

Before the National Green Tribunal

Principal Bench

New Delhi

OA No. 89/2019

In the matter of

Ramani Radhakrishnan, Owners welfare association

Vs

State of Karnataka

COMPLIANCE REPORT BY BBMP

It is submitted that the government of Karnataka had earlier entrusted and allocated land under the Ashraya scheme in Hagadur village. The process of officially handing over to the BBMP was in process when the land fell in dispute on complaints raised by private parties.

That on account of litigation over the said allocated land, the work was halted and only recently the government of Karnataka to expedite the process of rehabilitation has identified an alternative land in the same village.

The Tahsildar vide order dated 15.12.2020 has allocated the land measuring 1 acre 25 guntas under Karnataka Land Revenue Act 1964, Section 71 under the Ashraya Scheme and the said land has officially been handed over to the Bruhat Bangalore Mahanagara Palike, Mahadevapura Zone on 02.02.2021. Translated copy of the order of the Tahsildar is Annexure-1.

The BBMP with utmost sincerity and in view of the earlier orders of the court has expedited the process of preparation of Estimation of costs in developmental works including providing infrastructural support of road

construction, electricity connections, provision of water supply and sewage connection and construction of compound. The said estimation has been submitted for allocation of grant since the Bruhat Bangalore Mahanagara Palike (BBMP) is in the process of preparation of the Budget for the year 2021-22, the grants will be earmarked during the Financial year 2021-22.

That it is submitted that after the allocation of grant, BBMP would be inviting tenders and the work would be entrusted to contractors for execution of work. The estimated time for completion of the whole process is 6 (six) months approximately and thereafter the rehabilitation process would commence forthwith.


B.T.Mohan Krishna

Chief Engineer (Lakes)

Bruhat Bangalore Mahanagara Palike

Dated: 14.02.2021

Place: Bangalore

Filed by

Kashi Vishweshwar

Advocate for BBMP

H-24, Kailash Colony

New Delhi 48

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ANNEXURE -1

"TRANSLATED COPY"

Office of the Tahsildar, Bangalore East Taluk, K.R.Puram, Bangalore Urban District.

No. LND/CR/149/2012-13

Dated: 15.12.2020

LAND HANDING OVER LETTER

Sub: Handing over of land measuring 1 Acre 25 Guntas of Sy.No.9 of Hagadur village, out of 49 Acres 12 Guntas for relocation of Lake encroachers at Sy.No.41 White field village, K.R.Puram Hobli, Bangalore East Taluk.

Ref: 1. Deputy Commissioner Bangalore Urban District O.M.No.L.N.D (E) CR/155/2017-18 dated 30.11.2019.
2. Deputy Commissioner Bangalore Urban District O.M.No.L.N.D (E) CR/155/2017-18 dated 12.12.2019.

The Handing over of land to Bruhat Bangalore Mahanagara Palike measuring 1 Acre 25 Guntas in Sy.No.9 of Hagadur village out of 49 Acres 12 Guntas under Ashraya Scheme under the Karnataka Land Revenue Act 1964 Sec 71 for the rehabilitation of Lake encroachers at Sy.No.41 White field village, K.R.Puram Hobli, Bangalore East Taluk, as per the orders of Deputy Commissioner Bangalore Urban District vide reference No.(1) & (2) , the boundaries of the land is as follows:

East - Survey No.22 land
West - Halla
North - Remaining land of Survey No.9
South - Halla

The land has been handed over to Bruhat Bangalore Mahanagara Palike measuring 1 Acre 25 Guntas in Sy.No.9 of Hagadur village out of 49 Acres 12 Guntas

HANDED OVER

TAKEN OVER

TRANSLATED COPY PREPARED BY BBMP OFFICIALS



BRUHATH BANGALORE MAHANAGARA PALIKE

ESTIMATION

Office of The Executive Engineer
~~Bommasahalli~~ Division
Bruhath Bangalore Mahanagara Palike
Bangalore

SN	Description	No	L	Avg B	D	Qty	Rate	Unit	Amount
16	Cement concrete pavement. Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30, with 25mm and down size graded granite metal coarse aggregates and fine aggregates, with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008, mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rakers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixture as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) (P.No. 176, L.No.22.6)								
	Basic Rate	4916.00							
	AW 8%	393.28							
	Total	5309.28							
	Surrounding	1	250.00	0.75	0.20	37.50			
					Total	37.50	5309.28	Cum	199098.00
17	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications. MORTH -100/ Chapter 1 (P-134, It.17.1)								
	Avg wt of earth 1.28 tonne/km								
	Basic rate lead charges for 15.00kms (2.00x1.28x15.00)					57.00			
	Add loading & unloading					68.00			
	Sub total					125.00			
	AW 8%					100.00			
	Total					135.00			
	Qty vide no 1					429.98	135.00	Cum	58047.00
	SUB TOTAL								3420691.00
	GST=17%								410483.00
	Miscellaneous								826.00
	GRAND TOTAL								3832000.00

CERTIFICATE:

1. The above estimate has been prepared as per PWD SR 2018-19
2. The work spot has been inspected and found to be necessary
3. The work spot comes under BBMP Limits
4. The provisions made in the estimate are necessary and minimum

