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Assessment of Pavement Condition With Pavement Condition Index

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Abstract: Large amounts of plastic are produced in India, and disposal of this garbage is a great difficulty. By the end of 2020–2021, India's plastic consumption is expected to be 15 million tonnes. Human health and the surroundings suffer from this attitude. Mostly Polyethylene Terephthalate (PET), High-Density Polyethylene (HDPE) and Low-Density Polyethylene (LDPE) make up the range of plastic trash. One fresh creative and environmentally beneficial approach to dispose of plastic garbage might be using it as binder material to fix the potholes. Usually, parent material like bitumen and concrete fills potholes on the roadways. Nevertheless, in this work aggregates and HDPE material help to fix the potholes. The potholes on bituminous roads are filled right away from HDPE plastic waste. This will make fixing potholes on the site far faster and easier. This study reveals that the potholes repaired with HDPE have rather higher durability than those filled using traditional techniques. This HDPE material filling potholes technique will be cost-effective and aid to lower plastic waste from the environment.

Keywords: Plastic waste, Pothole, Eco-friendly, HDPE Plastic waste, Bituminous roads, Durability of Potholes, Aggregates

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