



FACULTY OF ENGINEERING

DEPARTMENT OF WATER RESOURCES AND MINING ENGINEERING

FINAL YEAR PROJECT PROPOSAL

**DESIGN AND CONSTRUCTION OF A MOTORISED MINI CHAIN TRENCHING
MACHINE**

**CASE STUDY: NATIONAL WATER AND SEWERAGE COOPERATION TORORO
AREA**

BY

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ABSTRACT

Trenching in developing countries such as Uganda is energy is less productive, requires more man power and high time consuming due to the use of traditional methods. This has called for solutions in areas of difficult ground conditions, high ground water table and in very congested areas. The objective of this design therefore, is to construct a trenching machine to be used in trenching for ground water piping, drainage systems, and agricultural works.

The designed machine presents characters of easy trenching of depth of 50cm, 18 cm width and has both adjustable length and width. It is run by a 9hp engine which provides enough power to do trenching.

Key words: Trencher, Fundamental Earth Equation, water distribution systems.

DECLARATION

I **OCHII JOSEPH**, hereby declare to the best of my knowledge that this project report is an outcome of my efforts and has not been presented to any academic award institution.

Signature:

Date:/...../.....

APPROVAL

This is to certify that this project report has been written under my close supervision and it is ready to be presented to the Faculty of Engineering for examination

SUPERVISOR:

M.R. MASERUKA S BENEDICTO

Signature..... Date...../...../.....

ACKNOWLEDGEMENT

I thank the Almighty God for the gift of good health, knowledge, and guidance throughout my life at school and being able to work on this design project and my uncle ***Rev.Fr. Wiliiam Ojulo***, my parents ***Moris Avalla and Hellen Ajalet*** and all other family members for helping me at school.

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Great thanks to my classmates and friends for their practical help and prayers during the work synthesis.

DEDICATION

This report is dedicated to my family and friends.

LIST OF ACRONYMS

MWE: Ministry of Water and Environment

NWSC: National Water and Sewerage Cooperation

FEE: Fundamental Earth moving Equation

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