

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
<b>PART 1. PRELIMINARY WORKS</b>								
1	1.01	Clearing and grubbing road land including uprooting all vegetation, grass, bush shrubs,.....	APPROCH 1  1 APPROCH 2  1	120  1600	24  24		SQ M  SQ M TOTAL Ha Ha	2880  38400 41280 4.128 4.2
2	1.02	Installation of a steel portable barricade.....	2	80	-	-	NO	160
3	1.03	Supplying and fixing the necessary sign boards.....(QTY. considered in road work)	-	-	-	-	-	0
4	1.04	Dismantling of structures and sorting of the dismantled material,.....(provisional qty)  a) Dismantling bricks / stone masonry,  b) Dismantling of Concrete Structures					cum  cum	200  100
5	1.05	Taking one 100 mm bore hole at each foundation location of flyover proper and one each in approaches.....  a) Boring in all strata.  b) Drilling in hard rock.	38  38	16  4	-  -	-  -	RM  RM	608  152

DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM

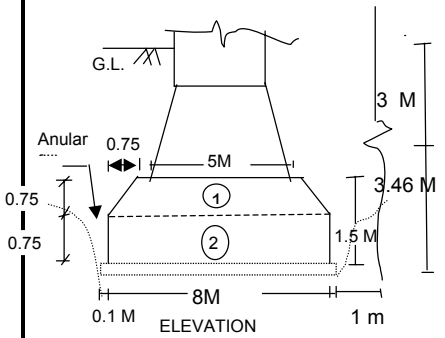
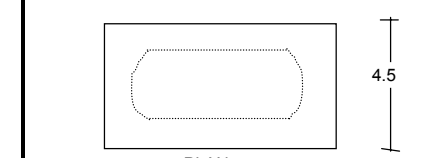
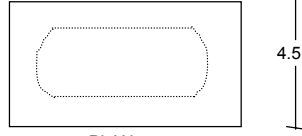
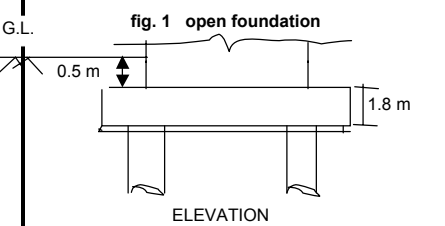
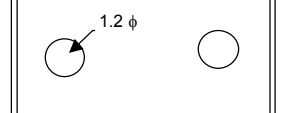
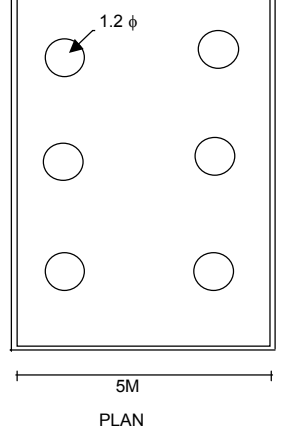
(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

MEASUREMENT SHEET

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
<b>PART 2 FOUNDATION AND SUBSTRUCTURE</b>								
SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
1	2.01	Earthwork in Excavation for foundation for Structures in all types of Strata other than rock .....						
		1) a) Soils of all types upto 3m						
		 <p>open foundation</p> <p>1x(10x2)=20</p> <p>9.1 4.7 3</p> <p>cum 2566.2</p>						
		 <p>Pile foundation</p> <p>1x(6x2)=12</p> <p>8.7 5.2 2.4</p> <p>cum 1302.91</p>						
		 <p>abutment</p> <p>1x(2x2)=4</p> <p>10 6.2 2.4</p> <p>cum 595.20</p>						
		total						1898.11
		 <p>well foundation</p> <p>1x(1x2)=2</p> <p>10 10 2.6</p> <p>cum 520.00</p>						
		 <p>stair case</p> <p>4</p> <p>2 2 1.5</p> <p>cum 24.00</p>						
		total						5008.31
		say						5009.00
		 <p>fig. 2 pile foundation (pier)</p>						