Assistant Engineer
Ward No.84

Assistant Executive Engineer
White Field Sub-Division

Executive Engineer
Mahadeyapura Division


BRUHAT BENGALURU MAHANAGARA PALIKE

NAME OF WORK : **Construction of UGD Lines in Survey No.9 in Hagaduru ward No.84**

Job Code:

Sl. No.	Description	No	L	Avg B	D	Estimated Cost in Lakhs:-			9.06
						Qty	Rate	Unit	
Amount									
1	KSRB 2-2.1 : Earthwork excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1(a) / 2.3.5 (P.No. 5, L.No. 2.3).								
	Basic Rate	299.00							
	AW 6%	17.94							
	Total	316.94							
		1	120.00	1.00	2.00	240.00			
		2	125.00	1.00	2.00	500.00			
					Total	740.00	316.94	Cum	234536.00
2	KSRB 12-1.4 : Providing and laying in position to required level or slope 230mm internal diameter salt glazed stoneware pipes grade A and jointing with stiff mixture of cement mortar in proportion of 1:1, testing of pipes and joints, including cost of materials, labour charges complete as per specifications. Specification No. KBS it no.11.4								
	Basic Rate	536.00							
	AW 6%	32.16							
	Total	568.16							
		1	120.00			120.00			
		2	125.00			250.00			
					Total	370.00	568.16	Mtr	210219.00
3	KSRB 12-5.2 : Constructing brick masonry circular type manhole 0.91 m internal dia at bottom 1.67m deep and 0.56m dia at top, with table moulded non modular bricks of class designation 50 in cement mortar 1:4, inside cement plaster 12mm thick with cement mortar 1:3, finish with a floating coat of neat cement, foundation concrete 1:3:6 mix using 40mm and downsize granite metal and making necessary channel in cement concrete 1:2:4 mix with 20mm and downsize granite metal, finished with a floating coat of neat cement, with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter confirming IS : 12592, total weight of cover and frame to be not less than 182 kg, fixed in cement concrete 1:2:4 20mm and downsize broken granite metal, providing and removing entering, shuttering including cost of materials, labour charges, HOM of mechineries complete as per specifications. (Excavation, footrests and 2mm thick cement plaster on the external surface shall be paid seperately) Specification No. KBS 12.4 it no.11.38								
	Basic Rate	24284.00							
	AW 6%	1512.72							
	Total	26226.72							
			1.00	4.00		4.00			
			2.00	3.00		6.00			
					Total	10.00	26226.72	Nos	262267.00
4	Refilling the basement and pipe lines trenches with selected available earth from trench exavation including watering consolidatation in layers of 15 cms thick including disposing of the surplus earth with a leas of 200mtr complete with all lead and lift and as per direction of engineer incharge of work								
	Basic Rate	129.00							

BRUHAT BENGALURU MAHANAGARA PALIKE

Name of Work :- **Providing Borewells and pipeline in survey No.9 in ward no 84 hagaduru**

							Estimate Cost Rs.		1190000.00	
DESCRIPTION OF WORK	UNIT	NO			L	B	D	QTY	RATE	AMOUNT
1	2	3	4	5	6	7	8	9	10	11
Geophysical investigation of site for sinking bore well for supply drinking water to the habitation either through the Hand Pump, MWS or PWSS by vertical electrical sounding by adopting Venner or schlumberger's method, including reconnaissance survey of geological formation, Geophysical investigation of existing ground infecundity its quality & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top in consolidated formation of proper scattng of casing pipe ,depth of drilling required to cover full depth of aquifer proposed to be tapped Proboabale yield and other information required including transporetation technical personal and labour etc PRE SR 2011-12 It no 9.4 page 42)										
	Nos	1	1					1	3956.40	3956.40
Sinking of borewell of 165mm dia clear using super fast hydraulic rig of capacity 250 PSIG and above 900 CMF and above in all strata including over burden upto 20m, fixing of casing pipes, collars and cap with necessary welding, cutting and treading including transportation of rig and supporting vehicles, scrope charges and cost of consumables, etc. complete including yield testing at the final depth with a minimum working of compressio for one hour.(excluding cost of casing pipes, collars, caps etc.)(RDED SR 2010-11 P-36, 1-9.1)										
a) 0.00 to 50.00 mts	Rmt	1	1	50.00				50.00	364.35	18217.00
b) 50.00 to 100.00 mts	Rmt	1	1	50.00				50.00	469.10	23205.00
c) 100.00 to 150.00 mts	Rmt	1	1	50.00				50.00	478.80	23940.00
d) 150.00 to 200.00 mts	Rmt	1	1	50.00				50.00	562.80	28140.00
e) 200.00 to 250.00 mts	Rmt	1	1	50.00				50.00	665.70	33285.00
f) 250.00 mtrs to 300.00 mtr	Rmt	1	1	50.00				50.00	735.00	36750.00
g) 300.00 mtrs to 350.00 mtr	Rmt	1	1	50.00				50.00	866.25	43312.50
h) 350.00 mtrs to 400.00 mtr	Rmt	1	1	50.00				50.00	945.00	47250.00
g) 400.00 mtrs to 420.00 mtr	Rmt	1	1	50.00				50.00	1185.45	59272.50
Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe - grade of Steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming to IS 554/1985, one end fixed with socket confirming to IS 4270:2001 and the other end with screwed pipes ISI Marking weighing 25.10Kg/mtr (Inclusive of all taxes and duties) Prices include Collar-medium duty P III, I No. H4 PRED SR 2012-13										
	Rmt	1	1	71.00				71.00	1601.25	113688.75
Providing & Fixing 175 mm dia MS casing collers (PREC SR 14-15 P-III-NO-86)										
	Nos	1	1					1	157.00	157.00
Providing and fixing Borewell Cap and Clamp Set Page No. XLVII, SI No. 17 PWD										
	Nos	1	1					1	1890.00	1890.00
Providing and fixing Borewell Cap and Clamp Set Page No. XLVII, SI No. 17 PWD										
	Rmt	1	1					1	2730.00	2730.00
Supply and deliver at site brand new CRI/Texmo/Atlanta/Luby/ Suguna make or any Equalant ISI Make suitable for vertical instalation in 150mm dia bore wells comprising of single stage or multistage CF pump closed by mens of stainless steel coupling to suitable HP, suitable speed totally enclosed and fitted with pure drinking water (Wet type) squirrel cage submersible indextion motor suitable for operation of 3PH 50 HZ 380/440 Volts AC supply fitted with required accseries,sand gouard non return valve, etc. complete the pump and motor shell form an integral unit with all the required fitting 17.5HP/40Stage (including VAT) with all lead and left and as per directions of the engineer incharge of work (PW,P &IWTD B.C-2018-19 / SL N.51 PNO.XLII)										


