

തദ്ദേശ സ്വയംഭരണ വകുപ്പ് ചീഫ് എഞ്ചിനീയറുടെ കാര്യാലയം.  
ലോക്കൽ ഇൻഫ്രാസ്ട്രക്ചർ ഡെവലപ്മെന്റ് & എഞ്ചിനീയറിംഗ് വിംഗ്  
റവന്യൂ കോംപ്ലക്സ്, മൂന്നാം നില  
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നം. ഡിബി3-6512(B)/2013/സിഇ/തസ്വഭവ

തീയതി 13/04/2021

**പരിപത്രം**

വിഷയം : തസ്വഭവ (സാങ്കേതിക വിഭാഗം) - അംഗീകൃത Observed data-കൾ പ്രസിദ്ധപ്പെടുത്തുന്നത് - സംബന്ധിച്ച്

സൂചന : ഈ ഓഫീസിൽ നിന്നുള്ള 05.04.2021, 26.03.2021, 30.03.2021 തീയതികളിലെ പരിപത്രങ്ങൾ

തദ്ദേശ സ്വയംഭരണ വകുപ്പ് എഞ്ചിനീയറിംഗ് വിഭാഗത്തിലെ പൊതുമരാമത്ത് പ്രവൃത്തികളുടെ എസ്റ്റിമേറ്റുകളിൽ നിയമാനുസൃതമല്ലാതെ പല രീതിയിലുള്ള Observed data-കൾ ഉപയോഗിച്ച് വരുന്നത് ശ്രദ്ധയിൽപ്പെട്ടിട്ടുണ്ട്. ആയതിന് ഒരു ഏകീകൃത സ്വഭാവം വരുത്തുന്നതിലേയ്ക്കായി തദ്ദേശ സ്വയംഭരണ വകുപ്പ് ചീഫ് എഞ്ചിനീയർ തലത്തിൽ അംഗീകരിച്ച Observed data-കൾ അനുബന്ധമായി ഇതോടൊപ്പം പ്രസിദ്ധപ്പെടുത്തുന്നു. ആയത് PRICE-2-ലും ഉൾപ്പെടുത്തുന്നതാണ്.

ഉള്ളടക്കം : Observed Data (7 nos)



ചീഫ് എഞ്ചിനീയർ

DRY RUBBLE MASONRY \_ Random rubble masonry with hard stone, including Through/Bond stone in foundation and superstructure including packing to compactness to lines and levels, cost and conveyance of all materials labour charges etc. complete as per approved drawing and relevant technical specifications.

Item Code	Description	Unit	Quantity	Rate	Amount
M-148	Unit = cum a) Material Stone for RR Masonry	cum	1.00000	987.08	987.08
M-361	Through Bond Stone (7 nos 0.24 x 0.24 x 0.39 = 0.16 cum)	no	7.00000	15.35	107.45
L-12	Mate	Day	0.12000	407.00	48.84
L-11	Mason (1st class)	Day	1.20000	487.00	584.40
L-29	Mazdoor (Unskilled)	Day	1.80000	368.00	662.40
L-21	Bhisti	Day	0.08000	407.00	32.56
	cost for one cum				2422.73
	say				2422.73

Providing Plain cement concrete for road work CC 1:2:4 (1 cement: 2 fine aggregate: 4 course aggregate) laid to required slope and camber in panels (@ 3 m c/c) as required including compaction, finishing and tamping etc complete. Max. size of course aggregate not exceeding 25mm, mixed in concrete mixer etc complete as per specification (i) Nominal mix (1:2:4)

Item Code	Description	Unit	Quantity	Rate	Amount
	Unit = cum   a) Material				
M-081	Cement	tonne	0.33000	5792.24	1911.44
M-348	Sand	cum	0.45000	1303.77	586.70
M-359	20 mm Aggregate	cum	0.54000	1403.77	758.04
	10 mm Aggregate				
M-360		cum	0.36000	1403.77	505.36
	b) Labour				
L-12	Mate	Day	0.08000	407.00	32.56
L-11	Mason (1st class)	Day	0.10000	487.00	48.70
L-29	Mazdoor (Unskilled)	Day	1.63000	368.00	599.84
	Bhisti				
L-21		Day	0.27000	407.00	109.89
	c) Machinery				
P&M-146	Concrete mixer 0.28/0.4 cum capacity	hour	0.40000	100.00	40.00
P&M-156	Needle vibrator	hour	0.12000	43.75	5.25
	Formwork @4% of (a+b+c)	cum	1.00000	183.91	183.91
	cost for one cum				4781.68
	say				4781.68