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.		
		b) Soils of all types greater than 3m depth	open foundation pier 1x(10x2)=20	9.10	4.70	2.00	cum	1710.80		
							say	<b>1711.00</b>		
		2) Excavation foundation of structure in rock by wedging / chiselling / controlled blasting or line drilling and mechanical means including.....	1x(10x2)=20	9.1	4.7	1.46	cum	<b>1249.00</b>		
2	2.02	Providing Trial Pits to find out the utilities..... a) Soils of all types upto 3m depth b) Soils of all types greater than 3m depth	2 -	24 -	3 -	3 -	cum cum	<b>432.00</b> <b>0.00</b>		
3	2.03	Providing and laying in situ M15 grade bedding concrete in foundation ,annular fillingbelow pile cap including.....  a) annular filling  b) 100 mm th. p.c.c. for foundation	open foundation 1x(10x2)=20 <b>Pile foundation</b> pier 1x(6x2)=12 abutment 1x(2x2)=4 <b>well foundation</b> 1x(1x2)=2 <b>stair case</b> 4	volume of excavation up to 1.5m depth =64.16m <sup>3</sup>  volume of foundation up to 1.5m depth =48.96m <sup>3</sup>  Hence volume of annular filling =15.2m <sup>3</sup>			cum	304.00		
				8.2	4.7	0.1			cum	77.08
				8.7	5.200	0.1			cum	54.29
				10.0	6.200	0.1			cum	24.80
				@ area=	78.500	0.1			cum	15.70
				2	2.0	0.1			cum	1.60
						total	<b>477.47</b>			
						say	<b>478.00</b>			



DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM

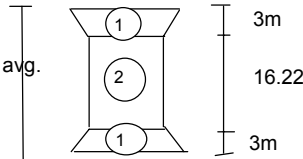
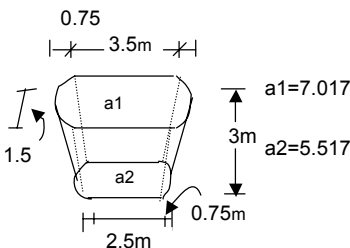
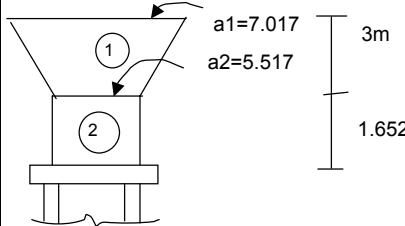
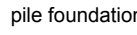
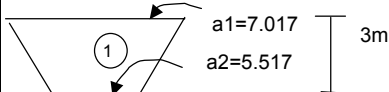

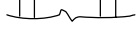
(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

MEASUREMENT SHEET

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
8	2.08	Providing and laying in situ M-30 grade reinforced cement concrete in RCC piers,abutments,staircase column, RE wall,dirt wall etc.....	<b>pier on open foundation</b>					
			PORTION 1 2x(10x2)=40			VOLUME=(a1+a2+sqrt(a1xa2))xh/3=18.80	cum	752.00
			PORTION 2 1x(10x2)=20			volume =89.41	cum	1789.60
			<b>pier on pile foundation</b>					
			PORTION 1 1x(6x2)=12			VOLUME=(a1+a2+sqrt(a1xa2))xh/3=18.80	cum	225.60
			PORTION 2 1x(6x2)=12			volume =9.11	cum	109.37
			<b>pier on well foundation</b>					
			PORTION 1			VOLUME=(a1+a2+sqrt(a1xa2))xh/3=18.80	cum	37.60
			PORTION 2 1x(1x2)=2			volume =5.681	cum	11.37
			<b>staircase</b> 4	13	0.400	0.400	cum	8.32
			<b>ABUTMENT</b> 1x(2*2)=4	9.8	1.2	2.8	cum	131.71
			<b>RETANING WALL</b> 1x(2*2)=4	1.8	0.50	5.397	cum	19.43
			<b>DIRT WALL</b> 1x(2*2)=4	9.8	0.30	2.597	cum	30.54
			<b>Total say</b>					<b>3115.54</b> <b>3116.00</b>

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.	
9	2.09	Providing and laying in situ M-30 grade RCC caps and pedestal over pier and abutment..... 	<b>pier caps</b>						
			PORTION 1						
			1x(17*2)=34	9	3.00	0.600m	CUM	550.80	
			PORTION 2						
			1x(17*2)=34	VOLUME=(a1+a2+sqrt(a1xa2))xh/3=20.63			cum	701.42	
			<b>pedestal</b>						
			1x(144x2)=288	0.60	0.60	0.40	CUM	41.47	
							total	<b>1293.69</b>	
							say	<b>1294.00</b>	
10	2.10	providing and fixing <b>H.Y.S.D.</b> Steel bars of various diameter in foundation of R.C.C. In piles, piles caps, foundations, pier caps, abutment wall, dirt wall, pedestal as per.....  1) foundation of pier/column 2) pier/column, pier cap, abutment, dirt wall, Retaining wall 3) RCC piles 4) pile caps 5) well caps 6) pedestal 7) well staning 8) well curb							
			@	80	kg/m3	MT	77.36		
			@	120	kg/m3	MT	524.19		
			@	80	kg/m3	MT	131.10		
			@	100	kg/m3	MT	134.20		
			@	120	kg/m3	MT	28.32		
			@	80	kg/m3	MT	3.32		
			@	20	kg/m3	MT	19.90		
			@	80	kg/m3	MT	14.24		
						total	932.63		
						say	<b>935.00</b>		
11	2.11	Providing and applying one coat of zinc-rich epoxy primer and two coats of coal tar epoxy paint of reqd. thickness as per specifications to all concrete surfaces in contact with earth.....					SQ-M	<b>2620.00</b>	