BRUHAT BENGALURU MAHANAGARA PALIKE

NAME OF WORK : Construction of Compound Wall in Survey No.9 in Hagaduru ward No.84

Job Code:						Estimated Cost in Lakhs:-			38.32
SN	Description	No	L	Avg B	D	Qty	Rate	Unit	Amount
1	KSRB 2-2.1 : Earthwork excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1(a) / 2.3.5 (P.No. 5, L.No. 2.3).								
	Basic Rate	299.00							
	AW 8%	23.92							
	Total	322.92							
	North side	1	131.50	1.00	1.35	177.53			
	South Side	1	91.10	1.00	1.35	122.99			
	East side	1	50.40	1.00	1.35	68.04			
	West side	1	45.50	1.00	1.35	61.43			
					Total	429.98	322.92	Cum	138848.00
2	KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift, complete as per specifications. specification. No. KBS (P.No.7/I.No. 2.15)								
	Basic Rate	2429.00							
	AW 8%	194.32							
	Total	2623.32							
	North side	1	131.50	1.00	0.30	39.45			
	South Side	1	19.00	1.00	0.30	5.70			
	East side	1	50.40	1.00	0.30	15.12			
	West side	1	45.50	1.00	0.30	13.65			
					Total	73.92	2623.32	Cum	193916.00
3	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cm s. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.No. 13, L.No. 4.3)								
	Basic Rate	5102.00							
	AW 8%	408.16							
	Total	5510.16							
	North side	1	131.50	1.00	0.15	19.73			
	South Side	1	19.00	1.00	0.15	2.85			
	East side	1	50.40	1.00	0.15	7.56			
	West side	1	45.50	1.00	0.15	6.83			
					Total	36.96	5510.16	Cum	203656.00

AW 6%	7.74							
Total	136.74							
		Qty Vide Item No.1	740.00	136.74	Cum	101188.00		
					SUB TOTAL	808210.00		
					GST=12%	96985.00		
					Miscellaneous	305.00		
					GRAND TOTAL	905500.00		

CERTIFICATE:

1. The above estimate has been prepared as per PWD SR 2018-19
2. The work spot has been inspected and found to be necessary
3. The work spot comes under BBMP Limits
4. The provisions made in the estimate are necessary and minimum

Assistant Engineer
Ward No.84

Assistant Executive Engineer
White Field Sub-Division

Executive Engineer
Mahadevapura Division

SN	Description	No	L	B	D	Qty	Rate	Unit	Amount
	Basic Rate	5.00							
	AW 6%	0.30							
	Total	5.30							
	Asphalt Road	1	120	6.0		720.00			
		1	120	3.0		360.00			
						360.00	5.30	Sqm	1908
10	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 (P.No.158 I.No.21.6)								
	Basic Rate	32.00							
	AW 6%	1.92							
	Total	33.92							
	Asphalt Road	1	120	6.0		720.00			
		1	120	3.0		360.00			
						360.00	33.92	Sqm	12211
11	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.161 I.No.21.17.6)								
	Basic Rate	6880.00							
	AW 6%	412.80							
	Total	7292.80							
	Asphalt Road	1	120	6.0	0.05	36.00			
		1	120	3.0	0.05	18.00			
						54.00	7292.80	Cum	393811
12	KSRRB 500-9. Providing and applying tack coat using 80/100 grade bitumen (VG10) on granular base such as WBM surfaces hot bitumen primed at 4 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5 (P.No.48 I.No.21.9)								
	Basic Rate	20.00							
	AW 6%	1.20							
	Total	21.20							
	Asphalt Road	1	120	6.0		720.00			
		1	120	3.0		360.00			
						1080.00	21.20	Sqm	22896
13	KSRRB M500-19. Providing and laying bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with paver finisher 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. 509 complete in all respects complete as per specifications. - using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % CRMB 55 (P.No.158 I.No.21.23.6)								
	Basic Rate	8300.00							
	AW 6%	498.00							
	Total	8798.00							
	Asphalt Road	1	120	6.0	0.025	18.00			
		1	120	3.0	0.025	9.00			
						27.00	8798.00	Cum	237546
14	KSRRB M800-13. Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 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 complete as per specifications. MORTH Specification No. 803 (P.No.185 I.No.24.15)								



