

### **Government of Andhra Pradesh**

### DRAFT COMMON SCHEDULE OF RATES AS PER A.P. REVISED STANDARD DATA FOR THE YEAR 2019-20

### **BOARD OF CHIEF ENGINEERS**

## PART-I

## (WATER RESOURCES DEPARTMENT WORK ITEMS)

## PREAMBLE

#### PREAMBLE

#### I.0 AREA ALLOWANCES:

#### A) <u>CORPORATIONS & MUNICIPALITIES</u>:

a) (i) 25% extra over the rates on labour component of works is allowed in all Municipal Corporation Limits of Andhra Pradesh except Greater Visakhapatnam and Vijayawada municipal corporations (up to a belt of 12 Kms. from Municipal Corporation limits) and other corporations as notified by the Government from time to time.

(ii) 40% extra over the rates on labour component of works for Greater Visakhapatnam and Vijayawada Municipal Corporation (up to a belt of 12 Kms. from Municipal Corporation limits).

(iii) 40% extra over the rates on labour component of works for Amaravati Capital City area(217 sq.km) as declared by the Govt.vide G.O.Ms.No.141,MA&UD (M2)Dept., dt:09.06.2015(This is introduced as per the Govt instructions issued in Govt.memo.No.668755/Reforms/2017 d:14.07.2017).

- b) Allow 20% extra over basic rates on labour component of works in all District Headquarters and the remaining Municipal limits (up to a belt of 12 Kms from Municipal limits).
- c) For works at Tirumala Hills in Chittoor District, 40% extra over the basic rates of labour component is allowed.
- d) For works at Horsely hills in Chittoor District, 30% extra over the basic rates of labour component is allowed.
- e) For works located inside Tirumala Temple, 20% extra over the basic rate of labour component specified for Tirumala Hills is allowed.
- f) For Works located inside T.T.D Temples of Sri Padmavathi Ammavari Temple, Tiruchanoor, Sri Govindaraja Swamy Temple at Tirupathi, Sri Kapleswara Swamy Temple, Kapilatheerthm, Tirupathi and Sri Kalyana Venkateswara Swamy Temple, Srinivasa Mangapuram, 20% extra over the basic rates of labour component for Tirupathi Municipal Corporation is allowed.

#### B) JAIL COMPOUNDS:

20% extra is allowed over labour rates for the work in the Jail compounds. Only equivalent number of Man Mazdoor shall be provided in the Jail premises and no women Mazdoor are allowed inside.

#### C) INDUSTRIAL AREA:

a. 20% over basic rates on labour component works allowed for works situated within 10Kms belt of Industrial area of, Ibrahimpatnam, Vuyyuru, Jaggaiahpeta in Krishna District, Macherla, Gurajala, Challapalli in Guntur District Garividi in Vijayanagaram District, Renigunta in Chittoor District and Yerraguntla & Mangampet in Kadapa District, Hindupur, Tadipatri, Anantapur, Guntakal, Rayalcheruvu, Yadiki of Anantapur District and Adoni, Dhone,Cement Nagar, Nandyal, Kurnool, Yemmiganur & Bethamcherla of Kurnool District, Anakapally of Vishakhapatnam District.

#### D) AGENCY / TRIBAL AREAS:

- a) 25% extra is allowed for the works located within the interior Agency / Tribal limits, i.e. for the works located within & upto16 KMs from any all weather route inside Agency / Tribal.
- b) 40% extra is allowed for the works located within the interior Agency / Tribal limits, i.e. for the works located beyond 16 KMs from any all weather route inside Agency / Tribal.
- **NOTE:** 1. No extra percentage is permissible in respect of Forest produce such as Bamboo, Rellu grass and for all materials obtained from outside the Agency / Tribal.
  - 2. The extra percentage under Agency / Tribal areas allowance may be allowed on the labour component and on the labour charges in the rates for conveyance of materials.

3. The extra percentage on cost of materials in Agency / Tribal areas can be allowed on the labour component only, if they are manufactured in the Agency / Tribal areas itself except Forest produce.

#### E) GHAT ROADS:

For Ghat Roads steeper than 1 in 20, the length of the road may be taken as 1.5 times the existing length of the road for the purpose of leads only for conveyance of materials based on the certificate for the Ghat Road given by the Superintending Engineer concerned.

**Foot Note:** Under compelling circumstances, the concerned Chief Engineer can adopt the equivalent length of road as 2 <sup>1</sup>/<sub>2</sub> times of actual length.

#### Note below area allowances:

If more than one area allowance (such as those) for (1) Municipalities (2) Agency / Tribal areas (3) Industrial areas are applicable for a particular situation, only the maximum out of the allowable percentages is to be allowed.

