

ABSTRACTESSENTIAL ASPECTS OF MANAGEMENT ON REFURBISHMENT PROJECTSGEORGE COLIN FORD

The recycling, refurbishment, restoration, rehabilitation or re-use of buildings for adaptive or continuing use has become an important activity in the Construction Industry. In Trinidad and Tobago, there has been a steady increase in the number of these projects being undertaken.

The nature of refurbishment works requires innovative methods of design and construction to accomplish the desired goals. The refurbishment work possesses numerous uncertainties as to the scope of the works that may only be discovered when exposing concealed components and a large proportion of the works may involve repair, patching, replacement, cleaning, etc., usually associated with maintenance.

This dissertation identifies and discusses the essential task to be performed in refurbishment projects with respect to the five phases of the project: feasibility and conceptual, planning, design, construction, close-out and start-up. The nature of the works and constraints which may be encountered are also discussed.

Some of the tasks to be performed by the Project Manager includes: assisting with the preparation of cost and time estimates and with

feasibility study; co-ordination of the specialist consultants for design and construction supervision; co-ordination of numerous small specialist contractors performing short duration activities; preparation, monitoring and supervision of cost and time control systems and quality assurance programmes.

A case study is presented to aid in identifying the nature of the constraints which may be encountered in such refurbishment projects.

Some of the main recommendations include the following:

- Conducting detailed site investigations such as soil, services, structural, survey, etc. These specialist investigations may be necessary in assessing the viability of the project particularly if change of use of the structure is proposed, or when refurbishing old buildings.
- Prepare detailed and accurate cost and time control systems and quality assurance programmes.
- Compatibility of materials especially where new materials will be employed amongst older similar materials.
- If the occupants remain insitu during the refurbishment, the works should proceed in a manner that limits the amount of

dust, noise or visible disturbance to these occupants.

In summary, the nature of refurbishment works requires a different philosophy, particularly solutions to technical problems and constraints, as compared to the construction of a new building. These constraints and problems encountered require innovative solutions to make the project feasible.

at existing structures and conserve energy, materials and foreign exchange. This economic climate along with the desire for the historical preservation and aesthetic appeal of the existing old buildings have increased the attractiveness and feasibility of the recycling alternative. The restoration of the building both in monetary and aesthetic terms is usually justified, sometimes even at high cost, especially for monumental buildings with high aesthetic and historical value.

however, refurbishment should not be confused with "conservation" or "Historical Preservation" for national heritage. Conservation utilises the techniques of refurbishment but has a different philosophy of approach in relation to the tasks. For example, conservation may require additional consultants, i.e. historians and archaeologists and the viability of the project may not be based on economic considerations.

buildings have a limited social and economic life beyond which it may be unprofitable to rehabilitate them. Sometimes, although the