



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

BILL OF QUANTITIES (BOQ) - CONSTRUCTION

Name of Road : NH 57 Mohammad Parwej Ke Ghar To Mohammad Karim Ke Ghar Tak

Length of Road : 0.7

L / TR No. : 0

District : MUZAFFARPUR

Block : BOCHAHA

Sl. No.	SOR No.	Description of Items	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
(A) PREPRATORY WORK & SITE CLEARANCE						
1	2.2	Clearing and Grubbing Road Land 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				
	(i)	By Manual Means				
	(A)	In area of non-thorny jungle	Hect.	0.14	72697.86	10177.70
2	3.14	Construction of Subgrade and Earthen Shoulders				
		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.	Cum	294.00	263.44	77451.36
3		Construction of Embankment with Material Obtained from Roadway Cutting Construction of embankment with approved materials deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of Tables 300.1 and 300.2 as per Technical Specification Clause 301.5	Cum	18.75	80.37	1506.94
Sub Head : PAVEMENT LAYERS - GSB & WBM ITEMS						
4	4.1	Granular Sub-base with Well Graded Material (Table 400.1)				
		(By mix in place method) For Grading II Material				
		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 smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.	Cum	65.27	2437.46	159093.01
5	4.7	WBM Grading 3 (By Mechanical Means)				
		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	113.86	4,878.12	555403.23

M/S R S CONSTRUCTION

Arun Kumar
PARTNER

Sat
Executive Engineer
RWD Works Division
Muzaffarpur East-

BILL OF QUANTITIES (BOQ) - CONSTRUCTION

Name of Road : NH 57 Mohammad Parwej Ke Ghar To Mohammad Karim Ke Ghar Tak

Length of Road : 0.7

L / TR No. : 0

District : MUZAFFARPUR

Block : BOCHAHA

Sl. No.	SOR No.	Description of Items	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
6	6.4	Analysis of Panel Concrete Pavement Construction of un-reinforced, dowel jointed at 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 aggregate conforming to IS:383, Maximum size of coarse aggregate not exceeding 25mm, Mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using aproved 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, cutting of concrete slabs for 14-days, using curing	cum	331.41	9717.37	3220446.22
7	10.1	Kilometre stone Reinforced cement concrete M15 grade kilometre local stone of standard design asper IRC:8 fixing in position including painting and printing , etc as per drawing and technical specification clause 1703. ii) Km stone iii) 200 m stone	No.	2.00	3081.90	6163.80
8	10.2	Retro-reflectorised 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 600 mm circular 600 mm x 450 mm rectangular	No.	3.00	864.86	2594.58
9	10.1	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	Nos	24	683.34	16400.16
10	10.8	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 Old CC Portion	Sqm	190.00	1004.15	190788.50
11	10.6	(I) Providing and Fixing 'Logo' of Maintenance				2 of 3

Executive Engineer
P.W.D. Works Division
Muzaffarpur East-2

BILL OF QUANTITIES (BOQ) - CONSTRUCTION

Name of Road : NH 57 Mohammad Parwej Ke Ghar To Mohammad Karim Ke Ghar Tak

Length of Road : 0.7
L / TR No. : 0

District : MUZAFFARPUR
Block : BOCHAHA

Sl. No.	SOR No.	Description of Items	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
		Providing and fixing of typical MMGSY 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	No.	3	10715.49	32146.47
12	13.9	Brick Masonry in C.M.(1:3) in parapet				
		Brick masonry work in cement mortar 1:3 in parapet excluding pointing and plastering as per drawing and technical specifications Clauses 600, 900 and 1208.4	cum	2.88	6776.52	19516.38
13	12.3 (i)A	Plastering with cement mortar (1:4)				
		Plastering with cement mortar (1:4) on brick work in sub-structure as per Technical Specifications	sqm	40.32	226.90	9148.61
14	12.13	Painting Two Coats on New Concrete Surfaces				
		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	117.12	135.23	15838.14
15		1% Labour Cess	Rs	1	43713.10	43713.10
16		18% GST	Rs	1	786835.77	786835.77
17		Add 10% Seigniorage Fee :	Rs	1	25018.98	25018.98
Total Construction Cost :						5226877.69
18		1st Year Maintenance cost	Year	1	29725	29725.00
19		2nd Year Maintenance cost	Year	1	35807	35807.00
20		3rd Year Maintenance cost	Year	1	232678	232678.00
21		4th Year Maintenance cost	Year	1	47971	47971.00
22		5th Year Maintenance cost	Year	1	238760	238760.00
23		1% Labour Cess	Rs	1	5849.41	5849.41
24		18% GST	Rs	1	105289.38	105289.38
25		Add 10% Seigniorage Fee :	Rs	1	559.05	559.05
Five Year Maintenance Cost :						696638.84
Total Estimated Cost in Figures						5923516.53
Say Amount						59,23,517.00