BRUHATH BANGALORE MAHANAGARA PALIKE



TYPICAL CROSS SECTION OF ASPHALTING ROAD

Assistant Engineer
Ward No 84

Asst Executive Engineer
White field Sub Division
BBMP

Executive Engineer
Mahadevapura Division, BBMP

NOTE:- Drawing Not To Scale
All dimensions in Meter

Abstract:

1. Construction of Compound Wall	Rs.38.32 Lakhs
2. Construction of RCC Drain and Asphalt Road	Rs.49.48 Lakhs
3. Providing Borewell and Water Supply pipe line	Rs.11.90 Lakhs
4. Construction Of UGD Line	Rs. 9.06 Lakhs
5. Electricity Connection and Installemnt of Poles	<u>Rs.15.00 Lakhs</u>
Total	Rs123.76 lakhs

SN	Description	No	L	B	D	Qty	Rate	Unit	Amount	
	Basic Rate	429.00								
	AW 6%	25.74								
	Total	454.74								
	Asphalt Road	2	120	0.10		24.00				
		2	120	0.10		24.00				
						48.00	454.74	Sqm	21828	
15	Transportaion & disposing of the excavated earth obtained from side drains & high burns an either sides of the road 2km lead (P.No 134)									
	Avg wt of earth 1.28 tonne/km									
	Basic rate lead charges for 15.00kms (2.00x1.28x15.00)					48.00				
	Add loading & unloading					68.00				
	Sub total					116.00				
	AW 6%					6.96				
	Total					122.96				
	Qty vide i.no 1					464.40	122.96	Cum	57103	
	Sub Total								4417067	
	Add GST 12%								530048	
	Miscellaneous								885	
	Grand Total								4948000.00	

CERTIFICATE:

- 1.The above estimate has been prepared as per PWD SR 2018-19
2. The work spot has been inspected and found to be necessary
3. The work spot comes under BBMP Limits
4. The provisions made in the estimate are necessary and minimum

Assistant Engineer
Ward No.84

Assistant Executive Engineer
White Field Sub-Division
BBMP

Executive Engineer
Mahadevapura Division
BBMP

SN	Description	No	L	Avg B	D	Qty	Rate	Unit	Amount
4	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 (P.No.25/ LNo. 5.6)								
	Basic Rate	4596.00							
	AW 8%	367.68							
	Total	4963.68							
	Foundation								
	North side	1	131.50	0.90	0.45	53.26			
	South Side	1	19.00	1.00	0.45	8.55			
	East side	1	50.40	0.90	0.45	20.41			
	West side	1	45.50	0.90	0.45	18.43			
					Total	100.65	4963.68	Cum	499580.00
5	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 (P.No.23/ LNo. 5.9)								
	Basic Rate	5483.00							
	AW 8%	438.64							
	Total	5921.64							
	Basement								
	North side	1	131.50	0.60	0.45	35.51			
	South Side	1	19.00	1.00	0.45	8.55			
	East side	1	50.40	0.60	0.45	13.61			
	West side	1	45.50	0.60	0.45	12.29			
					Total	69.95	5921.64	Cum	414207.00
6	KSRB 5.4-4 : Providing and constructing granite / trap / basalt size stone masonry @ superstructure with cement mortar 1:4 , edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, scaffolding, curing complete as per specifications. KBS 5.1.13 (P.No.23/ LNo. 5.13)								
	Basic Rate	6005.00							
	AW 8%	480.40							
	Total	6485.40							
	Super Structure								
	North side	1	131.50	0.45	0.45	26.63			
	South Side	1	19.00	1.00	0.45	8.55			
	East side	1	50.40	0.45	0.45	10.21			
	West side	1	45.50	0.45	0.45	9.21			
					Total	54.60	6485.40	Cum	354083.00
7	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs. with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregors @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No, KBS 4.1, 4.2. (P.No.17, LNo. 4.6)								
	Basic Rate	5422.00							
	AW 8%	453.76							

