Department : **Civil**

Year : **2015-2016**

Group No: **2**

Guided By

**DR. A.H. SHAH**

# SMT. S. R. PATEL ENGINEERING COLLEGE, UNJHA

## Project Title
### DESIGN OF AUTOMETIC TRAFFIC CONTROL SYSTEM

## Abstract:

Traffic is a problem in many urban areas worldwide. Rapidly increasing road network and vehicles growth creating problems such as congestion on roads, traffic jam and accidents on road network. Based on the literature review, it is identified that intersection is one of the major problematic component of road network among straight, curve and intersection. A haphazard traffic flow at intersections causing various problems. Therefore, there is a need to take some remedial measure to short out these problems. Intersection of any road network can be controlled by installing the Traffic Signal, Rotary and Islands. A study area "Vijay Char Rasta, Ahmadabad" has been chosen to carry out the traffic study and need to identify the selected provision to install the best feature on intersection to control the traffic. The purpose of this project is to find a way to make intersections controlled with traffic signal more efficient. This goal is to be accomplished through the creation of a algorithm and installation of traffic control barriers at approach roads as per the signal timing proposed by Webster method. Traffic volume count is done with direction on Vijay char rasta. As per the traffic volume count, Webster method is used to determine the Signal timing for four phase signal. Further, Signal timing is used in developing the algorithm on Arduino Controller to control the Hydraulic Jack to lift and fall as per the Red and Green phase of Signal timing. In this project, a working model is developed to realize the actual situation. This project will be help full on intersection where traffic flow is very haphazard and frequently accident occurs.

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