Acknowledgement

The author is highly pleased to express his profound gratitude and sincere thanks to Dr. (Mrs.) Bibha Das Saikia, Professor and Head, Civil Engineering Department, Assam Engineering College, Guwahati, Assam, India, for her invaluable guidance and full hand co-operation through all the aspect of this work, which made author’s inquisitiveness a lot more easy.

Sincere thanks and gratitude are also due to Dr. Ranjan Saikia, Prof. and Head (Retd.), Department of Geography, Cotton College, Guwahati, for his invaluable suggestions and help in carrying out this research work.

I like to thank Dr. M.I.Das, H.O.D, Chemical Engineering Department, Assam Engineering College, for his kind help and guidance in this work.

My thanks are also due to all the staff members of Soil Mechanics Laboratory of Civil Engineering Department and Chemical Engineering Laboratory of Assam Engg. College, for their continued help in carrying out the experimental works.

The author takes the opportunity to convey his sincere thanks to his wife Momi and son Pratyay and all his friends and family members for the inspiration and encouragement that they are forwarding to him continuously.

Dilip Kumar Talukdar.

Date: 12.11.07

Place: Guwahati - 14.