

**Name of work : Annual Rates for Maintenance and repairs (Road work) Ta- Radhanpur and Santalpur , under jurisdiction of R & B (Panchayat) Sub Division Radhanpur.**

**Index of Specification**

<b>Item No As Per Tender</b>	<b>Decription Of Item</b>	<b>Applicable Specification</b>	<b>Specification Booklet Attached</b>
1	Earthwork for embankment including breaking clods, dressing with all lead and lift (excluding watering and consolidation)(S.O.R P.No 187 Code No 26001)		
A	(A)From Borrow pits within land width (S.O.R P.No 187 Code No 26001A Sr.No 1)	P-10, It No.1B	Road Work Booklet
B	(B)From Borrow area within 0.5 Km.lead (upto 10 ton)(S.O.R P.No 187 Code No 26001BA Sr.No 2)	P-10, It No.1D	Road Work Booklet
C	(C)From Borrow area within 1.0 Km.lead (upto 10 ton) (S.O.R P.No 187 Code No 26001CA Sr.No 3)	P-10, It No.1D	Road Work Booklet
D	(D)From Borrow area within 2.0 Km. lead (upto 10 ton)(S.O.R P.No 187 Code No 26001DA Sr.No 4)	P-10, It No.1D	Road Work Booklet
E	(E)From Borrow area within 3.0 Km. lead (upto 10 ton)(S.O.R P.No 187 Code No 26001EA Sr.No 5)	P-10, It No.1D	Road Work Booklet
2	Earthwork in cutting in all sorts of soil and soft murrum including conveying and spreading the stuff, embankment as and where directed within 200meters from the end of the cutting with all required lead and lift.(S.O.R P.No 188 It.Code No. 26005, Sr.No 13)	P-26, It No.26	Road Work Booklet
3	Providing and fixing Hectometer as per I.R.C. type design including painting, lettering etc. complete.(ii) Fixing in C.C. 1:5:10(S.O.R P.No 194,It Code.26044B, Sr.No 81)	P-11, It No.30	Road Work Booklet
4	Providing and fixing guard stone as per I.R.C. type design including white washing etc. complete.(i) Fixing in Earth(S.O.R P.No 194 Code No 26045A, Sr.No 82)	P-12, It No.31	Road Work Booklet
5	Providing and fixing Boundary stone as per I.R.C. design including painting, carving lettering etc. complete.(i) Fixing in Earth(S.O.R P.No 195,It Code No.26046A, Sr.No 84)	P-75,It No.57	Road Work Booklet
6	Providing and fixing ordinary Kilometer stone of precast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design in C.C. 1:4:8 including letter and paints etc. complete (For N.H., S.H. and M.D.R.)(S.O.R P.No 195,It Code No.26047, Sr.No 86)	P-30, It No.09	Road Work Booklet
7	Supplying and fixing road sign board of M.S. plates and angle iron including painting, lettering etc. complete including fixing in C.C. 1:4:8 with necessary excavation etc. complete as per I.R.C. type design.(i) Non - Reflective type(S.O.R P.No 196,It Code.26054A, Sr.No 94)	P-31, It No.13	Road Work Booklet
8	Providing and fixing Pre Cast indicator stone of approved stone as per I.R.C. type design in C.C. 1:4:8 including white washing etc. complete.(i) Fixing in Earth (S.O.R P.No 195, It Cd No.26053A, Sr.No 92)	P-30, It No.08	Road Work Booklet
9	Pinting and lettering with enamel paint 3- coats etc complete.(i) Ordinary K.M. Stone for N.H. S.H. and M.D.R.		
A	(i) Ordinary K.M. Stone for N.H. S.H. and M.D.R. (S.O.R P.No 196,It Cd.26058A, Sr.No 99)	P-12, It No.31	Road Work Booklet
B	(ii) Ordinary K.M. Stone for O.D.R. and V.R. (S.O.R P.No 196,It Cd No.26058B, Sr.No 100)	P-12, It No.31	Road Work Booklet

