

# **VOLUME - II**

## **Bill Of Quantity (BOQ)**

**Name of Work : Resurfacing work on Bituminous Road Surfaces at MCW and ramps in Jewar sector (KM 45 to KM 48) with Micro-Surfacing Type – III and at Facilities (KM 100 & KM 107) and Cafeterias (KM 150 & 96) locations with DBM & BC along Yamuna Expressway, UP.**

**Jaypee Infratech Limited**  
**J- Block, Sector 128, Noida – 201304**  
**Uttar Pradesh, India**



**PREAMBLE TO BILL OF QUANTITIES**

1. This Bill of Quantities ("BOQ") shall be read in conjunction with all Volumes of the tender documents such as NIT, ITT, GCC, SCC, Specifications and all other documents as mentioned in the tender documents.
2. Rates shall include the cost of all labour, materials, tools, plants and machinery, equipment, tower cranes/hoists, all form of works, steel scaffoldings, transportation and wastages etc. and testing of materials with Contractor's testing appliances (as required), all other taxes, duties, levies, royalties, any other statutory obligations, Electricity, water, Contractor's overheads & profit etc. Only GST shall be paid extra, as applicable.
3. The items of work set out herein which are further detailed in the work order, shall be carried out as per the approved drawings, specifications and directions of the Engineer-in-charge of Jaypee Infratech Limited (hereinafter called as JIL).
4. The Contractor shall be deemed to have studied the drawings, specifications and details of work to be completed within the time schedule and to have acquainted itself with the conditions prevailing at Site. The quoted rates shall be applicable for all works in any shape/size/section and design etc.
5. The quantities shown against various items, as provided by JIL, are estimated and provisional and are given to provide a common basis for bidding. Any increase or decrease in the quantities shall not form the basis for alteration of the rates quoted and accepted. The basis of payment will be actual quantities of work ordered and carried out.
6. In cases where the specifications given in the Description of the item of work in BOQ are found wanting, MoRTH & IRC Specifications, the CPWD Specifications-2019 (with up-to-date correction slips) shall be followed; and where not specified, specifications of the latest edition of relevant IS codes shall be applicable. In case of any ambiguity in interpretation, JIL's decision shall be final and binding.
7. The rates and the prices shall hold good for all heights/ depths leads, lifts and levels, working in all conditions including in/under water, liquid mud, foul conditions etc. unless otherwise specifically stated against an item in the BOQ.
8. Rates include all costs for disposal of rubbish or malba etc. (generated / accumulated by the Contractor during the execution of this work) outside the site premises, removal of labour hutment, any temporary structure etc., demobilization from site/any premises provided by JIL. Nothing extra shall be payable on any such account.
9. General directions and descriptions of work are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
10. All materials samples to be submitted and got approved from JIL before execution of work.
11. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of Work.
12. The method of measurement of completed work for payment shall be in accordance with the Technical Specifications & IS Codes.

**BILL OF QUANTITIES (BOQ)**

**Name of Work : Resurfacing work on Bituminous Road Surfaces at MCW and ramps in Jewar sector (KM 45 to KM 48) with Micro-Surfacing Type – III and at Facilities (KM 100 & KM 107) and Cafeterias (KM 150 & 96) locations with DBM & BC along Yamuna Expressway, UP.**

S.No.	Description	Unit	Quantity	Rate	Amount
1	<p>Providing and laying micro-surfacing type-III 6-8mm (six to eight millimetre) thick layer comprising of crushed aggregate of specific size conforming to Type-III grading @14 Kg per Sqm (Fourteen Kilogram per square metre) of road surface coverage , Polymer Modified Cationic Bitumen Emulsion @ 12% (at the rate of twelve percent) of weight of aggregate, Portland cement as a Mineral filler @ 2% (at the rate of two percent) of by weight of crushed aggregate , Break Control Additives @ 2% (at the rate of two percent) of by wight of crushed aggregate and Purified Water with PH 6-7 as needed, using specialized microspacing paver and other material, machinery etc. micro surfacing paver should be equivalent to BREINING / BERGKAMP / VSS with spreader box of 3.7 meter. so that each lane could be covered in a single in single pass and as per IRC : SP:81-2008 and provision 512-514 of MoRTH specifications 5th revision including entire carriage of materials, labour and equipment's to various location of site of work through all modes of transportation in all leads, lifts and all incidental charges by mechanical mean and as per the direction of Engineer-in-charge. The rate is including octroi, royalty, Malkana, toll tax or other taxes imposed by the Government.</p> <p>Item Includes restore the surface with necessary repairs of potholes cracks ruts and undulations, filling of depressions with cold mix material etc. prior to the micro surfacing work. Make the surface levelled &amp; smoother with zero undulations for good to lay the layer of Micro-surfacing Type - III.</p> <p>The repair work shall be as per the MORTH &amp; IRC guidelines or as per the direction of Engineer In-charge.</p>	SQM	155046		
2	<p>Providing &amp; laying Corrective cold mix layer consisting of mixture of unheated mineral aggregate and bitumen emulsion, laid in a single layer of 12 to 25 mm with average thickness of 18mm. Details are given in MORTH Specifications clause 518 (specifications for Roads &amp; Bridges works), 5th Revision 2013.</p>	SQM	48960		
3	<p>Milling out the top bituminous undulated surface upto 20 MM only from distressed / ravelled areas removal and carriage of material by vehicle from the structure to a suitable dump site outside the expressway as per direction of engineer in charge. Thickness &amp; Area as per site requirement for surface levelled and suitable for Micro-surfacing work.</p>	SQM	1000		

S.No.	Description	Unit	Quantity	Rate	Amount
4	Repair of Jerks & depressions between Structures & Approaches by proving & filling of depressions with cold mix material (Average Thickness 25 mm) levelling and compacting with vibratory roller complete as per the direction of Engineer In charge.	SQM	2434		
5	Providing and laying Bituminous Concrete (BC) using CRMB complete by drum type hot mix plant as per MORTH Specifications Clause 507. Complete as per direction of Engineer in charge and accordance with applicable specifications.	Cum	2628		
6	Providing and laying Dense Bituminous Macadam (DBM) using VG-30 complete by drum type hot mix plant as per MORTH Specifications Clause 505.	Cum	384		
7	Providing and laying Bituminous prime coat over Granular surface with bitumen emulsion @ 6.0 to 9.0 kg per 10 Sqm, complete as per MORTH Specification clause 502.	Sqm	3840		
8	Providing and laying Bituminous Tack Coat complete as per MORTH Specification clause 503.	Sqm	68116		

**TOTAL AMOUNT, excluding GST**

**Note :** Only GST shall be paid extra as applicable;

All other taxes, Octroi, Royalty, Labour Cess, other Cess, Lavies etc. shall be included in the above quoted rates.

The work shall be carried out as per MORTH & IRC Specifications and as per the direction of Engineer-in-Charge.

All the road safety measures shall be taken during the execution at site by the agency at his own cost.

Quality Compliance to be carried out as per MORTH & IRC Guidelines and as per Quality Plan Approved by Project In-charge.