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
12	2.12	Providing and applying one coat Epoxy Phenolic primer of DFT 50 micron and two coats of Epoxy Phenolic coating of DFT 100 microns each or any other equivalent epoxy coating system to all concrete surfaces exposed to atmosphere in superstructure and substructure including.....(not considered)	-	-	-	-	SQ-M	0.00
13	2.13	Dewatering including diversion of stream providing cofferdam bunds etc.....						
		non perinial river	10x2=20	9.1	4.70	6.5	cum	5560.10
		perinial river	-	-	-	-	cum	0.00
						say	<b>5561.00</b>	
14	2.14	Sinking of well foundation in all types of soil and murum dia.10m and depth up to 20 m etc. ....	1x(1x2)=2	19			RM	38.00
15	2.15	Providing and laying in situ <b>M-20</b> grade reinforced cement concrete in <b>well steining</b> including shuttering ,compacting,curing e.t.c.....	1x(1x2)=2	14.00	@ area=	35.51	cum	994.38
							say	<b>995.00</b>
16	2.16	Providing and laying in situ <b>M-25</b> grade reinforced cement concrete in <b>well curb</b> including shuttering ,compacting,curing e.t.c.....	1x(1x2)=2	@ area=	35.5134	2.5	cum	177.57
							say	<b>178.00</b>
17	2.17	Providing and setting out mild steel cutting edge in well curb in situ , e.t.c.....	1x(1x2)=2	@ perimeter=	31.4	@ 90 kg/m	MT	5.65
							say	<b>6.00</b>

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

**(ROAD NO.-10 )**

**(From Ch: 0+460 TO 2+750 )**

**MEASUREMENT SHEET**

REF.DRG. NO.-2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.	
18	2.18	Providing and laying in situ <b>M-30</b> grade reinforced cement concrete in <b>pile cap/well cap</b> including dewatering ,shuttering ,compacting,curing e.t.c.....(ref.fig 1)	<b>pile cap</b>						
			pier						
			1x(6x2)=12	8.5	5.00	1.8	cum	918.00	
			abutment						
			1x(2x2)=4	9.8	6.00	1.8	cum	423.36	
							total	1341.36	
							say	1342.00	
			<b>well cap</b>						
			1x(1x2)=2	@ area=	78.50	1.50	cum	235.50	
							say	236.00	
							total	<b>1578.00</b>	
19	2.19	Providing and filling in well sand/rubble in situ ,compacting,curing e.t.c.....	1x(1x2)=2	@ area=	42.9866	13.4	cum	1152.04	
			1x(18x2)=36	31.7	1.5	0.332	cum	568.32	
							total	1720.36	
							say	<b>1721.00</b>	
20	2.20	Providing and laying in situ <b>M-15</b> grade reinforced cement concrete in <b>bottom plug</b> ,compacting,curing e.t.c.....	1x(1x2)=2	@ area=	60.7433	2.8	cum	340.16	
							say	<b>340.00</b>	
21	2.21	Providing and laying in situ <b>M-15</b> grade reinforced cement concrete in <b>top plug</b> ,compacting,curing e.t.c.....	1x(1x2)=2	@ area=	42.9866	0.3	cum	25.79	
							say	<b>26.00</b>	
22	2.22	Providing and installing 6 mm MS liner for bored-cast-in-situ concrete piles including.....	72+32=104	8	@ 180 kg/m		MT	149.76	
							say	<b>150.00</b>	

