

Onanong Ruangsupanimit 2010: Interruption in Construction Operations of Housing Development Projects. Master of Engineering (Civil Engineering), Major Field: Civil Engineering, Department of Civil Engineering. Thesis Advisor: Assistant Professor Suneerat Kusalasai, Ph.D. 195 pages.

In general, construction projects face with many causes of interruption. These include absence of work force, machines break down, late delivery of materials and equipments, and bad weather conditions. All of these critical interruptions lead to uncertain work duration.

This research aims at analyzing barriers causing the interruptions of construction operations. The study employed a housing development project as a case study. Regarding to site observation of the construction of 207 houses, it was found that the causes of interruption included: moving off work force (38%); absence of workers and machine break down (19.4%); lack of materials and equipments (14.8%); bad weather (8%); work area overlapping (6.3%); delay of predecessors (4.2%); unanticipated soil conditions (3.8%); interferences from other contractors (2.5%); machines or equipments blocking construction area (0.8%); and rework (0.8%). Additionally, suggestions of how to minimize the causes of interruption by using Lean concept are proposed. The first suggestion is the use of work standard which helps the construction operations to be more predictable. Preventive plan, strategies to prevent the interruptions, focuses on work preparation at the outset of the construction, checking for deviations during the construction, and work revision to solve the problems after construction.

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