

MUKHYA MANTRI GRAM SAMPARK YOJNA (MMGSY)
BILL OF QUANTITY

Name of Road:- Pheku Bigha To Payare Chak
Block:- Arwal

Length:- 0.750 KM

S. No	Description	Unit	Balance Work To Be Done as per actual site		
			Quantity	Rate	Amount (Rs.)
1	Providing & Fixing of Working benchmark/Reference Pillars 01 nos. per km & 04 Nos. of reference pillars required for 1 Km. as per drawings given and direction of E/I	No	10	11	12
1	Construction of Reference & Working Benchmark	No	1.000	4123.100	4123.1
	Construction of Reference Pillar	No	3.000	1899.720	5699.16
	Clearing and Grubbing Road Land	Hect.	0.169	73248.750	12379.04
2	Clearing and Grubbing Road Land (By manual means) including uprooting wild vegetation , grass ,bushes ,shrubs , saplings and trees of girth upto 300mm , removals of stumps of such trees cut earlier & disposal of unserviceable materials & stacking of serviceable materials to be used or auctioned upto a lead of 1000 m including removal and disposal of top organic soil not exceeding 150mm in thickness as per technical specification - clause 201.1 and direction of E/I (By Manual Means) In area of non-thorny jungle	Hect.	0.221		16169.66
3	Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5 for 1000 m lead @ 30%	Cum	278.855	240.750	67134.34
4	Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 100 m as per Technical Specification Clause 301.5 for 100 m lead @ 70%	Cum	869.405	192.840	167656.06
5	Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m as per Technical Specification Clause 303.1. construction of subgrade	Cum	553.200	244.02	134991.86
6	Granular Sub-base with Well Graded Material (Grade-II) (Table 400.1) :- Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with three 80-100 kn wheel roller capacity to achieve the desired density, complete as per Technical Specification Clause 401.	Cum	454.400	2291.13	1041089.47
7	WBM Grading 3 :-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 to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 3 as per Technical Specification Clause 405.	Cum	214.880	3996.81	858834.53
8	Prime Coat (Low Porosity) :- 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 0.70-1.0kg/sqm using mechanical means as per Technical Specification Clause 502	Sqm	2486.250	55.09	136967.51
9	Tack Coat:- Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25-0.30kg per sqm on the prepared granular surfaces treated with primer & cleaned with Hydraulic broom as per Technical Specification Clause 503.	Sqm	2486.250	18.95	47114.44
10	Mix Seal Surfacing Type B Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness composed of 11.2 mm to 0.9 mm (Type-A) or 13.2 mm to 0.9 mm (Type-B) aggregates using penetration grade bitumen 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 a three wheel 8-10 kN static roller and finishing to required level and grades as per Technical Specification Clause 509	Cum	2486.250	183.06	455138.32
11	Construction of un-reinforced, expansion and construction joint only, plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including provision of contraction and expansion, construction joints, applying debonding strips, primer, sealant, dowel bars, near approaches to bridge/culvert and construction joints, admixtures as approved, curing of concrete slabs for 14-days, using curing compound (where specified) and water finishing to lines and grade as per drawing and Technical	Cum	60.600	6435.91	390017.35

B.O.Q. approved as Corrected

S.E., Aurangabad

24/1/25
B.E.

