

ABSTRACT

As the province of Cavite continues to develop in terms of economy and industry, it is important to maintain accessible road transportation in and out of the province. The subbase and base, as parts of the structural layers of the road, are needed to lengthen the existence of a road to further maximize its use. The Department of Public Works and Highways (DPWH) has set standard specifications for subbase and base materials to sustain the quality of public roads and highways.

In the province of Cavite, the municipalities of Ternate and Maragondon have high potential to be quarries due to its mountainous land area. The unexplored sites at Brgy. Sapang, Ternate and at Brgy. Pinagsanjan 1-A, Maragondon are areas open for mining applications based on RA No. 7942. Thus, the researchers gathered soil sample from the stated barangays. The soil samples were subjected to the following tests: sieve analysis, atterberg limit, moisture density, California bearing ratio and Los Angeles abrasion.

Based on the laboratory tests, the unexplored site at Brgy. Sapang, Ternate is a potential source of subbase material. Hence, an environmental impact assessment was provided for the proposed quarry.