Providing Plain cement concrete for wearing coat CC 1:2:4 (1 cement: 2 fine aggregate: 4 coarse aggregate) laid to required slope as required including compaction, finishing and tamping etc. complete. Max. size of coarse aggregate not exceeding 25mm, mixed in concrete mixer etc. complete as per specification (i) Nominal mix (1:2:4)

Item Code	Description	Unit	Quantity	Rate	Amount
	Unit = cum   a) Material				
M-081	Cement	tonne	0.33000	5792.24	1911.44
M-348	Sand	cum	0.45000	1303.77	586.70
M-359	20 mm Aggregate	cum	0.54000	1403.77	758.04
M-360	10 mm Aggregate	cum	0.36000	1403.77	505.36
	b) Labour				
L-12	Mate	Day	0.08000	407.00	32.56
L-11	Mason (1st class)	Day	0.10000	487.00	48.70
L-29	Mazdoor (Unskilled)	Day	1.63000	368.00	599.84
L-21	Bhisti	Day	0.27000	407.00	109.89
	c) Machinery				
P&M-146	Concrete mixer 0.28/0.4 cum capacity	hour	0.40000	100.00	40.00
	cost for one cum				4592.52
	say				4592.52

Providing plain/reinforced concrete(1 cement:2 fine aggregate: 4 course aggregate) for substructure as per drawings and technical specifications Clause 802, 803, 1202 & 1203 as required including compaction, finishing and tamping etc complete. Max. size of course aggregate not exceeding 25mm , mixed in concrete mixer etc complete as per specification  
(i) Nominal mix (1:2:4)

Item Code	Description	Unit	Quantity	Rate	Amount
	Unit = cum   a) Material				
M-081	Cement	tonne	0.33000	5792.24	1911.44
M-348	Sand	cum	0.45000	1303.77	586.70
M-359	20 mm Aggregate	cum	0.54000	1403.77	758.04
M-360	10 mm Aggregate	cum	0.36000	1403.77	505.36
	b) Labour				
L-12	Mate	Day	0.08000	407.00	32.56
L-11	Mason (1st class)	Day	0.10000	487.00	48.70
L-29	Mazdoor (Unskilled)	Day	1.63000	368.00	599.84
L-21	Bhisti	Day	0.27000	407.00	109.89
	c) Machinery				
P&M-146	Concrete mixer 0.28/0.4 cum	hour	0.40000	100.00	40.00
	Formwork @4% of (a+b+c)	cum	1.00000	183.70	183.70
	cost for one cum				4776.22
	say				4776.22

Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.35 mm (+0.05%), total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling/self tapping screws of size (5.5x55mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.

Item Code	Description	Unit	Quantity	Rate	Amount
	Details of cost for 216.14 sqm MATERIAL: (External dimension of plinth). Area of roof 20.2x10.70 m = 216.14 sqm. MATERIAL: Sheets used = 20 Nos x 10.70m x 1.06m = 226.84 sqm Add 3% wastage = 6.81 Total = 233.65 sqm Precoated glavanished iron profile sheet 0.35 mm TCT	sqm	233.65000	367.00	85749.55
MR					
1023	Galvanised steel J or L hooks 8 mm dia	10 nos	476.00000	115.00	5474.00
1208	Bitumen washer	100 nos	476.00000	30.00	142.80
1209	G.I. Plain washer thick Carriage	100 nos	476.00000	35.00	166.60
9977	of bolts and nuts, washers etc.	L.S	8.06000	1.73	13.94
9999	Sundries LABOUR:	L.S	39.52000	1.73	68.37
0130	Mistry	Day	2.34000	487.00	1139.58
0112	Carpenter 2nd class	Day	9.34000	448.00	4184.32
0114	Beldar	Day	9.34000	368.00	3437.12
	cost for 216.14 sqm				100376.28
	cost for one sqm				464.40
	say				464.40

