ACKNOWLEDGEMENT

I wish to express my deep appreciation to
Professor Mohamed Emam Abd el Razek. Who served
as my advisor for all the support and guidance. Thanks
are due also to other members of the thesis committee
Professors Hossam el Deen Hosny, Emad el Beltagy and
Hesham Bassiouny.

I would like to express my thanks also to all members of the Construction Engineering Department for their positive participation that provided me with the necessary data.

My thanks and gratitude is due also to my wife for her encouragement and patience without which this work would not have been possible.

Mohamed Anees