#### 2.0 <u>EXCAVATION OF TRIAL TRENCHES, TRIAL PITS AND EXCAVATION IN</u> <u>RESTRICTED PLACES</u>: -

#### I) EXCAVATION OF TRIAL TRENCHES, TRIAL PITS AND EXCAVATION IN RESTRICTED PLACES: -

#### A. TRIAL TRENCHES:

1) Trial trenches of not more than 2 metres in width...25% extra

#### B. TRIAL PITS:

1) Up to 2 Metres depth	 25% extra
2) 2 Metres to 4 Metres depth	 50% extra
3) 4 Metres to 6 Metres depth	 75% extra
4) 6 Metres to 8 Metres depth	 100% extra
5) 8 Metres to 9 Metres depth	 150% extra
6) More than 9 Metres depth	 200% extra

#### II) EXCAVATION IN RESTRICTED PLACES:-

I)	Foundation of Buildings	75% extra
II)	For pipe lines where the depth is less than 1.5 times the width	75% extra
III)	For pipe lines where the depth is 1.5 times or more than the width	120% extra
IV)	Silt removal in restricted areas such U. T's., Culverts and Syphons	120% extra
V)	Excavation of field channels	75% extra
VI)	For narrow trenches not more than 2 meters in width and depth not less than twice the width and for excavation of road boundary drains, model sections of canals	75% extra
VII)	High berm cutting of not more than 150 mm average thickness and sectioning for roads	50% extra

- **Note:** 1) The extra percentage is allowed over Common item for all earth works (COM-MWRK- Manual Works) for corresponding soil and Standard data items. It includes the charges for all lifts and initial lead but does not include dewatering charges if any in respect of all the items under (A) and (B) above.
  - 2) The above extra percentages in respect of excavation in hard rock for restricted places are to be allowed for (2/3)rd of the cost and shall not to be allowed in respect of items involving blasting component which may be taken as 1/3 of the cost.

#### 3.0 SEIGNIORAGE CHARGES:

The rates of the materials indicated in the SOR are exclusive of Seigniorage Charges. Appropriate Seigniorage Charges for relevant materials are to be added to the Unit rate of work item in the estimates as fixed by the Government in G.O.Ms.No.100 (Industries and Commerce Dept.) dt: 31.10.2015. In case of revision, the revised rates as fixed by Mines and Geology Department have to be adopted.

Part I - Labour Rates-Common SoR 2019-20

# LABOUR RATES

#### LABOUR RATES

Sl No.	CATEGORY OF WORKER	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3
I.	SKILLED CATEGORY:	
1	Bar bender	620
2	Black smith / Tin smith / Rivetor	490
3	Blaster	570
4	Carpenter Cl- I	570
5	Electrician ( Licensed )	575
6	Fitter Cl- I	540
7	Floor Polisher / Tile Layer	490
8	Foreman	570
9	Gauge reader	475
10	Maistry / Work Inspector with Non-technical Qualification SSLC/SSC/HSC	520
11	Mason Cl- I / Brick layer Cl- I	490
12	Mechanic Cl- I	530
13	Operator Air compressor / DG set	505
14	Operator Batching plant	570
15	Operator Bus/Ambulance/ Lorry/ Tanker	570
16	Operator Concrete / Asphalt mixer	505
17	Operator Concrete / Asphalt paver	505
18	Operator Concrete pump / Placer/ ice plant	505
19	Operator Core drilling machine	570
20	Operator Crane/ Tower crane/ Cable way	570
21	Operator Drilling jumbo / Loco / Winch	505
22	Operator Grouting/ Guniting/ Shotcreting	505
23	Operator Jackhammer/Pneumatic tamper	505
24	Operator Pump / Ventilation fan	505
25	Operator Lathe/Drilling/Shearing machine	570
26	Operator Bending / Planing machine	505
27	Operator Road roller	505

