

## ABSTRACT

Water is the major problem on the pavement. Water flowing over pavement damages the pavement, so we use the new technique to reduce the damages on the pavement. In this project we introduce the new technique called porous concrete. In this technique open graded material consisting of cement, coarse aggregate and water. Water absorption by concrete consists of little or no fine aggregate such as sand, it is sometimes referred to as 'no fine concrete'. Now a day's porous concrete is being used for parking pavements, footpaths, walkways and highways, it has low strength, so it can be used for above low traffic volume roads for storm water management. Porous concrete reduces runoff and it will recharge ground water table. In urban and built up areas, porous concrete can be used instead of conventional road using construction materials like bitumen and concrete. A good quality concrete needs to be designed to reduce the runoff and meet the specification of low traffic volume roads and pavement areas.

In this project work, mix design has been carried out for conventional concrete and porous concrete. Fine aggregate is replaced by coarse aggregate and concrete with 0% fines is prepared and tested for its mechanical and hydraulic properties. Fine aggregate is added at 10% increments up to 30% of total volume of aggregate and cubes casted and tested for 7 days and 14 days and 28 days strength. The test results are compared for different percentage replaced of fine aggregate.

**Keywords:** No fine concrete, absorption concrete, storm water management, absorption concrete for parking areas and low volume roads.