IMPACT: International Journal of Research in Engineering & Technology ISSN(P): 2347–4599; ISSN(E): 2321–8843

Vol. 8, Issue 5, May 2020, 1–12

© Impact Journals



ANALYSIS OF ENGINEERING PROPERTIES OF BLACK COTTON SOIL IN NUMAN LGA, ADAMAWA STATE

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Received: 02 May 2020 Accepted: 09 May 2020 Published: 31 May 2020

ABSTRACT

Black cotton soils for the study were derived from Numan LGA of Adamawa State, Nigeria, The study used both disturbed and undisturbed soil sampling technique to select soil from a depth of 1m, 1.2 m and 1.5 meters. Physical and geotechnical properties of the soil samples were studied in the laboratory. The tests conducted were grain size analysis, specific gravity, atterberg's limits, and standard Proctor compaction. Results as obtained were compared with the standard code. The test results showed that there is increase in the clay content attributed to black cotton soil in the study area. The study concluded that black cotton soils formed a major soil in Numan LG, Adamawa State. The study recommends that engineering properties of Black cotton soil should be checked before construction takes place, and effort should be made to completely remove Black cotton soil in sites in Numan, where construction sites are not too large.

KEYWORDS: Engineering Properties, Black Cotton, Construction, Site Condition