20	Supplying and fixing 500"x500"x65mm" polished wood board made of not less than 25mm thick planks on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverting wooden screws etc.	Nos	1	1			1	1890.00	1890.00
21	Supplying and fixing LED type panel board indicating lamp with required colour suitable for 230/440V AC 50 HZ 12/24 V DC (PWD Ele SR 2019-20,p-29,Sl no.5.36)	Nos	1	1			1	317.10	317.00
22	Supplying fixing and wiring heavy duty low voltage capacitors conforming to IS 2834 3 phase 400/440 volts grade, for power factor improvement of rotating machinery (PWD Ele SR 2019-20,p-29/Sl no.5.37)	Nos	6	35			210	451.50	94815.00
23	Supplying and fixing miniature circuit breakers on existing MCB distribution board using necessary fixing materials and "C" type curve indicator ON/OFF energy cross-3 with short circuit breaking capacity of 10K and complete wiring as required conforming to IEC 60898.(PWD Ele SR 2019-20,P-27/Sl no.5.17.8) 40 Amps TPN	Mts	1	3			3	420.00	1260.00
24	Supplying and fixing wiring earth electric code for grounding conduits IC cutouts and other equipments on the meter board using 40mm dia 2.9mm thick GI-pipe 2.5m long buried in a pit. The pit sollowed filled with equal portions of sand and stones. 2.5mtrs will be used the pipe to complete depth the connection from pipe to the rranduit etc. is to be established through GI wire of size as per ISI specification 7.3.3 of IS 732 using 12mm dia bolts, nuts, washers, check nuts, etc., the pipes shall have 16 through holes of 12mm dia (Ele SR OF 2019-20P-No.40/No-7.11)	Nos	1	1			1	2492.70	2492.00
25	Supplying and fixing class-A (medium duty) GI pipe wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1KV class 40mm (PWD Ele SR 2019-20,p-41,It-6.9.1)	Mtr	1	2			2	3148.95	6297.00
26	Supplying laying 1.1 KV class LT UG cable XLPE or heat resistant PVC insulated, PVC extruded inner shethed armoured UG LT cable as per IS-1554, part-1: or IS-7098 Part-1 Armourig strip thickness in average +5% and resistivity 140hms/Kms (Max) as per IS-3975 (4 core 16 sq mm) PWD Ele SR 2019-20,p-40,It-6.4.4)	Nos	1	1			1	351.75	351.00
27	Labour charge for laying 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe/ on wall / on poles as required in existing trench/duct. 6 sq mm to 16 sq mm (PWD Ele SR 2019-20,p-41,It-6.5.1)	Mtr	4	1	25.00		100.00	157.50	15750.00
28	Digging of trench of 0.6mtrs deep x 0.5 mtrs wide refilling the trench to the required gorund level and consolidating etc. complete (PWD Ele SR 2019-20,p-41,It-6.6.2) hard soil	Mtr	2	1	50.00		100.00	12.47	1247.00
29	Supplying and fixing LT cast iron pot heads suitable for 1.1KV class UG cable filled with necessary bitumen / insulating compound complete with terminals, clamps bolts and nuts and washer etc. complete for 16 sq mm as per specifications. (PWD Ele SR 2019-20,p-42,It-6.10.2)	Rmt	4	1	50.00		200.00	107.10	21420.00
30	Supplying and fixing porcelain fuse channel with cut out on the existing wooden block and wiring complete 63 amps (PWD Ele SR 2019-20,p-25,It-5.7.3)	Nos	2	1	50.00		100.00	283.50	28350.00
31	Supplying and fixing mounting Msbox made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary scable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc. complete box of 21600 sqcm P No. 49 L No 640.2 PWD Electrical SR 2019, 20	Nos	6	1	50.00		300.00	238.35	71505.00
		Cm	2	1			2	0.22	0.00

Pipeline

32	KSRB 2-2 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (Other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up to 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled including breaking of clods and neatly dressed as per specifications, specification. No. KRS 2-2.1 (a)/2.3.5	Basic Rate	249.00						
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BRUHAT BENGALURU MAHANAGARA PALIKE

Name of work: Improvements to roads and drains to Survey No.9 in ward No.84 Hagaduru

Job code:							Estimated Cost in Lakhs			49.48
SN	Description	No	L	B	D	Qty	Rate	Unit	Amount	
1	KSRB 2-1.1 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (including transportation of buildings, culverts, road drains and installation of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1 (P.No.8 LNo.2.3)									
	Basic Rate	299.00								
	AW @ 6%	17.94								
	Total	316.94								
	Rcc Drain									
	Main Road	2	120	0.9	0.9	97.20				
	Cross road	2	120	0.9	0.9	97.20				
	Asphalt Road									
	Main Road	1	120	6.0	0.25	180.00				
	Cross road	1	120	3.0	0.25	90.00				
						464.40	316.94	Cum	147187	
2	KSRB 57300-59.2. Loosening, levelling and compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment construction. complete as per specifications. Case-II: Compacting original ground supporting embankment.(which includes watering charges & compaction by vibratory roller) MORTH Specification No. 305.3.4 (Page No. 147 / Item No.19.66)									
	Basic Rate	23.00								
	AW @ 6%	1.38								
	Total	24.38								
	Asphalt Road									
	Main Road	1	126.5	3.0	0.25	94.88				
	Cross Road	1	166	2.5	0.25	103.75				
						Total	198.63	24.38	Sqm	4842
3	KSRB 4-1.3: Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85 cum and fine aggregates @ 0.57 cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms, thick well compacted, in foundation and plinth including cost of all materials, labour, HOM of machinery, curing complete as per specifications. (P. 13/4.3)									
	Basic Rate	5102.00								
	Area Weightage 6%	306.12								
	Total	5408.12								
	Rcc Drain									
	Main Road	2	120	0.9	0.15	16.20				
	Cross road	2	120	0.9	0.15	16.20				
						32.40	5408.12	cum	175223	
4	KSRB 4-6.9 :Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floor including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Page No. 17 / Item No.4.36)									
	Basic Rate	755.00								
	AW @ 6%	45.30								
	Total	800.30								

