

**Name of Road: Tehsil to RSEB Quarters
(From Ch 0+000 to 1+770)**

Bituminous Road

ROAD SIKAR PWD BSR-2010

| S.No | BSR Ref | Particulars | Factor | No | L | B | H | Quantity | Unit | Rate (Rs) | Amount (Rs) |
|------|-------------------------------|--|--------|----|-----|-------|-------|-----------------|------|-----------|------------------|
| 1 | BSR-14.9.2+G-5.2 Building -09 | Dismantling stone rubble masonry including stacking of serviceable material and disposal of unserviceable material within 5 km lead. (cement mortar) | 1 | 50 | 2 | 1.00 | 0.750 | 75.000 | cum | 342.80 | 25710.00 |
| | | EARTHWORK | | | | | | | | | |
| 2 | R-3.5 i | Excavation for roadway in soil using manual means for carrying of cut earth to embankment site with a lift upto 1.5 m and lead upto 50 m as per Technical Specification Clause 302.3 | | | | | | | | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.40 | 0.250 | 822.500 | | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.20 | 0.250 | 765.000 | | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.70 | 0.250 | 288.750 | | | |
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.90 | 0.250 | 533.250 | | | |
| | | (considering the 50 % of total crust thickness will be used to raising the road | | | | | | 2409.500 | cum | 44.00 | 106018.00 |
| 3 | G- 5.1 | Carriage of excavated material at site , earth , sand, moorum,manure or sludge lead upto 5 km. including loading and unloading | | | | | | | | | |
| | | | | | | | | 2409.500 | cum | 60.30 | 145292.85 |
| | | GSB&WBM WORK | | | | | | | | | |
| 4 | R-4.2 ii | Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with three wheel 80-100 kN static roller capacity to achieve the desired density, complete as per Technical Specification Clause 402 | | | | | | | | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.40 | 0.150 | 493.500 | cum | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.20 | 0.150 | 459.000 | cum | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.70 | 0.150 | 173.250 | cum | | |
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.90 | 0.150 | 319.950 | cum | | |
| | | Total | | | | | | 1445.700 | cum | 348.00 | 503103.60 |

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|------|----------|--|--------|----|-----|-------|-------|------------------|------|-----------|------------------|
| 5 | R-4.7 | Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming, stone screening/binding materials to fill-up the interstices of coarse aggregate, watering and compacting to the required density grading 2 & grading 3 as per Technical Specification Clause 405. | | | | | | | | | |
| | 4.7.1 | a. 90-45 mm Grading I (as per technical specification clause 405) | | | | | | | | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.4 | 0.1 | 329 | cum | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.2 | 0.1 | 306 | cum | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.7 | 0.1 | 115.5 | cum | | |
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.9 | 0.1 | 213.3 | cum | | |
| | | | | | | | | 963.8 | cum | 535.00 | 515633.00 |
| | 4.7.2 B | 63-45 mm Grading II (as per technical specification clause 405) | | | | | | | | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.40 | 0.075 | 246.750 | cum | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.20 | 0.075 | 229.500 | cum | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.70 | 0.075 | 86.625 | cum | | |
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.90 | 0.075 | 159.975 | cum | | |
| | | | | | | | | 722.850 | cum | 715.00 | 516837.75 |
| | 4.7.3 B | 53-22.4 mm Grading III (as per technical specification clause 405) | | | | | | | | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.40 | 0.075 | 246.750 | cum | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.20 | 0.075 | 229.500 | cum | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.70 | 0.075 | 86.625 | cum | | |
| | | From Ch. 1400 To Ch. 1500 | 1 | 1 | 0 | 6.20 | 0.075 | 0.000 | cum | | |
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.90 | 0.075 | 159.975 | cum | | |
| | | | | | | | | 722.850 | cum | 727.00 | 525511.95 |
| | | BITUMINOUS WORK | | | | | | | | | |
| 6 | R-5.1 ii | Providing and applying primer coat with Bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90- 1.2 kg/sqm using mechanical means as per Technical Specification Clause 502. | | | | | | | | | |
| | | From Ch. 200 To Ch. 350 | 1 | 1 | 150 | 6.50 | | 975.000 | sqm | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.40 | | 3290.000 | sqm | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.20 | | 3060.000 | sqm | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.70 | | 1155.000 | sqm | | |
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.90 | | 2133.000 | sqm | | |
| | | Total | | | | | | 10613.000 | sqm | 30.00 | 318390.00 |

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|------|------------|---|--------|----|-----|-------|---|------------------|------|-----------|------------------|
| 7 | R-5.2 ii | Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared dry and hungry bituminous surface cleaned with Hydraulic broom as per Technical Specification Clause 503. | | | | | | | | | |
| | | From Ch. 0 To Ch. 350 | 1 | 1 | 350 | 6.50 | | 2275.000 | sqm | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.40 | | 3290.000 | sqm | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.20 | | 3060.000 | sqm | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.70 | | 1155.000 | sqm | | |
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.90 | | 2133.000 | sqm | | |
| | | Total | | | | | | 11913.000 | sqm | 8.00 | 95304.00 |
| | R-5.2 iii | Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared granular surfaces treated with primer & cleaned with Hydraulic broom as per Technical Specification Clause 503 | | | | | | | | | |
| | | From Ch. 200 To Ch. 350 | 1 | 1 | 150 | 6.50 | | 975.000 | sqm | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.40 | | 3290.000 | sqm | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.20 | | 3060.000 | sqm | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.70 | | 1155.000 | sqm | | |
| | | From Ch. 1400 To Ch. 1500 | 1 | 2 | 0 | 6.20 | | 0.000 | sqm | | |
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.90 | | 2133.000 | sqm | | |
| | | Total | | | | | | 10613.000 | sqm | 8.00 | 84904.00 |
| 8 | R-5.4 A ii | Providing, laying and rolling of built-up spray grout layer over prepared base consisting of a two layer composite construction of crushed coarse aggregates using motor grader for aggregates. Key stone chips spreader may be used with application of bituminous binder after each layer, and with key aggregates placed on top of the second layer to serve as a base, conforming to the line, grades and cross-section specified, the compacted layer thickness being 75 mm as per Technical Specification Clause 505 (S-45) | | | | | | | | | |
| | | From Ch. 0 To Ch. 200 | 1 | 1 | 200 | 3.25 | | 650.000 | sqm | | |
| | | From Ch. 200 To Ch. 350 | 1 | 1 | 150 | 4.60 | | 690.000 | sqm | | |
| | | Total | | | | | | 1340.000 | sqm | 184.00 | 246560.00 |

