

TOPOGRAPHIC SURVEY USING AERIAL LIDAR FOR FEASIBILITY OF ROAD CONSTRUCTION IN HILLY TERRAIN

A CASE STUDY IN SANGAMNER

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ABSTRACT

In any nation or country, roads are essential. They make it possible for both people and vehicles to move freely over a variety of terrain and get where they're going. In any place, roads are a crucial sort of infrastructure that is ideal and necessary. Planning road alignment in hilly terrain is a difficult task when comparing it in plain. Several factors need to be evaluated to choose the best alignment among alternatives in hill roads. In this paper the project as per the contract, the Project Road starts from Chondhe Kh and passes through Devighat (Ghatandevi), and terminates at Ghatghar. The entire project road (Chondhe –Ghataghar) lies in the district of Thane and Ahmednagar. The project road of Chondhe –Ghataghar is part of SH-44 which runs from Chondhe to Ghataghar. The Project Road is situated in Shahapur and Akole Talukas and is located in the northwest part of the Ahmednagar district. The main aim of this project is to produce highly accurate real-time data on DTM and contours so that proper analysis can be done, and further engineering general designs can be made in order to provide a proposed alignment for the missing links between Chondhe Kh and Ghatghar.

1. INTRODUCTION

Roadways are essential in any country or nation. They enable people and vehicles to travel through a wide range of terrain and arrive at their destination without hindrance. Roadways are an important type of infrastructure that is ideal and essential in any location.

All cities and villages in India are well connected by an efficient road infrastructure. There are numerous roads in the country that traverse some of the country's most important states, including Maharashtra, Gujarat, Punjab, Himachal Pradesh, and most of the highways in India are on flat plains, while some are in mountainous parts of India's mountain ranges.