Item No As Per Tender	Decription Of Item	Applicable Specification	Specification Booklet Attached
C	(iii) Fifth K.M. Stone .(S.O.R P.No 196, It Cd. 26058C,Sr.No 101)	P-10, It No.30	Road Work Booklet
D	(iv) Hectometer stone.(S.O.R P.No 196, It Cd No.26058D Sr.No 102)	P-11, It No.30	Road Work Booklet
E	(v) Road sign board. (S.O.R P.No 196,It Cd No.26058E Sr.No 103)	P-31, It No.13	Road Work Booklet
F	(vi) Village name board.(S.O.R P.No 196, It Cd NO.26058F Sr.No 104)	P-31, It No.14	Road Work Booklet
G	(vii)Junction board.(S.O.R P.No 196, It Cd No.26058G, Sr.No 105)	P-74, It No.56	Road Work Booklet
10	Charges for Clearing Road site by removing by ganda baval akadas, bordies etc. upto 1.5 mt On Both sides from edge of B.T. surface including serooting by Excavator machine &throwing away all stuff branches etc. with all lead and lift with all material,labour etc.comp.as directed.		
10.1	dense forest BY MECHANICAL MEANS (R.A. )	P-86, It No.78	Road Work Booklet
10.2	Scattered Forest MECHANICAL MEANS(R.A.)	P-86, It No.78	Road Work Booklet
10.3	dense forest By manual means (R.A. )	P-86, It No.78	Road Work Booklet
10.4	Scattered Forest By manual means (R.A. )	P-86, It No.78	Road Work Booklet
11	Geru/Chuna of road side trees including 30 cm wide patta of 3 coats of white bwashing at top & 90 cm wide patta of 3 coats of sona geru at bottom using saresh including cleaning the surface etc as directed (R.A)	P-112, It No.18.17	Road Work Booklet
12	Engaging earth Excavator incl. cleaning sites for hire charges of excavator incl diesel,1 labour and 1drivers etc complete as directed.(Hydraulic Excavator 1 cum bucket capacity @ 60 cum per hour)(RA)	-	-
13	Supplying and fixing reinforced concrete heavy duty non-pressure pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specifications including setting the pipes in C.M. 1:2 watering and laying (to level or slopes) of class NP3 of following internal daimeters (S.O.R P No 238 SR.No 138)		
	(i) 300mm dia. (upto 10 ton)(S.O.R P No.238 It Cd.26131)	P-58, It No.33	Road Work Booklet
	(ii) 450mm dia. (upto 10 ton)(S.O.R P No 238 It Cd 26132)	P-58, It No.33	Road Work Booklet
	(iii) 600mm dia. (upto 10 ton)(S.O.R P No 238 It Cd 26134)	P-58, It No.33	Road Work Booklet
	(v) 900mm dia. (upto 10 ton)(S.O.R P No 238 It Cd 26135)	P-58, It No.33	Road Work Booklet
	(vii) 1200mm dia. (upto 10 ton)(S.O.R P No238 It Cd 26137)	P-58, It No.33	Road Work Booklet
14	Supplying and Stacking of quarry spall of hard stone free of dis integrated Pieces, deleterious and organic matter including royalties & filling measure boxes with all lead and lift etc completed for road work (R.A.)	P-58, It No.33	Road Work Booklet
15	Supplying and stacking of machine crushed stone coarse aggregate chippings etc of hard stone of size 40mm to 63mm size free of disintegrated pieces,deleterious and orgenic matter including royalties & filling measure boxes with all lead and lift etc. completed for road work (R.A)	P-22, It No.4E	Road Work Booklet

