UNIVERSITY OF NAIROBI

A TECHNICAL AUDIT OF NAIROBI-THIKA SUPERHIGHWAY

DRAINAGE SYSTEM DESIGN

BY EMMANUEL MICHAEL OKOTH

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Supervisor: Eng. P.K Matheri

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Abstract

In all road designs, designs of drainage system are the most critical as they determine whether the road will last for a long period or not. The designs of the drainage systems should be up to standard to avoid

percolation of water into the road pavements and cause failure of the road.In our great nation Kenya, we normally experience two seasons of rain, a long and a short rainy season. Longer periods are experienced in the months of March to early June and Short rainy season experienced in the months of October to December. These rains in the previous years have caused great floods in some regions of Kenya, Nairobi being one of them. Many roads in Nairobi have previously been affected, NairobiThika superhighway being one of them. The Nairobi- Thika superhighway has got the latest road design but has greatly been affected by floods, sometime motorists find it have to drive on the highway when it has rained. They are constrained by the great amount of water on the pavements. This project is aimed at auditing the adequacy of the drainage facilities and checking out the standards of the drainage design system to establish the main cause of the floods normally experienced on this road and also the sensitivity analysis of the drainage system to rainfall.