
- Gymnasium
- Hospital, 2-3 Story
- Hospital, 4-8 Story
- Library
- Medical Office, 1 Story
- Medical Office, 2 Story
- Office, 2-4 Story
- Office, 5-10 Story
- Office, 11-20 Story
- Swimming Pool, Enclosed

1. 0 ORGANIZATIONAL CONTEXT

The first phase of the process of matching concerns identifying comparable organizations from which to draw a set of buildings. The organizations are matched as closely as possible based on several factors:

1.1 Organizational Structure

a. Type of organization
   1. Private Developer
   2. Private University
   3. Public University
   4. Public State Agency

b. Structure of the organization (institution or corporation)

   [Obtain an organizational chart]
   1. Number of staff and management levels/layers
   2. Number of subdivisions/departments within the organization
   3. Centralization/Decentralization of administrative decision making
   4. How staff and management levels/layers relate to the facility development process
c. Size of the organization
   1. Number of employees in the organization

1.2 Organizational Experience
   a. Facility development experience
      1. Years of experience
      2. Number of buildings/facilities the organization constructs per year
      3. Total development cost expenditures per year
   b. Facility management experience
      1. Number of buildings which are currently owned, operated, and managed by the institution or corporation
      2. Number of buildings which are currently leased by the institution or corporation
      3. Amount of capital expenditures allocated for management of buildings per year

1.3 Organizational Function
   a. Function of organization
      1. Stated goals and mission of the organization
   b. Motivations for development
      1. How these motivations/reasons relate to facility development
      2. Goals and objectives for constructing this building
         1. More space
         2. To make $
         3. Improve delivery of service
         4. Other

2.0 FACILITY DEVELOPMENT PROCESS

Once the organizations are matched, information concerning procedures used for development is gathered, compared and analyzed. The following set of questions are organized by the stages in the facility development process:

2.1 Definition of Scope
   a. Procedures, if any, for defining the scope of a project
   b. Levels in the organization where decisions concerning the scope of the project are made
APPENDIX C: STUDY FRAMEWORK QUESTIONNAIRE

2.2 Staff/Consultant Selection

a. Procedures, if any, concerning the delegation of staff and consultants to a particular project
b. Policies which suggest different combinations of in-house staff and outside consultants
c. Decision criteria and sequence for consultant selection
d. Who makes the final decisions concerning consultant selection
e. Comparability between the case study's staff/consultant selection and expectations for other projects

2.3 Design Development and Review

a. Procedures for design review
b. How concept budget estimates are factored into design
c. Who makes the final decisions concerning design
d. Comparability between the case study's design development and review stage and expectations for other projects

2.4 Construction Documents & Estimates

a. Procedures for construction documents and estimates
b. Sequence of decisions for reviewing construction budget estimates
c. How budget estimates relate to decisions concerning construction document revisions
d. Who makes the final decisions concerning completion of the construction documents
e. Comparability between the case study's construction documents and estimates stage and expectations for other projects

2.5 Bids & Contract Negotiation

a. Procedures for bidding and negotiation
b. How construction costs relate to final decisions concerning contract negotiation
c. Who makes the final decisions concerning contract negotiation
d. Comparability between the case study's bidding and contract negotiation and expectations for other projects

2.6 Construction & Project Management

a. Procedures for construction and project management
b. Who makes the final decisions concerning construction and project management issues
c. Comparability between the case study's construction and project management and expectations for other projects
2.7 Occupancy & Facility Management

   a. Procedures for facility management
   b. Types of maintenance policies
   c. How buildings are managed and operated on an on-going basis
   d. Operations and management responsibilities of the owner and responsibilities of the building tenants
   e. Who is responsible for facilities management and who makes the final decisions on facility management issues
   f. Comparability between the case study's occupancy and facility management and expectations for other projects

3.0 PROJECT SCOPE

At the second level of comparison, the overall project scope for all case study buildings are matched as closely as possible. Project program requirements are the controlling factors for comparing case study pairs. The parameters that are identified for matching include:

3.1 Program

   a. Who prepared the detailed program [In-house staff or consultant]
   b. Special building performance/durability standard requirements
   c. Quality/finish standard requirements
   d. Budget

3.2 Location Factors/Site Conditions

   a. Urban or suburban context
   b. Relative cost market [i.e. Milwaukee vs. Stevens Point]
   c. Parking accommodations
   d. Amount of grading/clearing/building demolition required
   e. Site/contextual constraints [i.e. Campus enclave vs. unencumbered site]

3.3 Size/Form/Configuration

   a. Total square footage
      1. Per floor
      2. Footprint
      3. Floor area ratio
      4. Efficiency ratio? [net/gross]
APPENDIX C: STUDY FRAMEWORK QUESTIONNAIRE

b. Number of stories

c. Overall building configuration
   Bar -shape
   L-shape
   U-shape
   H-shape
   O-shape
   Other/combination

d. Special design features [atrium, plazas, passive solar, special interior or exterior finishes, special function spaces]

e. Compact or loose organization on the site

f. Surface/volume ratio

   g. Perimeter/floor area ratio

3.4 Construction Materials & Building Systems

a. Construction Type
   1. Structural System [C.I.P. concrete, Precast concrete, Steel Frame, Etc.]
   2. Mechanical System
   3. Enclosure System

b. Performance
   1. Anticipated design life
   2. Level of Finish

3.5 Occupancy

a. Primary users

b. Other users

c. Daily pattern of building use

d. Seasonal pattern of building use

e. Total occupancy

4.0 PROJECT OUTCOMES

Finally, once all five case study pairs have been successfully matched the outcome variables are measured, compared and analyzed. These dependent variables include:

4.1 Land Costs

a. Total cost of land acquisition

b. Cost per square foot
c. Cost/square foot for special site work [Hazardous materials or environmental remediation etc.]

4.2 Project Costs
   a. Total cost of improvements: building costs, construction costs, project costs
   b. Cost per gross square foot
   c. Unit costs by subcontracts as per DFD worksheets

4.3 Furnishings and Equipment Costs
   a. Movable equipment budget
   b. Total movable equipment cost per square foot
   c. Interior partitions and built-ins budget
   d. Total interior partitions and built-ins cost per square foot

4.4 Delivery of Building
   a. Total implementation time [From project inception to occupancy]
   b. Schedule completion influences [Fast-tracking, seasonal conditions, unforeseen conditions]
   c. Complications that affected the move-in process
   d. Tenant move-in costs