Sl No.	CATEGORY OF WORKER	Rate Proposed by ENC(IW) for the year
1	2	3
28	Operator Shovel / Scraper / Dozer	570
29	Operator Spillway / Sluice gate	505
30	Operator Crusher / Conveyor / Mucker	505
31	Operator Tipper / Dumper / Transit mixer	570
32	Operator Concrete vibrator	505
33	Operator Vibratory plain / pad foot roller	505
34	Operator Wagon drill / Drifter	570
35	Painter Cl- I	570
36	Plumber / Pipe fitter	570
37	Sarang / Khalasi	505
38	Spun pipe moulder	505
39	Stone chiseller CI- I / Stone cutter Cl- l	510
40	Struct. steel Fabricator / Marker / Erector	615
41	Welder / Gas Cutter	510
42	Welder (X-ray quality)	570
II.	SEMI SKILLED CATEGORY:	
1	Asphalt Sprayer / Boiler attendant	455
2	Bhisti	455
3	Boatman with boat	455
4	Carpenter Cl- II / Erector shuttering	455
5	Cartman with double bullock cart	515
6	Cartman with single bullock cart	485
7	Chavali / Navagani	455
8	Crowbarman / Jumper man	455
9	Fitter Cl- II	455
10	Gang man / Head / Survey mazdoor	455
11	Gardener / Trained mali	455
12	Air compressor / DG set	455
13	Helper Batching plant	460
14	Helper Blasting	460

Sl No.	CATEGORY OF WORKER	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3
15	Helper Bus/ Ambulance/ Lorry/ Tanker	460
16	Helper Bending/Shearing/Planing machine	460
17	Helper Carpenter	460
18	Helper Concrete / Asphalt mixer	460
19	Helper Concrete / Asphalt paver	460
20	Helper Core drilling machine	460
21	Helper Crane/ Tower crane/ Cable way	460
22	Helper Drilling jumbo / Loco / Winch	460
23	Helper Fitter / Fabrication/Electrician	460
24	Helper Grouting/ Guniting/ Shotcreting	460
25	Helper Jack hammer / Pneumatic tamper	460
26	Helper Laboratory / Instrumentation	460
27	Helper Road roller	460
28	Helper Shovel / Scraper / Dozer	460
29	Helper Crusher / Conveyor / Mucker	460
30	Helper Tipper / Dumper/ Transit mixer	460
31	Helper Vibrator	460
32	Helper Vibratory plain/ pad foot roller	460
33	Helper Wagon drill/ Drifter	460
34	Lineman Electric / Telephone	455
35	Mason Cl- Il / Brick layer Cl-II	455
36	Mechanic Cl- II	455
37	Painter Cl- II	455
38	Patkari / Neeraganti / Sowdy	455
39	Stone Chiseller Cl- II	455
40	Stone breaker / Hammer man	455
41	Valve man / Canal sluice operator	455
III.	UN-SKILLED CATEGORY:	
1	Cement / Asphalt handling mazdoor	415
2	Civic worker	415
3	Man mazdoor	415

Sl No.	CATEGORY OF WORKER	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3
4	Woman mazdoor	415
5	Watchman	415
IV.	OTHER CATEGORY:	
1	Care-taker / conductor / Lift Attender	470
2	Cook / Mess man	470
3	Dhobi	470
4	Diploma Engineer / Surveyor	750
5	Diver with headgear	590
6	Graduate / Laboratory Assistant	580
7	Graduate Engineer/ Geologist	960
8	Horticulture Assistant / Photographer	475
9	ITI certificate holder / Tracer / Printer	580
10	Literate mazdoor	450
11	Stenographer / Computer Operator	630
12	Telephone / Wireless Operator	570
13	Typist / Job Typist	570
14	CAD operator with Diploma in Engineering/General degree	775
15	Jeep Driver	565
16	Data Processing Operator	775

**Note:** - 1)The wage should not be less than the minimum wages of schedule of employment, subject to out turn. 2) 25% extra over the corresponding labour rates in respect of the work to be done during night time subject to issue of certificate accordingly by the concerned estimate sanctioning authority for providing in the data and by concerned Executive Engineer in charge of the work for payment. The night time allowance is applicable only to the works done under Greater Visakhapatnam Municipal Corporation and Vijayawada Municipal Corporation limits only.

# BASIC INPUT DATA FOR WATER RESOURCE WORK ITEMS

#### STATEMENT OF RATES FOR MATERIALS FOR THE YEAR : 2018-19 GENERAL GUIDE LINES FOR REVISING RATES OF MATERIALS:

- 1 Average of the prevailing market rates, ignoring freak rates, is the criteria for Fixing market rates for materials.
- 2 The rates for materials are **exclusive of GST**, duties and other local levies.
- 3 The rates for materials are **exclusive of** Seigniorage charges wherever applicable.
- 4 The rates for materials, except those for which lead charges are admissible as per the

Statement of lead charges is for all leads.

- 5. The rates provided for useful rubble / stone chips from excavation shall be at dump yard.
- 6. Unless otherwise specified the rate of materials are inclusive of loading charges.