B.O.Q. approved for Rs. 59,23,517.00
Rupees..... Crore..... Fifty two lakh twenty three Thousand..... five Hundred Seventy Only

M S R S CONSTRUCTION
Arun Kumar
PARTNER

Executive Engineer
RWD Works Division
Muzaffarpur East-2
Muzaffarpur East-2
Superintending Engineer
Rural Works Department
Muzaffarpur
28/11/23



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

BILL OF QUANTITIES (BOQ) - CONSTRUCTION

Name of Road : Old Muradpur To Garha Dusadh Tola

Length of Road : 1.65

L / TR No. : 0

District : MUZAFFARPUR

Block : BOCHAHA

Sl. No.	SOR No.	Description of Items	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
(A) PREPARATORY WORK & SITE CLEARANCE						
1	2.2	Clearing and Grubbing Road Land 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				
	(i)	By Manual Means				
	(A)	In area of non-thorny jungle	Hect.	0.33	72697.86	23990.29
2	3.14	Construction of Subgrade and Earthen Shoulders 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.	Cum	693.00	263.44	182563.92
Sub Head : PAVEMENT LAYERS - GSB & WBM ITEMS						
3	4.1	Granular Sub-base with Well Graded Material (Table 400.1) (By mix in place method) For Grading II Material				
		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 smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.	Cum	33.82	2535.23	85741.48
3	4.7	Water Bound Macadam with Stone Screening Gr-II WBM Grading 2 (By Mechanical Means)				
		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 2 as per Technical Specification Clause 405.	Cum	38.66	5274.51	203912.56
4	4.7	WBM Grading 3 (By Mechanical Means) 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	152.15	5,075.03	772140.44

WS RS CONSTRUCTION

Arun Kumar

PARTNER

Executive Engineer
PWD Works Division
Muzaffarpur East-2

BILL OF QUANTITIES (BOQ) - CONSTRUCTION

Name of Road : Old Muradpur To Garha Dusadh Tola

Length of Road : 1.65

District : MUZAFFARPUR

L / TR No. : 0

Block : BOCHAHA

Sl. No.	SOR No.	Description of Items	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
5	5.1	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- 1.0 kg/sqm using mechanical means as per Technical Specification Clause 502.	Sqm	1869.80	59.00	110318.20
6	5.11	Patch work over WBM using Mix seal surface for bituminous and Existing CC Pavement				
		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.	Sqm	2214.4	292.47	647645.57
7	5.6	Tack Coat				
		Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared granular surface treated with Primer and cleaned with hydriloc broom as per technical specification clause 503.	Sqm	7365.40	20.28	149370.31
8	5.7	Semi-Dense Bituminous Concrete				
		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, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 508 complete in all respects.	Cum	128.78	15205.96	1958147.50
9	6.4	Cement Concrete Pavement				
		Construction of un-reinforced, dowel jointed at 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 aggregate conforming to IS:383, Maximum size of coarse aggregate not exceeding 25mm, Mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using aproved 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, cutting of concrete slabs for 14-days, using curing	cum	175.74	9217.79	1619934.41

M/S R S CONSTRUCTION

Arun Kumar

PARTNER

(Signature)

Executive Engineer
RWD Works Division
Muzaffarpur East.

BILL OF QUANTITIES (BOQ) - CONSTRUCTION

Name of Road : **Old Muradpur To Garha Dusadh Tola**

Length of Road : **1.65**

District : **MUZAFFARPUR**

L / TR No. : **0**

Block : **BOCHAHA**

Sl. No.	SOR No.	Description of Items	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
10	10.1	Kilometre stone				
		Reinforced cement concrete M15 grade kilometre 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.				
		ii) Km stone	No.	3.00	3101.28	9303.84
		iii) 200 m stone	No.	7.00	868.30	6078.10
11	10.2	Retro-reflectorised 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	Nos	6.00	4632.45	27794.70
		600 mm circular	Nos	2.00	6082.07	12164.14
		600 mm x 450 mm rectangular	Nos	4.00	5933.68	23734.72
12	10.1	Boundary Pillar/Guard 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	Nos	24	684.92	16438.08
13	Ref. to MoRTH Spec.307	Planting of Trees and their Maintenance for one				
		Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year	Each	48.00	1254.41	60211.68
14	10.8	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	272.00	886.39	241098.08
		Pedestrian Crossing(2 m in length and providing at 50 cm apart)	Sqm	8.00	886.39	7091.12
		At Edge for Old CC Portion	Sqm	58.00	1004.15	58240.70