17.50HP/40 Stage Submersible pump set									
	No	1	1						
8	Submersible pump cable 1x3x10 sqmm (it-9,pg-XLVII, PWD SR 2018-19)					1	81937.80		81937.80
	Rmt	1	1	290.00					
9	Supply and fixing 50 mm Dia GI Collar Heavy duty) SR 2018-19 pg-XLVII it-2)					290.00	231.00		66990.00
	No	1	1						
10	Outdoor panel board upto 20 HP(PWD SR, PG-XLVII IT-13)					1	189.00		189.00
	set	1	1						
11	Supplying and fixing ISI marked Galvanized mild steel tube (conteneously welded) electrical resistance welded (ERW) Hi freezueency inculcation whelded hot finished we with latest amendmets, pipex threaded at both end the other end procte with HD colled amendment 1-5 and with all its latest amendmets if any: the pipe supplied should be with BIS Mark Galvaized iron pipes : ISI 239 (part 1) 1990 50mm dia "C" Class (Heavy Duty collar)UPRED Bananlase Cycle SE Approved rate dated:26.07.2010					1	22050.00		22050.00
	Rmt	1	2						
12	Providing and fixing 50mm nominal bore gun metal non-return Page No. XLVIII, SI No. 26, PWD SR 2018-19					2	556.50		1113.00
	Nos	1	2						
13	Supplying and fixing 50mm GI Elbow.(PWD SR 2016-17,P-XXXIX)					2	1890.00		3780.00
	Nos	1	3						
14	Supplying and fixing 50mm GI Nipple.(PWD SR 2016-17,P-XXXIX)					3	234.89		704.00
	Nos	1	50						
15	Supplying and fixing 50mm GI Nipple.(PWD SR 2016-17,P-XXXIX)					50	117.39		5869.00
	Nos	1	1						
16	Supplying and fixing 50mm GI Hose colleres(PWD SR 2016-17,P-XXXIX)					1	109.52		109.00
	Rmt	1	4.00						
17	Labour charges for erection as new /repaired submercible pumpset along with GI pipe (32/50mm) cable (new submercible pumpset if required will be supplied by the department free of cost and released pumpset shoud be handed over to department including transportation (Each lenth =6.00) Page No. it-18 BWSSB SR 2017-18					4.00	109.15		432.00
	Each	1	1						
18	Erection of panel board and laying in position plain cement concrete of mix 1:2:4 with stone aggregate 20mm and down size graded metal machine mixed concrete laid in layersnot exceeding 15cms thick well compected, cost of all materails labour, HOM of machineries, curing complete as per specification no KBS 4.1.4.2 (PW,P&IWTD,SR OF					1	96.60		96.00
	Nos	1	1						
19	Supplying of TPST with rewirable porcelain channels in SM encloser made out of 14 SWG powder coated point of approved colour 32 amps (PWD Ele SR 2019-20,P-24,It-5.5.1)					1	459.90		459.00

SN	Description	No	L	Avg B	D	Qty	Rate	Unit	Amount
13	KSRB 15.1.2 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:4, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No. 115, I.No. 15.2).								
	Basic Rate	140.00							
	AW 8%	11.20							
	Total	151.20							
	North side	2	131.50		0.45	118.35			
	South Side	2	19.00		0.45	17.10			
	East side	2	50.40		0.45	45.36			
	West side	2	45.50		0.45	40.95			
					Total	221.76	151.20	Sqm	33530.00
14	Providing external walls with texture finish using approved brand paint, applied uniformly in three coats over one coat of primer including cost of all materials, machineries, labour, transportation, loading and unloading, all lead and lift and all other incidental charges including scaffolding and removing stains, complete as per specifications.(P.No. 128, I.No. 15.105)								
	Basic Rate	439.00							
	AW 8%	35.12							
	Total	474.12							
	North side	2	131.50		1.20	315.60			
	South Side	2	19.00		1.20	45.60			
	East side	2	50.40		1.20	120.96			
	West side	2	45.50		1.20	139.20			
	Deduction								
	Main Gate	-1	1.80		1.20	-2.16			
					Total	589.20	474.12	Sqm	279352.00
15	KSRB 7.3 : Providing and fixing 1mm thick M.S. sheet garage door with frame and diagonal braces of size 40x40x6 mm angle Iron, 3.15mm thick M.S. Gusset plates at the junctions and corners, with handles, stoppers and locking arrangements etc., including applying a priming coat of red lead paint cost of materials, labour, HOM of machinery complete as per specifications. Double leaf door of size 2.4x2.4m. Specification No. KBS 7.9 / 7.12. (P.No. 33, I.No. 7.3)								
	Basic Rate	2729.00							
	AW 8%	218.32							
	Total	2947.32							
	Gate	1	1.80		1.20	2.16			
					Total	2.16	2947.32	Sqm	6366.00

SN	Description	No	L	Avg B	D	Qty	Rate	Unit	Amount
	Total	6528.60							
	Pinth Beam					5.05			
	North side	1	131.50	0.23	0.20	0.87			
	South Side	1	19.00	0.23	0.20	2.32			
	East side	1	50.40	0.23	0.20	2.09			
	West side	1	45.50	0.23	0.20				
					Total	11.33	6528.60	Cum	73998.00

10 Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, typing with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks, and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications, specification No. KBS 4.6.3 [P-18, I-4.46.2]

Basic Rate	70966.00								
AW 8%	5677.28								
Total	76643.28								
160 kg per cum of Concrete						1.81			
					Total	1.81	76643.28	Tonne	138993.00

