Sri Birendra Kumar EE, Allahabad district, UPRRDA requested NJB for inspection of a 4 Km stretch of rural road under PMGSY from Mansorabad to Korari via Anapur where upgradation work has been going on with the use of 292 gsm OW JGT as paving fabric below the Pre-Mix Carpet (PMC).

With the consent of Secretary, NJB Sri P K Choudhury - Principal Technologist visited Allahabad for the above purpose on 12.04.2018 who was accompanied by Sh. Umanath Mishra AE and Ms. Priyanka Tripathi - JE along with the representatives of agency, M/s. Shakti Enterprises. As desired by the EE during the last Allahabad visit of Sri Choudhury from 15 to 16 March, 2018 the concerned engineers of the present site had met him to have a clear guidance regarding the methodology to be followed for laying 292 gsm JGT as paving fabric.

Unfortunately, due to sudden heavy rainfall on the previous day of visit of Sri Choudhury, ie, on 11th night the site earmarked for demonstration and the construction materials got wet, hence demonstration at site on laying of JGT could not be taken place on 12th instant. However, as observed and reported by the AE & JE during laying following sequences were followed:-

i) Compaction of WBM (G3) (stone metal) by roller
ii) Spreading Prime Coat @ 0.70 kg/m² after cleaning the top surface thoroughly one day before applying Tack Coat.
iii) Applying Tack Coat @ 0.30 kg/m² on pre-treated surface with Prime Coat.
iv) Laying 3 lengths of 292 gsm JGT (out of 3 lengths two were of 1.5 m wide and one is of 1m wide) with an overlap of 10 cm.
v) Fixing the fabric on to the WBM layer with steel nail at an interval of 1 m both in longitudinal and transversal direction.
vi) Applying Tack Coat on JGT @ 0.3 kg/m²
vii) Spreading Pre-Mixed Carpet (PMC) - temperature being maintained at site at about 150°C followed by roller compaction for a thickness of 20 mm.
viii) Spreading of seal coat on to the PMC.

Construction of about 3 km of the road of the above stretch was already been completed with the application of JGT which was inspected and observed to be in good shape with proper camber and shoulder. It was also observed that under this R&D project the other two stretches of the same road was constructed using 80 mm thick Inter Locking Concrete Block (ICBP) and also using the conventional method to observed the comparative performance of the three methodologies adopted in this road.

JGT stored at site were also checked and it was advised to the PIU to arrange for testing of JGT sample through a NABL accredited laboratory and to send the copy of test report along with about 1m long sample to NJB. It was also suggested the PIU to convey the comparative performance of the stretches of road treated with three different methods along with still and video photographs sequentially.

During site inspection on 12.04.18 photographs were taken for reference.
JGT at site

JGT laid over tack coat overlain with prime coat
Applying tack coat on JGT

Compacted PMC laid over tack coat