M/S R S CONSTRUCTION

Aayankumar

PARTNER

sd-
Executive Engineer
RWD Works Division
Muzaffarpur East- 2

BILL OF QUANTITIES (BOQ) - CONSTRUCTION

Name of Road : Old Muradpur To Garha Dusadh Tola

Length of Road : 1.65

District : MUZAFFARPUR

L / TR No. : 0

Block : BOCHAHA

Sl. No.	SOR No.	Description of Items	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
15	10.6	(I) Providing and Fixing 'Logo' of Maintenance				
		Providing and fixing of typical MMGSY 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	No.	3	10733.63	32200.89
16	13.9	Brick Masonry In C.M.(1:3) In parapet				
		Brick masonry work in cement mortar 1:3 in parapet excluding pointing and plastering as per drawing and technical specifications Clauses 600, 900 and 1208.4	cum	5.76	6757.27	38921.88
17	12.3 (I)A	Plastering with cement mortar (1:4)				
		Plastering with cement mortar (1:4) on brick work in sub-structure as per Technical Specifications	sqm	60.48	224.98	13606.79
18	12.13	Painting Two Coats on New Concrete Surfaces				
		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	175.68	135.23	23757.21
19		1% Labour Cess	Rs	1	63244.07	63244.07
20		18% GST	Rs	1	#####	1138393.19
21		Add 10% Seigniorage Fee :	Rs	1	69966.96	69966.96
Total Construction Cost :						7596010.83
22		1st Year Maintenance cost	Year	1	157336	157336.00
23		2nd Year Maintenance cost	Year	1	211151	211151.00
24		3rd Year Maintenance cost	Year	1	550086	550086.00
25		4th Year Maintenance cost	Year	1	273006	273006.00
26		5th Year Maintenance cost	Year	1	590151	590151.00
27		1% Labour Cess	Rs	1	17817.3	17817.30
28		18% GST	Rs	1	320711.40	320711.40
29		Add 10% Seigniorage Fee :	Rs	1	3843.45	3843.45
Five Year Maintenance Cost :						2124102.15
Total Estimated Cost in Figures						9720112.98
Say Amount						9,720,113.00

Say Rs. 97,20,113.00

EE
RWD (w) DIV
MUZAFFARPUR EAST-2

Executive Engineer
RWD Works Division
Muzaffarpur East-2

Superintending Engineer
Rural Works Department

M/S R S CONSTRUCTION
Asyn Kumar
PARTNER

B.O.Q. approved for Rs. 97,20,113.00
Rupees.....Crore Ninety seven lakh twenty
Thousand.....Hundred.....thirteen Only

**OFFICE OF THE
Executive Engineer
Rural Works Department
Works Division, Muzaffarpur East-2**

1. Name Of Work :- (Tender ID-118695)MR(3054)

S.No	Name of Road	Length	Block	Const.Cost	Maint Cost.	Total
1	Old Muradpur Purani Sadak Se Garha Dushad Tola	1.65 KM	Bochaha	6836410.00	1911692.00	8748102.00
2	NH-57 Mohammad Parwej Ke Ghar to Mohammad Karim Ke Ghar Tak	0.7 KM	Bochaha	4704190.00	626975.00	5331165.00
Total-				11540600.00	2538667.00	14079267.00

2. No of Road :- Two

3. Length of Road :- 1.65 KM + 0.7 KM =2.35 KM

4. Name of Contractor
With full address :- M/S R.S Construction,
Swami Sahjanand Colony,
Bhagwanpur,Muz.
PIN No-842001
PAN No-AATFR7318F
Mob- 9430262218
Mail No- cont.rscons@gmail.com
5. Agreement No :- MR(3054)/MBD-13/2023-24

6. Approval of Rate :- C.E-3, RWD, Work Patna. letter No- 4222
Dt-03.08.2023 On 10% Below of Schedule rate

7. BOQ Amount :- 15643630.00

8. Agreement Amount :- 14079299.00 (As Per BOQ)

9. BOQ value of the work :-
(a) Construction Cost :- 12822889.00
(b) Maintenance cost :- 2820741.00
15643630.00(One Crore Fifty Six Lac Fourty Three
Thousand Six Hundred Thirty) Only

On 10% Below of Schedule rate.

10. Agreement value of the work :-
(a) Construction Cost :- 11540600.00
(b) Maintenance cost :- 2538667.00
14079267.00 (One Crore Fourty Lac Seventy Nine
Thousand Two Hundred Sixty Seven) Only(As Per
BOQ).

11. EMD(5%) :- RS-704000.00
APG(3.75%) :- RS-528000.00
RS-1232000.00

M/S R S CONSTRUCTION
Arun Kumar
PARTNER

sd
Executive Engineer
Rural Works Division
Muzaffarpur East-2