

### **3.SCHEDULE OF QUANTITIES**

## SCHEDULE OF QUANTITIES

**Name of Work: Construction of internal campus road including WBM, metalling and black topping at NIT Meghalaya Permanent Campus, Sohra (Cherrapunjee)**

<i>* Estimate on the basis of Meghalaya PWD SOR (Road Works) 2020-21</i>					
Sl. No	Description of Items	Qty	Units	Rates to be quoted in figure & words (Rs)	Amount (Rs)
<b>A</b>	<b>CONSTRUCTION OF WBM, METALLING &amp; BLACK TOPPING</b>				
1	Excavation for roadway in ordinary rock with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, transporting to embankment site with a lift upto 1.5 m and lead upto 1000 m, trimming the bottom and side slopes in accordance with the requirement of lines, grades and cross-sections as per Technical Specification (Clause 302.3.5)	22767.58	Cum		
2	Filling in foundation trenches as per drawing and Technical Specification Clause 305.3.9 Earth filling (For Marshy Soil).	25896.14	Cum		
3	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 to achieve the desired density, complete as per Technical Specification Clause 402.	2419.20	Cum		
4	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming stone screening /binding materials to fill up the interstices of coarse aggregates, watering and compacting to the required density Grading 1 as per Technical Specification Clause 404.	1951.49	Cum		
	WBM Grading 1(90 mm to 45 mm)				
	By Manual Means.				

5	Providing laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming crushable screening to fill up the interstices of coarse aggregate, watering and compacting to the required density Grading 3 as per Technical Specification Clause 405.	2935.3	Cum		
	WBM Grading 3 (53 mm to 22.4 mm)				
	By Manual Means.				
6	Providing and applying tack coat with penetration grade bitumen (S-90) using bitumen pressure distributor at the specified rate of 0.50 kg/sqm on the prepared WBM surface not primed, cleaned with hydraulic broom as per Technical Specification Clause 503(MORT&H)	16128.00	Sqm		
	Over Water Macadam.... @ 0.50kg/m2				
7	Providing laying and rolling of open-graded premix carpet of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates either using penetration grade bitumen or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with three wheel 80-100 kN static roller capacity, finished to required level and grades to be followed by seal coat of either Type A or Type B or Type C as per Technical Specification Clause 508.	16128.00	Sqm		
	By Manual means				
	Without Anti-stripping Agent				
	Bitumen 80/100 grade				
8	Providing and laying seal coat sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall using Type A, Type B and Type C as per Technical Specification Clause 510	16128.00	Sqm		
	By Manual means: Case I : Type A				
	Without Anti-Stripping Agent				
	Bitumen 80/100 grade				
<b>B</b>	<b>CONSTRUCTION OF STONE MASONRY RETAINING WALL</b>				

9	Construction of retaining walls/breast walls with random rubble stone masonry in cement mortar 1:5, earthwork in excavation (manual means) in ordinary rock (not requiring blasting) , M10 grade PCC in foundation and boulders filling with stones/boulders of 150 - 200 mm size, 60 cm wide behind the abutments, wing walls, retaining walls etc including providing weep holes with 100 mm dia AC pipe extending through the full width of the structures with slope of 1 (V) : 20 (H) as per drawing and Technical specification Clause 1604.(2.0m average height above ground with 1.0m foundation) ).	262.00	Rm		
<b>C CONSTRUCTION OF STONE MASONRY GUARD WALL</b>					
10	Construction of random rubble stone masonry guard wall of sizes 1.50mx0.60mx0.45m in cement mortar 1:3 with 12 mm plastering in cement mortar 1:4 and painting (two coats) with synthetic enamel paint complete as per drawing and Technical Specification Clauses 700 and 1208.4.	176	Each		
<b>D ROAD MARKING</b>					
11	Painting lines, dashes, arrows etc. on roads in two coats on new work with ready mixed road marking paint conforming to IS : 164 on bituminous/concrete surface, including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control as per drawing and Technical Specification Clause 1702. Assuming 100 mm width	1001.68	Sqm		
<b>E CONSTRUCTION OF RCC HUME PIPE CULVERT</b>					
12	Unloading of R.C.C. Hume pipe by Manual Means including a lead upto 30 m.	20	Each		
	1000 / 1200 mm dia Hume pipe.				
13	Excavation for roadway in ordinary rock with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, transporting to embankment site with a lift upto 1.5 m and lead upto 1000 m, trimming the bottom and side slopes in accordance with the requirement of lines, grades and cross-sections as per Technical Specification	27.00	Cum		

14	Providing and laying reinforced cement concrete pipe NP4 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets as per Technical Specification Clause 1106 1200 mm dia	50.00	Rm		
15	Stone Masonry Work in cement mortar in foundation of head walls complete as per drawing and Technical Specification Clause 1109 In cement mortar 1 : 4	243.75	Cum		
<b>F</b>	<b>CONSTRUCTION OF ROAD PAVERS</b>				
16	Providing and laying of interlocking concrete block pavement having thickness 80 mm as per drawings and Technical Specification Clause 1504.	600.00	Sqm		
<b>G</b>	<b>CONSTRUCTION OF CC FOOTPATH</b>				
17	Construction of 1.80m wide footpath with 300mm random rubble stone masonry in cement mortar 1:3 and 100mm cement concrete (1:3:6) including 12mm thick cement plastering in cement mortar 1:4; earthwork in excavation in ordinary rock with hydraulic excavator including cutting and loading in tippers, transporting to embankment site with a lift upto 1.5 m and lead upto 1000 m; providing & laying rectangular paver block/ tiles of size 0.45m x 0.30m x 0.15m laid over 20 mm thick bed of cement mortar in prop. 1:6 and painting two coats (including primer coat) with synthetic enamel paint on new plastered/concrete surface as per drawing and technical specifications.	225.00	Rm		
<b>TOTAL QUOTED AMOUNT= (Rs)</b>					

*Rupees in words*

***Dated signature of the Tenderer with Seal***