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|------|------------|---|--------|----|-----|-------|-------|-----------------|------|----------------|-------------------|
| 9 | R-5.3 | Providing and laying bituminous macadam on prepared surface with specified graded crushed aggregates for base/binding course including loading of aggregate mixing of stone aggregate(including cost of anti stripping mixing compound to bring the stripping value of aggregate within permissible limits as per specification) and bitumen in Hot mix plant, transporting the mixed material in tipper to paver and laying mixed material with paver finisher to the required level and grade, rolling by road roller to achieve the desired density but excluding cost of primer/tack coat as per MORTH Specification 504 | | | | | | | | | |
| | | From Ch. 0 To Ch. 350 | 1 | 1 | 350 | 6.50 | 0.075 | 170.625 | cum | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.40 | 0.075 | 246.750 | cum | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.20 | 0.075 | 229.500 | cum | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.70 | 0.075 | 86.625 | cum | | |
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.90 | 0.075 | 159.975 | cum | | |
| | | Sub Total | | | | | | 893.475 | cum | | |
| | | Add extra for undulation and camber correctoin @ 20 % | | | | | | 178.695 | cum | | |
| | | Total | | | | | | 1072.170 | cum | 3929.00 | 4212555.93 |
| 10 | R-16.4.2.6 | Providing and laying semi dense bituminous concrete with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 4.5 to 5 per cent of mix and filler, For GradingII(10 mm nominal size) 60-70 grade | | | | | | | | | |
| | | From Ch. 0 To Ch. 350 | 1 | 1 | 350 | 6.50 | 0.025 | 56.875 | cum | | |
| | | From Ch. 600 To Ch. 950 | 1 | 1 | 350 | 9.40 | 0.025 | 82.250 | cum | | |
| | | From Ch. 950 To Ch. 1250 | 1 | 1 | 300 | 10.20 | 0.025 | 76.500 | cum | | |
| | | From Ch. 1250 To Ch. 1400 | 1 | 1 | 150 | 7.70 | 0.025 | 28.875 | cum | | |

| S.No | BSR Ref | Particulars | Factor | No | L | B | H | Quantity | Unit | Rate (Rs) | Amount(Rs) | |
|------|----------------------------|---|--------|----|------------------------|------|-------|-----------------|------|-----------|-------------------|--------------------|
| | | From Ch. 1500 To Ch. 1770 | 1 | 1 | 270 | 7.90 | 0.025 | 53.325 | cum | | | |
| | | Total | | | | | | 297.825 | cum | 5618.00 | 1673180.85 | |
| | | ROAD FURNITURE | | | | | | | | | | |
| 11 | R-16.7.5 | Marking center line w, stop line etc on road as per IRC pattern with thermoplastic paint of approved quality and make with 8% glassbeeads laid on the road surface at temperature 160 Degree Cent. | | | | | | | | | | |
| | a | Center Line(in BT Road of width 7.5 or dual carriageway | 1 | 1 | 500 | 0.15 | | 75.000 | sqm | 577.00 | 43275.00 | |
| | b | Edge Line | 1 | 2 | 1420 | 0.15 | | 426.000 | sqm | 577.00 | 245802.00 | |
| 12 | R-10.4 B | Providing and erecting direction and place identification of semi reflective sign boards as per IRC-67 made of 2 mm thick M.S. Sheet duly stove enameled paint white colour in front and grey colour on back with reflective border of 70 mm width and required message, letters, figures with reflective tape of engineering grade as per MORTH specifications of required shade and colour. Supported and welded on two nos. 47 mm x 47 mm of 12 SWG square tube of 3050 mm height duly strengthened by 25 mm x 5 mm MS flat iron on edges on back firmly fixed to the ground by means of properly designed foundations with M-15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701 | 1 | 8 | | | | 8.000 | No | 2484.00 | 19872.00 | |
| 13 | 3.2.3 (Building BSR-09) | Providing and laying in position cement concrete including curing, compaction etc. complete in specified grade excluding the cost of centering and shuttering - all work upto plinth level (1:2:4). -using 1 cement : 2 coarse sand : 4 graded stone 20mm nominal size | 1 | 2 | 1420 | 0.30 | 0.150 | 127.800 | cum | 2288.00 | 292406.40 | |
| 14 | 16.6.1.6 | S & F cement concrete precast Kerb or Dand upto 60 cm length over 20mm thick base of cement mortar 1:6 including jointing earth work, painting & jointing with cement mortar 1:4 of size : (22.5+25)/2x30 cm | 1 | 2 | 1420 | | | 2840.000 | Rm | 284.00 | 806560.00 | |
| | | | | | Total Cost | | | | | | | 10376917.33 |
| | | | | | Say In Lacs(Rs) | | | | | | | 103.77 |