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

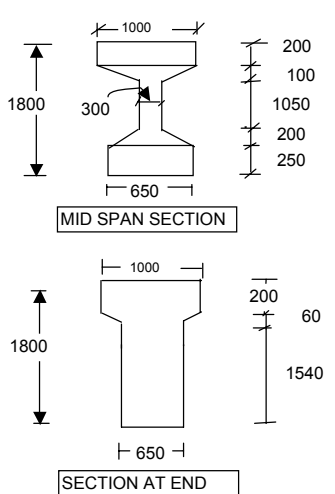
(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
<b>PART 3 SUPERSTRUCTURE</b>								
1	3.01	Providing and fixing 12.7/15.2 mm diameter low relaxation "prestressing steel strands" conforming to class II of IS:14268 for post tensioned girder including cutting.....		@	50	Kg/m3	MT	195.05
							say	<b>196.00</b>
2	3.02	Providing and laying in position M-40 grade P.S.C. girder.....  	MID SECTION 1x(72x2)=144	30.1	@ AREA=	0.838	CUM	3630.06
			BARING SECTION 1x(72x2)=144	0.6	@ AREA=	1.044	CUM	90.20
			END SECTION 1x(72x2)=144	1	@ AREA=	1.25	CUM	180.00
							TOTAL	<b>3900.26</b>
							say	<b>3901</b>
3	3.03	Providing and fixing POT cum P.T.F.E. bearing to true line and position.....	a) POT fixed bearing 144			CAPACITY =12	NO	144.00
			b) POT cum PTFE 144			CAPACITY =12	NO	144.00
4	3.04	Providing and laying in situ 240 mm thick M-40 grade Reinforced cement concrete deck slab and diaphragm.....  Intermediate diaphragm (300mm th).  End diaphragm (600mm th.)	DECK SLAB 1x(18x2)=36	31.7	9.90	0.24	CUM	2711.49
			1x(72x2)=144	0.3	@ AREA=	10.45	CUM	451.44
			1x(72x2)=144	0.5	@ AREA=	9.21	CUM	663.12
							TOTAL	3826.05
							say	<b>3827.00</b>
5	3.05	Providing and laying controlled in-situ cement concrete of M40 grade in Box Girders including.....(no box girder)	-	-	-	-	cum	<b>0.00</b>

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
6	3.06	Providing and fixing H.Y.S.D. Fe-415 steel bars of various diameter for all RCC work in superstructure .....						
		1) psc girder		@	100	kg/m3	MT	390.10
		2)deck slab, diphrams		@	120	kg/m3	MT	459.24
		3) waist slab, landing slab		@	80	kg/m3	MT	1.793
		4) r .c.c. beams		@	120	kg/m3	MT	1.43
							TOTAL	852.56
							say	<b>853.00</b>
7	3.07	Providing and applying one coat of phenolic primer ..... ..(QTY. not considered)	-	-	-	-	SQ-M	0.00
8	3.08	Providing and applying 3 coats of water based cement paint of approved quality to the inner concrete surfaces.....	-	-	-	-	SQ-M	0.00
9	3.09	providing and carrying out load test..... @ 120T ,SUPERIMPOSED	1	-	-	-	NO	1
10	3.10	providing and laying RCC M-30 in waist slab,landing slab,rcc beams.....						
		waist slab	16.0	2.891	1.500	0.150	cum	10.41
		steps	2X9X8=144	1.5	@ AREA=	0.030	cum	6.48
		landing slab	16.000	3	1.0	0.250	cum	12.00
		rcc beams	20.000	4.400	0.230	0.350	cum	7.08
			20.000	3.000	0.230	0.350	cum	4.83
							total	40.80
							say	<b>41.00</b>
11	3.11	providing and fixing chequered tiles.....	16.00	plan area =	9.3m2		sq. m	148.80
							say	<b>149.00</b>

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
<b>PART 4 MISCELLANEOUS</b>								
1	4.01	Providing and casting RCC Crash Barrier in M40 controlled concrete with cast-in-situ or precast members as per detailed drawings including.....	1(1x2)=2	215.1			RM	430.2
							SAY	<b>431</b>
2	4.02	Providing and laying 100 mm HDPE pipe in true line and level inside the.....	10x18=180	31.7				5706
3	4.03	providing and laying <b>M-25 grade</b> slab RCC in .....						
		1) footpath cover slab	1x(18x2)=36	31.70	1.50	0.100	cum	171.18
		2) median	1x(18x2)=36	31.70	0.6	0.302	cum	206.79
		3) edge beam/railing beam	1x(15x2)=30	31.70	0.3	0.362	cum	103.28
		4) road kerb	1x(18x2)=36	31.70	@ area =	0.0604	cum	68.93
							TOTAL	550.17
							say	<b>550.00</b>
4	4.04	Providing and fixing <b>H.Y.S.D. Steel bars</b> of various diameter .....						
		1) footpath cover slab		@	50	kg/m3	MT	8.56
		2) edge beam		@	75	kg/m3	MT	7.75
		3) road kerb		@	50	kg/m3	MT	3.45
		4) Median		@	50	kg/m3	MT	10.34
							TOTAL	30.09
							say	<b>31.00</b>
5	4.05	Providing and applying one coat Epoxy Phenolic primer of DFT 50 micron and two coats of Epoxy Phenolic coating of DFT 100 microns each or any other equivalent epoxy coating system to all concrete surfaces exposed to atmosphere in superstructure and .....					SQ-M	0.00