11 KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not less than 1800 kg/m³ and having a minimum average compressive strength 4.00 N/mm² conforming to IS 2185 (Part) : 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications, KBS No.5.4 (P.No. 77, I No. 8, 76.1)

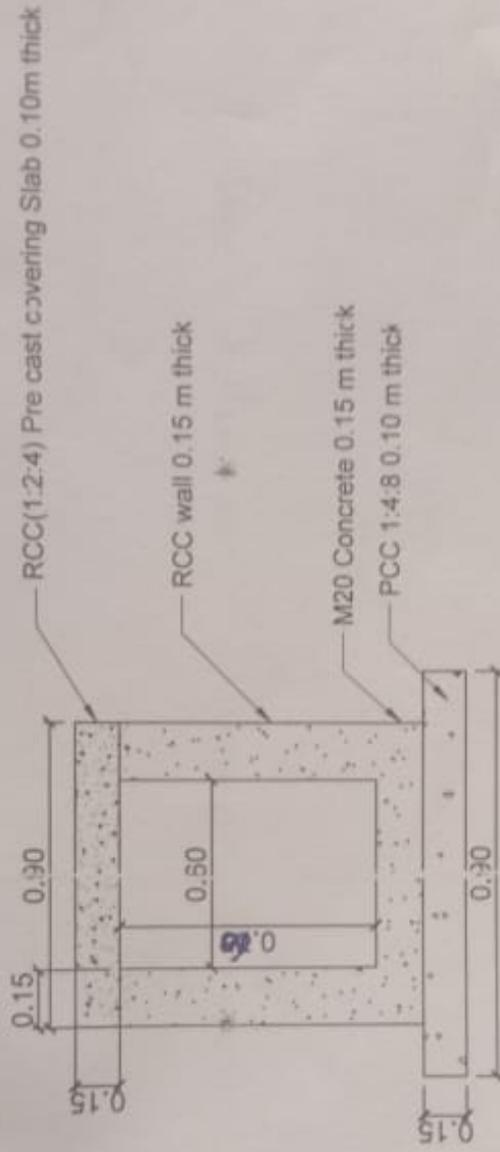
Basic Rate	962.00								
AW 8%	76.96								
Total	1038.96								
North side	1	131.50			1.20	157.80			
South Side	1	19.00			1.20	22.80			
East side	1	50.40			1.20	60.48			
West side	1	45.50			1.20	54.60			
Deduction									
Main Gate	-1	1.80			1.20	-2.16			
					Total	293.52	1038.96	Sqm	304956.00

12 KSRB 15.3.1 Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (P.No.115, I.No. 15.9)

Basic Rate	211.00								
AW 8%	16.88								
Total	227.88								
North side	2	131.50			1.20	315.60			
South Side	2	19.00			1.20	45.60			
East side	2	50.40			1.20	120.96			
West side	2	45.50			1.20	109.20			
Deduction									
Main Gate	-1	1.80			1.20	-2.16			
					Total	589.20	227.88	Sqm	134267.00



BRUHATH BANGALORE MAHANAGARA PALIKE



TYPICAL CROSS SECTION OF RCC DRAIN

Assistant Engineer
Ward Nc 84

Asst Executive Engineer
White Field Sub Division
BBMP

Executive Engineer
Mahadevapura Division, Bt:MP

NOTE: - Drawing Not To Scale
All dimensions in meters

SN	Description	No	L	Avg B	D	Qty	Rate	Unit	Amount
	Total	5855.76							
	Foundation								
	North side	1	131.50	0.90	0.10	11.84			
	South Side	1	19.00	1.00	0.10	1.90			
	East side	1	50.40	0.90	0.10	4.54			
	West side	1	45.50	0.90	0.10	4.10			
	Basement								
	North side	1	131.50	0.60	0.10	7.89			
	South Side	1	19.00	1.00	0.10	1.90			
	East side	1	50.40	0.60	0.10	3.02			
	West side	1	45.50	0.60	0.10	2.73			
	Super Structure								
	North side	1	131.50	0.45	0.10	5.92			
	South Side	1	19.00	1.00	0.10	1.90			
	East side	1	50.40	0.45	0.10	2.27			
	West side	1	45.50	0.45	0.10	2.05			
	Wall top coping								
	North side	1	131.50	0.20	0.15	3.95			
	South Side	1	19.00	1.00	0.15	2.85			
	East side	1	50.40	0.20	0.15	1.51			
	West side	1	45.50	0.20	0.15	1.37			
						Total	59.72	5855.76	Cum 349677.00

8 KSRB 4-6.3 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness above 200 mm including cost of all materials, labour complete as per Specification. Specification No. KBS 4.6.2 (P.No. 15, I.No. 4.31)

