

Multi-tech solution to rid roads of potholes

PWD Will Restore 242km Of Major Stretches

TIMES NEWS NETWORK

New Delhi: Bumpy rides on post-monsoon roads may soon be a distant memory. On Tuesday, the public works department (PWD) started relaying roads using recycling, micro-surfacing and plastic-mixed technologies. At least 242-km of main and arterial roads including major portions of Ring Road, Outer Ring Road and the stretches around Commonwealth Games venues are going to be strengthened by May next this way.

The project involving Rs 200 crore is expected to increase the life of these stretches as they will no more give in after spells of rain, PWD officials claimed. Unveiling the recycling and micro-surfacing technology in south Delhi, PWD minister Raj Kumar Chauhan said all major roads would be relayed using international know-how before the Games. "Special attention is being paid to improve roads around Games venues. But we are taking up all other stretches too and the entire work will be completed within the time frame," Chauhan said.

According to the elaborate plan, micro-surfacing technology would be used to cover 414-km lane length in the city and another 417-km lane length would be strengthened using recycling technology. The department has already awarded the tender for covering 50-km lane length using plastic-bitumen.

PWD engineer-in-chief Rakesh Mishra said the relaying work was being taken up vigorously and the worst affected stretches would be covered soon. "We will take up recarpeting of Outer Ring Road (between RTR and IIT) in this phase. These are proven technologies and we are hopeful of good results," he said.

It may be recalled that chief minister Sheila Dikshit had recently termed the potholed roads in the capital a "shame."

Some of the major stretches to be covered under micro-surfacing technique includes Mehrauli-Mahipalpur road, Nelson Mandela Marg, Africa Avenue Marg and Guru Ravidas Marg in south Delhi. Similarly, stretches of Ring Road — Rajghat to Ashram, Ashram to AIIMS, Raja Garden to AIIMS, Aurobindo Marg to Aruna Asaf Ali Marg, Neela Gumbad to Ashram stretch of Mathura Road and Press Enclave Road would be strengthened using recycling technology.

Chauhan said work to upgrade stretches in other parts of Delhi would be taken up simultaneously. The department has also chalked out plans to launch a streetscaping drive in the near future.

However, the remaining roads that come under PWD would be worked upon using the traditional technology, sources said.

toireporter@timesgroup.com

Lowdown On **New Technologies**

Recycling old material for new roads

70%
material

Using the new technology, maximum material is recycled to rebuild the road. The surface of broken road is heated by a machine containing heater and the material is removed. This is mixed with some fresh material in another machine containing a paver. This mixture is spread on the road through pavers that have sensors to determine appropriate thickness



A road being paved with recycling technology

Advantages

- ▶ Eco-friendly & economical
- ▶ Thickness of just **10-15mm**
- ▶ Life span of **5-7 yrs**
- ▶ Stretch can be opened for traffic after **1hr**



Work underway at site

Micro-surfacing technology

Cold bitumen-emulsion is mixed with fine stone aggregates. It has graded aggregate, a binder, fines & additives. The mix is then spread over to fill cracks in the road



A pavement quality indicator



Depth of relayed stretch being checked



An engineer measuring the temperature

Road length to be covered

410km

Advantages

- ▶ Works as a protective layer for the existing road, prevents water seepage

- ▶ Life of the road increased by **2-3yrs**
- ▶ Makes roads resistant to extreme heat and cold

Road length to be covered **471km**