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

**(ROAD NO.-10 )**

**(From Ch: 0+460 TO 2+750 )**

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
6	4.06	Providing and fixing G.I. Drainage spouts of 100 mm dia including grating with suitable clean out fixtures including .....	6x(18x2)=216				NOS	216.00
7	4.07	Providing and fixing G.I. Longitudinal runner pipe 150mm. dimeter.....	-	-			RM SAY	0.00 0.00
8	4.08	Providing and fixing 150 mm dia. GI down take pipes including.....	216	2.00	-	-	RM	432.00
9	4.09	Providing and constructing catch pit 0.90 m x 0.45 m x 1.2 m deep.....	2	-	-	-	NOS	2.00
10	4.10	Providing and fixing precast concrete 300 mm dia. pipes, type NP3,.....	2	15.00	-	-	RM	30.00
11	4.11	Providing and fixing in position strip seal type expansion joints as per detailed drawing and approved specifications for movement up to 40mm.....	19	19.80			RM SAY	376.2 377
12	4.12	Providing and applying primer coat using bituminous emulsion.....	1x(18x2)=36	31.70	7.5	-	sq-m	8559
13	4.13	Providing and applying tack coat using bituminous emulsion or cut back primer over primed / black top surface .....	1x(18x2)=36	31.70	7.5	-	sq-m	8559
14	4.14	providing and laying mastic asphalt coat @12mm th. over the prepared surface of deck slab.	1x(18x2)=36	31.70	7.5	-	sq-m	8559
15	4.15	providing and laying dense bituminous macadam @ 50mm thick.....	1x(18x2)=36	31.70	7.5	0.50	cum SAY	4279.50 4280.00
16	4.16	providing and laying bituminous concrete @25mm thick.....	1x(18x2)=36	31.70	7.5	0.25	cum SAY	2139.75 2140.00

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
17	4.17	Providing & fixing discontinuous M25 PCC precast kerb stones of size 600 x 300 x 1200 mm.....	400	-	-	-	NOS	400.00
18	4.18	Providing and fixing four pillars, one at each corner of each of the bridge of approved architectural.....	4	@	2 m2	-	sq-m	8.00
19	4.19	Road Markings.....(considered in road work)	-	-	-	-	-	0.00
20	4.20	Providing & fixing in position 100 mm Dia. A.C. pipes as.....	100	-	-	-	NOS	100.00
21	4.21	Providing & fixing in position MS Railing over RCC Crash Barrier and for staircase including.....  1) crash barrier  2) staircase	1(1x2)=2	215.1  52			RM  RM  total  SAY	430.2  52.00  482.20  483.00
22	4.22	Providing & Fixing Bituminous Filler Pad.....	18	31.7	-	-	RM  SAY	570.60  571.00
23	4.23	Providing and casting RCC Face panel in M30 controlled.....	-	-	-	-	-	0.00
24	4.24	Construction of RCC railing of M20 Grade in-situ with 20 mm nominal size aggregate.....	1x(15x2)=30	31.7			RM	951.00
25	4.25	Providing and filling behind abutment and return wall with selected fill of approved quality .....	1x(2*2)=4	8.7	1.20	5.397	cum  SAY	225.38  226.00
26	4.26	Providing and fixing Neoprene bearing .....	-	-	-	-	cu. centi meter	0.00

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

(ROAD NO.-10 )

(From Ch: 0+460 TO 2+750 )