S. No	Description	Unit	Balance Work To Be Done as per actual site		
			Quantity	Rate	Amount (Rs.)
1	2	3	10	11	12
12	Hard Shouldering - Laying Brick Soling layer on prepared subgrade with brick on end edging according to lines, graded, cross section shown on the drawing filling joints with sand and earth spreading 25mm thick layer of earth over soling watering and rolling	Sqm	50.000	482.800	24140.00
13	Kilometre Stone Reinforced cement concrete M15 grade kilometre stone/local stone of standard design as per IRC:8 fixing in position including painting and printing, etc as per drawing and Technical Specification Clause 1703				
	Ordinary Kilometer Stone (Precast)	Each	2.000	2461.33	4922.66
	200 m stone (precast)	Each	3.000	712.02	2136.06
14	Retro-reflectors Traffic Signs :- Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3 fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per drawings and Technical Specification Clause 801				
	600 mm equilateral & triangle	Each	4.000	3925.88	15703.52
	600 mm circular	Each	2.000	5366.8	10733.6
	600 mm x 450 mm rectangular	Each	2.000	5219.3	10438.6
15	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface :- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes.				
	At Edge for BT Portion	Sqm	130.000	801.65	104214.5
	At Edge for PCC Portion	Sqm	20.000	896.29	17925.8
16	Providing and fixing of typical informatory sign board with Logo as per MORD specifications and drawing. Three MS Plates of 1.6 mm thick, top and middle plate duly welded with MS flat iron 25mm x 5m size on back on edges. The lower plate will be welded with MS angle iron frame of 25mm x 25mm x 5mm. The angle iron frame of the lower most plate and flat iron frame of middle plate will be welded to 2 nos. 75mm x 75 mm of 12 SWG sheet tubes posts duly embedded in cement concrete M-15 grade blocks of 450mm x 450mm x 600mm, 600mm below ground level. The top most diamond plate will be welded to middle plate by 47mm x 47mm of 12 SWG steel plate tube. All M.S. will be stove enameled on both sides. Lettering and printing arrows, border etc. will be painted with ready mixed synthetic enamel paint of superior quality in required shade and colour. All sections of framed posts and steel tube will be painted with primer and two coats of epoxy paint as per drawing Clause 1701 and Annexure 1700.1	Sqm	3.000	9886.23	29658.69
17	Printing new letter and figures of any shade with synthetic enamel paint black or any other approved colour to give an even shade as per drawings and Technical Specification Clause 1701	per cm height per letter	44.000	0.730	32.12
18	Boundary Pillar/Gaurd Post Reinforced cement concrete M15 grade boundary pillars/local stone of standard design as per IRC:25, fixed in position including finishing and lettering but excluding painting as per drawing and Technical Specification Clause 1704	Each	8.000	607.850	4862.8
19	Planting of tree by the road side (Avenue Tree) in 0.6 m dia holes, 1 m deep dug in the Ground, Mixing the soil with decayed farm yard/ slug manure, planting the saplings back filling the trench, watering, fixing the tree guard & maintain the Plant for One Year.	Sqm	65.000	1231.940	80076.09
20	300MM Irrigation Pipe Providing and laying of a reinforced cement concrete pipe duct, 300 mm dia, across the road (new construction), extending from drain to drain in cuts and toe of slope to toe of slope in fills, constructing head walls at both ends, providing a minimum fill of granular material over top and sides of RCC pipe as per IRC:98:1997, bedded on a 0.3 m thick layer of granular material free of rock pieces, outer to outer distance of pipe at least half dia of pipe subject to minimum 450 mm in case of double and triple row ducts, joints to be made leak proof, invert level of duct to be above higher than ground level to prevent entry of water and dirt, all as per IRC: 98 - 1997 and approved drawings.	RM	20.00	941.28	18825.51
21	Earth work in excavation for foundation of structures upto 3.0 m depth as per drawing and technical specification clause 1104	Cum	15.66	386.53	6053.06
22	Providing M15 (PCC 1:2.5:5) as levelling course in foundation :- Providing PCC M 15 (1:2.5:5) concrete for plain concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203	Cum	2.85	5549.07	15814.85
23	Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 and 1204 (M20	Cum	15.17	6406.77	97190.7

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S.E. Aurangabad

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			Quantity	Rate	Amount (Rs.)
1	2	3	10	11	12
24	Providing and laying RCC pipe NP-3 for culverts on first class bedding of PCC M10 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 clause 1106 (600mm Dia)	RM	7.5	3031.85	22738.88
25	Painting on Parapet Wall (Black & White Strips) Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and Technical Specification Clause 1701	Sqm	12.48	128.06	1598.19
Dismanteling					
26	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 m as per Technical Specification Clause 202				
	Cement Concrete	Cum	0.81	717.79	581.41
27	Dismantling of existing structures like culverts, bridges, retaining walls and other structures comprising of brick masonry, including disposal of unserviceable material and stacking the serviceable material with all lift and lead of 1000 m as per Technical Specification Clause 202.				
	Cement mortar	Cum	30.69	331.24	10165.76
28	Removing all types of Hume pipes and stacking including Earthwork and Dismantling of Masonry Works as per Technical Specification Clause 202.				
	Above 600 mm to 900 mm dia Hume pipe	RM	5.00	371.46	1857.3
Total Construction Cost			Total Construction Cost		
			1% LABOUR CESS		
			Seignorage Fee @ 10%		
			18 % GST (B)		
Total Construction Cost			Total Construction Cost		
29	Maintainance for 1st year		1	34197.00	34197.000
30	Maintainance for 2nd year	KM	1	42897.00	42897.000
31	Maintainance for 3rd year	KM	1	194000.00	194000.000
32	Maintainance for 4th year	KM	1	83744.00	83744.000
33	Maintainance for 5th year	KM	1	98316.00	98316.000
Maintainance COST			Maintainance COST		
			1% LABOUR CESS		
			Seignorage Fee @ 10%		
			18 % GST (B)		
Total Maintenance Cost			Total Maintenance Cost		
Total Cost of Project			Total Cost of Project		

Say Rs. 5167895.86
5167896.00

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28/01/25
EE
Executive Engineer
Rural Works Department
Work Circle, Aurangabad

Bill Of Quantity approved as corrected

for item No. 01 to 33 for Rs. 5167896.00

(Rupees Fifty one lacs sixty seven thousand and eight hundred ninety six) only including five year maintenance

Approved
31.01.2025
Superintending Engineer
Rural Works Department
Work Circle, Aurangabad