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16	Supplying and stacking of hard morrum/sand/yellow earth/ binding material approved quality on road site including royalties & filling measure boxes with all lead and lift etc. road work (R.A)	P-32, It No.15	Road Work Booklet
17	Spreading the stone aggregate for solling & W.B.M. including filling the interstices forming the road surface to required camber & Gradient (i) 45mm to 63mm size M.C. aggregete (S.O.R. P.No 191 It Cd.26018A)	P-53, It No.27	Road Work Booklet
18	Spreading the binding material on road crust filling the gaps in metal and leveling to camber and gradient as directed.(S.O.R. P.No 191 It Cd.26020A)	P-23, It No.4A	Road Work Booklet
19	Providing and fixing pre-cast concrete kerb stone of gray cement based concrete block 30cm lenth, 30cm height and 15 cm thick of M 250 grade concret as per approved design and including exvation for fixing in proper line and leve, filling the joint with C:M (1 Cement : 3 fine sand) etc complete (S.O.R.P.No.135 It Cd.14032)	P-18, It No.3	Road Work Booklet
20	Providing and fixing pre-cast Rubber Dye / steel Dye inter locking concrete block 60mm thick with grade of concrete M300 pnumatic compressed / vibrated mechanically and as per approved design Confirming to IS 15658 : 2006 including 35 mm Sand layer for levelling and filling the joint with sand in proper line and level as per guidlines of IRC : SP 63-2018 etc. Complete.(S.O.R P.No.135 It Cd 14033)	Separate Sheet Attached	
21	Providing and laying 23cm thick rubble stone pitching on side slope on existing earthwork as per detailed drawing with pointing in CM 1:3 on rubble pitching and providing coarse sand bedding 10 thick as filter media cm etc complete (R.A)	Separate Sheet Attached	
22	Road marking with hot applied thermoplastic paints with reflectorising glass beads on bitumin surface providing and laying a hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250gms per sqm area, thickness of 2.5mm is excluding of surface applied glass beds as per IRC:35-2015. The finished surface to be level, uniform and free from streaks and holes. zebra patta /bump patta lane/center line/ edge line/cut patta. The white color marking should provide liminance coefficinet on cemend road shalll be min 130 mcd/m2/lux and Asphalt road shall be min 100 mcd/m2/lux during the service life during the day time. The marking should meet the performance criteria for night time reflectivity, wet reflectivity and skid resistance as mentioned in the section-15 of IRC 35-2015. Warranty for the Retro reflectivity should be two years.(S.O.R. P.No 244 It Cd.26161)	P-65, It No.41	Road Work Booklet

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23	Cat Eye / Road Stud / RPM: Supplying Raised Pavement Markers made of polycarbonate and ABS moulded body and reflective panels with Micro prismatic lens (No Glass bead lens) capable of providing total internal reflection of the light entering the lens face and shall support a load of 13635 kgs. tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 & DO III Dt 11.06. 1997. The height, width and length shall not exceed 20 mm, 130 mm and 130 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The body of the marker should having finger grip for easy and accurate placement and application with epoxy / bituminous Adhesive as recommended by the manufacturer of the marker. The color of the marker should be as per the IRC 35-2015 and as directed by Engineer-in-charge.((S.O.R. P.No 244 It Cd.26162)	Separate Sheet Attached	
24	Rolling and consolidation of soling including filling in depression which occur during the process, with power roler 8 tonne to 12 tonne.(S.O.R. P.No 191 It Cd.26021)	Separate Sheet Attached	
25	Cautionary Warning Sign :-Providing and fixing sing boards made out of 2mm aluminium sheet; size 90 x 90 x 90 cms. equilateral triangle as per design of IRC-67-1977. Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ;reflectorised with retro reflectivesheeting as per latest M.O.S.T.Specifications; 3.1m long stand postand frame fabricated from suitable sizeiron angle of 35 x 35 x 3mm, 75 x 75 x 6mm as required; painted with bestquality epoxy coatings in black andwhite bends. The details of symbol foreach board shall be as per theinstruction of engineer in charge. The fixing at site shall be in 1:2:4 CC blockof size 45 x 45 x 60 Cms. for each leg.including excavation, curing etc.complete under the supervision of engineer in charge.(A) Engineer Grade.....{SOR ITEMCODE-26092A P.No 201}	P-29, It No.7	Road Work Booklet
26	Flood gauge sign Providing and fixing sign board made out of 4mm aluminium composite sheet size200x43 cms rectangle as per design of IRC -67-2012 3.1 mtr long stand posted frame fabricated from suitable size iron angle ,coated with one coat of epoxy primer and two coat of best quality epoxy paint ,refectories with retro reflective engineering grade sheeting as per latetest M.O.S.T specification the fixing at site shall be in 1:2:4 cc block of size 45x45x60 cms including excavation ,curing etc.comp.B-high intensity grade sheeting(MR)	Separate Sheet Attached	