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
<b>PART 5 APPROACHE</b>								
1	5.01	Excavation for foundation of structures including dewatering, shoring and strutting as necessary and backfilling the trenches with .....	R. E. WALL	120x2=240	1.5	1.5	cum	540
			Gabian wall	1600	24	1.5	cum	57600
							total	<b>58140</b>
2	5.02	Providing and laying in situ PCC M30 grade bedding concrete below facia element / foundation including.....	1x(2x1)=2	120	0.6	0.3	cum	43.2
							SAY	<b>44</b>
3	5.03	Providing & fixing of precast facia elements in RCC M30 grade for reinforced soil embankment for approach .....	1x(1*2)=2	120	avg.ht=	3.963	SQ-M	<b>951</b>
4	5.04	Providing and laying in-situ RCC M-30 grade friction slab.....	1x(2*1)=2	120	3.45	0.25	cum	207.00
							say	<b>207.00</b>
5	5.05	Providing and fixing in position HYSD Fe415 reinforcing bars of various diameters for the above all RCC works .....		@	100	kg/m3	MT	<b>20.7</b>
							say	<b>20.0</b>
6	5.06	Providing earth work in embankment by using mechanical means with approved material obtained from borrow.....  1) R.E.WALL	R. E. WALL	120	18.4	2.962	cum	6540.10
							say	<b>6541.00</b>
7	5.07	Providing 300mm thick layer of earth work in embankment by using mechanical means.....(considered in road work)	-	-	-	-	cum	<b>0</b>
8	5.08	Providing and laying Granular Sub Base (Structural layer ) Close Graded conforming .....(considered in road work)	-	-	-	-	cum	<b>0</b>

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

**(ROAD NO.-10 )**

**(From Ch: 0+460 TO 2+750 )**

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.
9	5.09	Providing, laying, spreading and compacting specified graded crush stone in Granular Sub Base course (drainage layer) including.....(considered in road work)	-	-	-	-	cum	0
10	5.10	Providing and laying Dry Lean Concrete base including providing coarse and fine aggregate..... (considered in road work)	-	-	-	-	cum	0
11	5.11	Providing and applying tack coat using bituminous emulsion or cut back primer over primed / black top surface.....(considered in road work)	-	-	-	-	cum	0
12	5.12	Providing and applying tack coat using bituminous emulsion or cut back primer over primed / black top surface with emulsion.....(considered in road work)	-	-	-	-	cum	0
13	5.13	Providing and laying Pavement Quality Concrete of M 35 grade obtained from approved including .....(considered in road work)	-	-	-	-	cum	0
14	5.14	Providing and laying 40-100 mm thick compacted Dense Bituminous Macadam layer using B.T. chips .....(considered in road work)	-	-	-	-	cum	0
15	5.15	Providing and laying Bituminous Concrete in a single layer of 25mm to 50 mm compacted thickness on prepared surface using modified bitumen of grade approved by.....(considered in road work)	-	-	-	-	cum	0

**DPR FOR ROAD DEVELOPMENT IN NANDED UNDER JNNURM**

**(ROAD NO.-10 )**

**(From Ch: 0+460 TO 2+750 )**

**MEASUREMENT SHEET**

REF.DRG. NO. -2006069/BS/GAD-11/12

DATE:17/02/07

SR NO.	ITEM NO	DESCRIPTION	NO.	L	B	D	UNIT	QTY.	
16	5.16	Providing, laying, spreading and compacting specified graded stone aggregate to Wet mix macadam in layer of not exceeding 200 mm thk compacted including.....(considered in road work)	-	-	-	-	cum	0	
17	5.17	Providing and laying in position precast RCC pipes NP4 prestressed concrete pipes for culverts.....(considered in road work)	-	-	-	-	cum	0	
18	5.18	Providing and fixing of mechanically woven Double Twisted Hexagonal shaped wire mesh Gabian boxes of required section .....(note - +/- 0.5m variation in G.L. is considered in calculating quantities)	up to 6.5m ht.						
			2	480	16	m3/m	cum	15360	
			up to 5.5m ht.						
			2	760.0	12.25	m3/m	cum	18620	
			up to 4.5m ht.						
			2	410.0	9	m3/m	cum	7380	
							total	<b>41360</b>	
19	5.19	Backfilling in Gabian wall wall with approved material.....	vol. Of filling = total vol. At respective ht. - vol. Of gabian at that ht.						
			up to 6.5m ht.						
			1	480	21.3	( 6.5 - 1 ) = 5.5	cum	40872	
			up to 5.5m ht.						
			1	760.0	21.3	( 5.5 - 1 ) = 4.5	cum	54226	
			up to 5.5m ht.						
			1	410.0	21.3	( 4.5 - 1 ) = 3.5	cum	23903	
							total	<b>119001</b>	
20	5.20	Ground Improvement by removing unsuitable soil and backfilling with murrum.....	1	1600.0	24	1.5	cum	<b>57600.0</b>	