VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JNANA SANGAMA", MACHHE, BELAGAVI – 590018, KARNATAKA

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Project Report on

"CAPACITY ANALYSIS & DESIGN OF ROTARY INTERSECTION IN TUMKUR CITY"

Submitted in partial fulfillment of the requirement for the award of degree

BACHELOR OF ENGINEERING
IN
CIVIL ENGINEERING

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CERTIFICATE

Certified that a project report on entitled **"CAPACITY ANALYSIS & DESIGN OF ROTARY INTERSECTION IN TUMKUR CITY"** has been successfully carried out by **SRINIVAS J (1SV18CV033), RAJESHWARI MADIWALAR (1SV20CV402), ANIL B KOLI (1SV19CV003), NAGALAKSHMI (1SV18CV023)**, students of **Shridevi Institute of Engineering and Technology, Tumakuru -572106,** in partial fulfillment of project for the award of **Bachelor of Engineering in Civil Engineering** of the **Visvesvaraya Technological University, Jnana Sangama, Belagavi -590018** during the academic year **2022-2023**. It is certified that all corrections and suggestions indicated for internal assessment have been incorporated in the report deposited in the Department library. The report has been approved as it satisfies the academic requirement in respect of project on current topic prescribed for B.E Degree.

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ABSTRACT

Increasing trends of traffic in urban area is a major concern in all the cities in India. The heterogeneous traffic are more diverse in nature due to lane changing and lack of lane discipline characteristics of driver's in India. The rotary intersections are of the most vital components of urban roadway network. Intersection is one when either three or more road meets or intersects each other. It has been observed that the entry capacity of vehicles become comparatively lower at intersection than that of the straight portion of the road due to reduction in speed. Hence, long queues on intersections often observed, causing huge fuel consumption as well as environmental pollution in the urban area beside considerable time loss. The situation become more intense during the peak hours when increase of traffic volume by 50% than normal traffic. The traffic flow characteristics at rotary intersections are studied to observe the performance of intersection. The capacity of the roadway rotary depends on the flow at different legs approaching the rotary. The present traffic scenario is usually used to characterize the present traffic condition to access the different parameters at different types of intersection. The co-relation between location and intersection capacity in the present study area also been tried. In the vicinity of a rotary intersection, road users must co-adjust their performance by reduced speed or change of path to avoid collision with each other.

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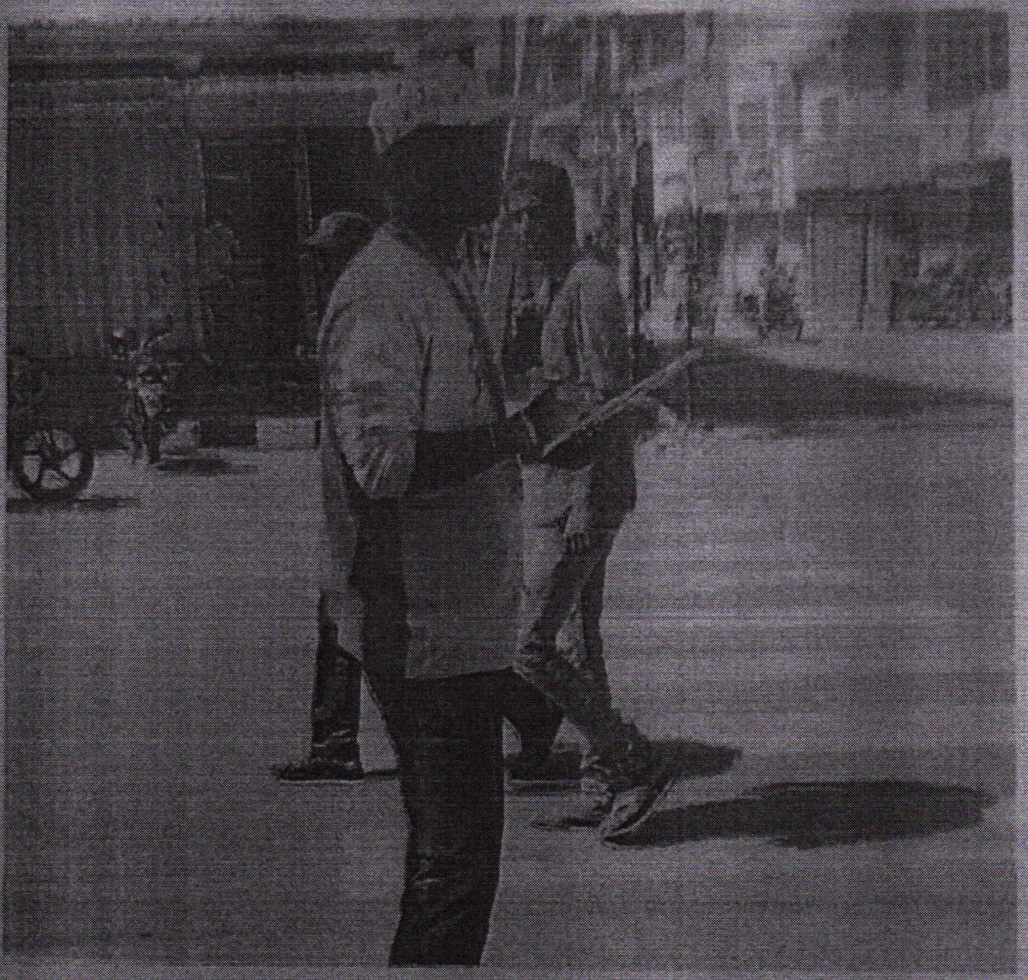

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