Item No As Per Tender	Decription Of Item	Applicable Specification	Specification Booklet Attached
27	Metal Beam Crash Barrier Type-A "W" Metal beam crash Barrier (Providing and erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metalbeam rail 70 cm above road /ground level fixed on ISMC series channel vertical post 150 x 75 x5 mm spaced 2m centre to centre 1.8 m high 1.1m below ground/road level all steel parts and fitments to be galvanised by hot dip process all fittings to conform to IS 1367 and IS 1364 metal beam rail to be fixed on the vertical post with aspacer of channel section 150 x 75 x 5 mm 330mm long complete as per clause 810) National Highway SOR	Separate Sheet Attached	
28	Excavation for foundation upto 1.5 m depth including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead.(A) Loose or soft soil ( A ) Loose or soft soil. ( P. 65, I. 1.0.0 , It Code:04001A) )	Separate Sheet Attached	
29	Providing and laying cement concrete 1:4:8 (1 Cement : 4 coarse sand :8 stone aggregates 40 mm nomial size) and curing complete excluding cost of form work in (A) Foundation and plinth(R.A)	P-21, Item No. 4.0.0(A)	Building Work Booklet
30	Demolition including stacking of serviceable materilas and disposal of unserviceable materials with all lead and lift. (i) R.C.C. work Sor Pg No153, It Cd NO.20002	P-30, Item No. 5.3.3(A)	Building Work Booklet
31	Providing and fixing in position Fe 500D TMT for R.C.C. bored piles as per detailed drawing, including cutting, bending hooking tying and welding complete and including forming the cage and lowering it in position. (S.O.R. Page no.260, It.No.27043C )	P-130, It No.20.3	Building Work Booklet
32	Providing and casting in situ ordinary cement concrete M 200 mix and providing necessary pin headers including shuttering scaffolding, laying, vibrating and finishing without V grooves etc.complete. 0.0 to 5.0 mts . (SOR P No 262 It Code 27053AA) (3206.03+(140 Kg x 5.234 = 732.76)= 3938.79)	P-130, It No.20.3	Building Work Booklet
33	Hire Charges Tipper Truck/Dumper of minimum 15 ton or more capacity including operator, Fuel, oil, Grease etc. all such complete. (MR)	-	-
34	Engaing Labours for various Work on road site & building as per instruction of engineering in charge SOR 2023-24 L037)	-	-

Item No As Per Tender	Decription Of Item	Applicable Specification	Specification Booklet Attached
35	Hire Charges Tipper Truck/Dumper of approx 25 ton capacity including operator, Fuel, oil, Grease and taking Hot mix material from Batch mix or hot mix Bitumin plant and spreading the same on site as directed by Engineer Incharge etc. (R.A.)	-	-
36	Spreading the material of It no 14 on site as directed by Engineer Incharge etc. (R.A.)	-	-
37	Clearing of CD works pipe for monsoon treatment including removing the jungle up to 15 mt on boths sides U/S & D/S of CD work by JCB machine providing the gutter on boths side up to 10 mt opening the pipes by labour & opening the water way etc complete	P-130, It No.20.3	Building Work Booklet
A	1 Row CD work Cleaning	-	-
B	2 Row CD work Cleaning	-	-
C	3 Row CD work Cleaning	-	-
D	4 Row CD work Cleaning	-	-
E	5 Row CD work Cleaning	P-130, It No.20.3	Building Work Booklet
F	6 Or More Row CD work Cleaning	-	-
38	Clearing Of Box Culvert works for monsoon treatment including removing the jungle up to 50 mt on boths sides U/S & D/S of Box Culvert / by JCB machine,Removing unncesasarry soil,grass,Vegetation etc cleaning and disposing incluidng all labour and machinery etc complete below box - culvert as per direction and instruction of engineer incharge.	-	-
39	Clearing Of Slab Drain or Major Bridge works for monsoon treatment including removing the jungle up to 50 mt on boths sides U/S & D/S of Slab Drain by JCB machine,Removing unncesasarry soil,grass,Vegetation etc cleaning and disposing incluidng all labour and machinery etc complete below Slab Drain as per direction and instruction of engineer incharge.	-	-
40	Providing Before/After photography of any type of work at any site of taluka including Soft copy & Hard Photo Copy . as per directed by incharge Engineer.	-	-

Dy.Executive Engineer  
R. & B (P) Sub-Division  
Radhanpur