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ASSIGNMENT

NAME SYED NAJEEB

ID 7855

SECTION B

SUBJECT GEOTECH

SEMESTER 6th

SUBMITTED TO ENGR LIAQAT
ALI

GEOTECHNICAL REPORT

General:

In this project we are intended to take live project and carry out necessary soil investigation in Mardan (Pakistan chowk)

SITE investigation:-

Site investigation or sub-surface exploration are done for obtaining the information about subsurface condition at the site of proposed construction. Site investigation in one form or the other is generally required for every big engineering project. Information about the surface and sub-surface features is essential for the design of

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structures.

Laboratory investigation:-

⇒ Following tests are conducted on soil samples.

- * Determination of specific gravity
- * " of shrinkage limit.
- * " of swell index.
- * " of plasticity index.

⇒ plastic limit and liquid limit is also considered.

Conclusion :-

In the end, Average specific gravity of soil at high temperature

$G_T = 2.482$ of Maridan (Pakistan

chawk) which also conclude that soil is more saturated and organic to west of it.

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QUIZ

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QUIZ

Ans: The surface which are used in geotechnical engineering are following below.

- 1) SEEP 2D
- 2) STABL
- 3) SVFLUX
- 4) SVSLOPE
- 5) UTEXAS.

SEEP 2D

Seep2D is a 2D seepage analysis program written by Dr. Fied Tracy of the United States Army Corps of Engineers. The program is used to analyze water seepage, typically through dams and levees or under sheet piles.

STABLE :-

It is another vital software which is used for summarization of sophisticated data. Its behavior, functionality, specification or API which is considered final for that version. It is highly recommended software by experts.

SV FLUX :-

It is an finite element seepage analysis program - developed by Soil - vision System (LTD). The software is designed to analyze both saturated and unsaturated flow through the ground.

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SV SLOPE:-

It is a slope stability analysis program developed by soil vision (LTD). The software is design to analyze slopes using both the classic "method of slice" as well as newer stress-based methods.

UTEXAS SOFTWARE:-

The main language of this software is english but it has been translated to many languages due to high value and need of it in the field and help to analyze the slope stability.