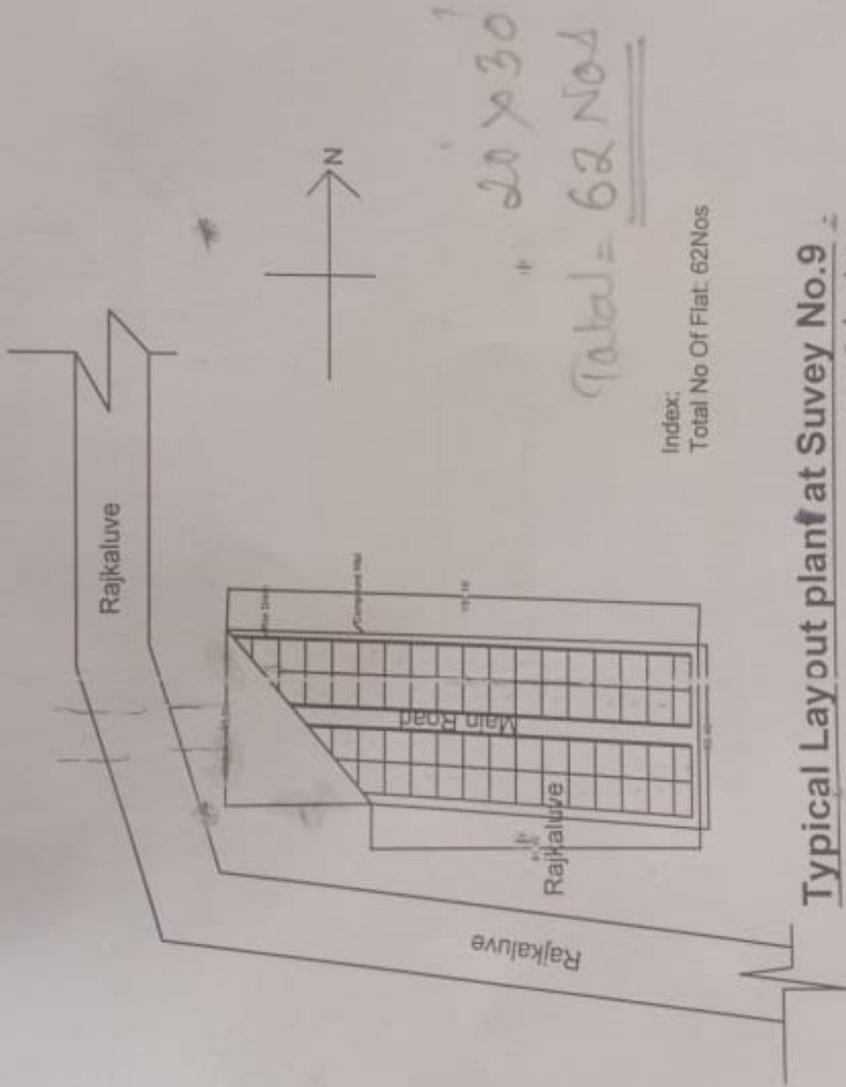
	Basic Rate	358.00							
	AW 8%	28.64							
	Total	386.64							
	Plinth Beam								
	North side	2	131.50		0.20	52.60			
	South Side	2	19.00		0.20	7.60			
	East side	2	50.40		0.20	20.16			
	West side	2	45.50		0.20	18.20			
						Total	98.56	386.64	Sqm 38107.00

9 KSRB 4.2.7 : Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplasticiser @3lts conforming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintles and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (P. No. 14/ I.No. 4.12)

	Basic Rate	6045.00							
	AW 8%	483.60							



BRUHATH BANGALÖRE MAHANAGARA PALIKE



Index:
Total No Of Flat: 62Nos

Typical Layout plan at Suvey No.9 HAGADUR.

Executive Engineer
Mahadevapura Division

Assist Executive Engineer
WhiteField Sub Division

Assist Engineer
Ward No. 84

SN	Description	No	L	B	H	Qty	Rate	Unit	Amount	
	Rcc Drain									
	Main Road	2	120			0.15	36.00			
	Cross road	2	120			0.15	36.00			
	For Drians Walls									
	Rcc Drain									
	Main Road	2	120			0.6	288.00			
	Cross road	2	120			0.6	288.00			
						Total	648.00	800.30	sqm	518594
5	Providing and laying plain / reinforced cement concrete for box drain walls of thickness 10 cm to 20 cm including centring shuttering for work etc., complete as per approved drawing and design Morth specification No1700,1700,2200, Pcc m20 grade using concrete mixer. (P.271/it 37.59.1)									
	Basic Rate	6862.00								
	Area veightage 6%	411.72								
	Total	7273.72								
	Rcc Drain									
	Main Road	2	120	0.9	0.125		27.00			
	Cross road	2	120	0.9	0.125		27.00			
	For Drians Walls									
	Rcc Drain									
	Main Road	4	120	0.15	0.6		43.20			
	Cross road	4	120	0.15	0.6		43.20			
						Total	140.40	7273.72	Cum	1021230
6	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. (TMT bars FC 500)(P.18/446.2)									
	Basic Rate	70966.00								
	Area Weightage 6%	4257.96								
	Total	75223.96								
	For Drain									
	Qty @ 1000 Cum		0.045	140.40			6.32			
						Total	6.32	75223.96	T	475265
7	Providing and and fixing Precast Concrete slab 10 CM thick with all lead and lift as per specification (Data Rate Approved) 2018-19									
	Basic Rate	1922.00								
	Total	1922.00								
	Rcc Drain									
	Main Road	2	120	0.9			216.00			
	Cross road	2	120	0.9			216.00			
						Total	432.00	1922.00	sqm	830304
8	KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P.No.155 L.No.20.18)									
	Basic Rate	1888.00								
	AW 6%	113.28								
	Total	2001.28								
	Asphalt Road	1	120	6.0	0.23		165.60			
		1	120	3.0	0.23		82.80			
						Total	248.40	2001.28	Cum	497118
9	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 (P.No.158 L.No.21.2)									