Plastic roads- Packed Bitumen Rate <br> 20mm thick Open-Graded Premix Carpet using Bituminous (penetration grade/modified bitumen) Binder -<br> Bitumen S-65 - Packed Bitumen and Shredded Plastic<br> <br> 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, using HM Plant attached with open pugmill. Heating of aggregate at 150 degree Celsius to 170 degree Celsius, then transferring the hot aggregate to pugmill and add shredded plastic @10.22 kg/100m2 mixing well to form a uniform thin layer of plastic over - hot aggregate and adding hot bitumen (150 to 165 degree Celsius) @ 13.578 Kg/10m2 and mix well, laying and rolling with a 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 <br> Case - I By Manual Means <br> <br> (II) Bitumen (S-65)

Item Code	Description	Unit	Quantity	Rate	Amount
	Unit = sqm   Taking output = 500 sqm (10 cum)     a) Labour    				
L-12	Mate	Day	1.08000	407.00	439.56
L-29	Mazdoor (Unskilled)	Day	22.00000	368.00	8096.00
L-30	Mazdoor (Semi skilled)	Day	8.00000	368.00	2944.00
P&M-154	b) Machinery				
	Mixall 6-10 T capacity	hour	4.00000	437.50	1750.00
P&M-144-02	Bitumen boiler oil fired (1000 litre) fitted with spray set	hour	4.00000	100.00	400.00
P&M-160	Three wheel 80 -100 KN Static Roller	hour	2.00000	200.00	400.00
	c) Materials				
M-408	Bitumen S-65 Packed @ 156 kg Drum	tonne	0.67890	39900.00	27088.11
M-294C	Carriage of Bitumen	tonne	0.67890	103.77	70.45
M-334	Crushed stone chipping, 13.2mm to 5.6mm @ 0.27 cum per 10 sqm	hour	13.50000	1303.77	17600.90
M-397	Shredded waste plastic	tonne	0.05110	22000.00	1124.20
MR	Pugmill	hour	4.00000	150.00	600.00
	cost for 500.0 sqm				60513.22
	cost for one sqm				121.03
	say				121.03

Plastic Roads - Bitumen S-65  
 Plastic roads- Bulk Bitumen Rate  
 20mm thick Open-Graded Premix Carpet using Bituminous (penetration grade/modified bitumen) Binder  
 Bitumen S-65 - Bulk Bitumen and Shredded Plastic  
 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, using HM Plant attached with open pugmill. Heating of aggregate at 150 degree Celsius to 170 degree Celsius, then transferring the hot aggregate to pugmill and add shredded plastic @10.22 kg/100m<sup>2</sup> mixing well to form a uniform thin layer of plastic over - hot aggregate and adding hot bitumen (150 to 165 degree Celsius) @ 13.578 Kg/10m<sup>2</sup> and mix well, laying and rolling with a 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  
 Case - I By Manual Means  
 (II) Bitumen (S-65)

Item Code	Description	Unit	Quantity	Rate	Amount
	Unit = sqm Taking output = 500 sqm (10 cum) a) Labour				
L-12	Mate	Day	1.08000	407.00	439.56
L-29	Mazdoor (Unskilled)	Day	22.00000	368.00	8096.00
L-30	Mazdoor (Semi skilled)	Day	8.00000	368.00	2944.00
	b) Machinery				
P&M-154	Mixall 6-10 T capacity Bitumen boiler oil fired	hour	4.00000	437.50	1750.00
P&M-144-02	(1000 litre) capacity fitted with spray set	hour	4.00000	100.00	400.00
P&M-160	Three wheel 80 -100 KN Static Roller	hour	2.00000	200.00	400.00
	c) Material				
M-400	Bitumen S-65	tonne	0.67890	34600.00	23489.94
M-294C	Carriage of Bitumen Shredded waste plastic	tonne	0.67890	103.77	70.45
M-397	incl carriage @ 7% of bitumen in the Original Data (0.1022 kg/m <sup>2</sup> )	tonne	0.05110	22000.00	1124.20
M-334	Crushed stone chipping, 13.2mm to 5.6mm @ 0.27 cum per 10 sqm	hour	13.50000	1303.77	17600.90
MR	Pugmill	hour	4.00000	150.00	600.00
	cost for 500.0 sqm				56915.05
	cost for one sqm				113.83
	say				113.83