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COST COMPARATIVE STUDY OF A SINGLE BUILDING WITH PEAK GROUND ACCELERATION OF 0.05g AND 0.1g

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BAHIRDAR UNIVERSITY

BAHIRDAR INSTITUTE OF TECHNOLOGY FACULTY OF CIVIL AND WATER RESOURCE ENGINEERING

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Approved By Board of Examiners

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ABSTRACT

Buildings designed in accordance with the code provisions, in our country EBCS-8-1995 is known as a guide line to design structures for seismic loading. As per the code the whole country classified in to four major zones. And the capital city Addis Ababa classified as a zone 2 city with PGA of 0.05g but scholars has been arguing that the capital city must have at least a PGA of 0.1g.

Even if the code is get revised I would like to discover the cost to be incurred on the total budget of the building due to the change in PGA from 0.05g to 0.1g. And in this project I have tried to compare a six story apartment building with typical floor plan and I have reached on a result of 5.8% additional cost due to the change of peak ground acceleration from 0.05g to 0.1g.

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