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
1	Acetylene gas	cum	306
2	Asphalt 80/100 Grade	Kg	41
3	Binding wire	Kg	55
4	Burnt stone slab 10 cm thick	sqm	283
5	Cement 43 Gr/53 Gr Note: Rate as fixed by the Government	tonne	3900
6	Chequered plate	Kg	57
7	Coarse aggregate 10-4.75 mm	cum	860
8	Coarse aggregate 20-10 mm	cum	1182
9	Coarse aggregate 40-20 mm	cum	1133
10	Coarse aggregate 80-40 mm	cum	622
	The aggregate rates mentioned above (from Sl.No.7 to Sl.No.10) are <b>exclusive of Seigniorage charges</b> <b>but</b> including blasting charges of Rs.70/cum and 25% machine crushing charges. However, if the metal is obtained from hand broken, the blasting and crushing charges shall be deducted. The aggregate shall be HB Stone of Granite, Dolamite, Dolerite and Trap. (Quartzite and Basalt with aggregate impact of less than 20)		
11	Coir brush	Each	41

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
12	Copper sheet 16 SWG	kg	632
13	Coursed rubble stone 30 x 30 x 45 cm	Each	24
14	Coursed rubble stone 30 x 30 x 60 cm	Each	27
15	Curing Compound	Ltr	112
16	D – cord	Rm	6
17	Delay - noiseless trunk	Each	17
18	Detonating fuse coil	Rm	7
19	Detonating shock tube / Cord relays	Rm	33
20	Detonator delay type	Each	18
21	Detonator electric	Each	9
22	Detonator ordinary	Each	5
23	Empty cement bag	Each	5
24	Explosive ANFO	kg	40
25	Explosive ANFO high strength booster	kg	60
26	Explosive small dia (Kelvex-220 or equivalent)	kg	60
27	(a)Fine aggregate/ sand(un- screened) for Concrete & Filtering items)	cum	Rates to be finalized as per the Government sand policy
	(b)Fineaggregate/Sand(unscreened)for filling		
28	Fine aggregate /Sand (Screened) for Mortar ,Plastering items and Sand blasting items ( <b>Rs.82 is</b> added towards screening Charges)	cum	
29	Geo-textile ( filter fabric ) 160 gsm	sqm	89
30	Geo-textile ( filter fabric ) 200 gsm	sqm	105
31	Geo-textile ( filter fabric ) 250 gsm	sqm	120
32	G I Pipe 100 mm dia B Class	Rm	698
33	G I Pipe 15 mm dia A class	Rm	83
34	G I pipe 25 mm dia A class	Rm	140
35	G I pipe 40 mm dia B class	Rm	218

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
36	G I pipe 50 mm dia A class	Rm	250
37	G I Pipe 80 mm dia B Class	Rm	428
38	G.I Bolts / Nuts and Washers	kg	95
39	G.I sheet ( plain )	tonne	55621
40	Hariyala turfing sods	sqm	25
41	Hectometer stone one line dressed	Each	259
42	Hemp yarn	kg	64
43	Honne wood planks	cum	43180
44	Hume pipe with collar 150 mm dia	Rm	243
45	Hume pipe with collar 300 mm dia	Rm	530
46	J- Bolts 30 cm long	Each	35
47	Jungle wood planks	cum	18390
48	Khandki stone 15 to 20 cm height	Each	11
49	Khandki stone 20 to 25 cm height	Each	15
50	Khandki stone 25 to 30 cm height	Each	17
51	Kilometer stone one line dressed	Each	477
52	LDPE sheet ( Geo membrane ) 500 micron	sqm	81
53	LDPE sheet ( Geo membrane ) 750 micron	sqm	119
54	LDPE sheet ( Geo membrane ) 1000 micron	sqm	164
55	M S Bolts / Nuts / Washers	kg	75
56	Murrum	cum	195
57	Oxalic acid	Ltr	70
58	Oxygen gas	cum	40
59	PVC sealing strip	Rm	40
60	PVC water stopper 310 mm wide	Rm	415
61	PVC pipe of 100 mm dia	Rm	150
62	Reinforcement steel (HYSD/TMT ) Note: As per Monthly rate fixed by Sub- Committee	tonne	

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
63	Resin bond Cement capsule	Each	44
64	Rough stone 20 x 20 x 75 cm	Each	23
65	Shahabad stone slab	sqm	234
66	Stone chips (at dump yard/Spoil )	cum	184
67	Stone chips ( at quarry )	cum	347
68	Structural steel angle / channel / beam / bars Note: As per Monthly rate fixed by Sub- Committee	tonne	
69	Structural steel plate / flats Note: As per Monthly rate fixed by Sub- Committee	tonne	
70	Super Plasticizer (Conplast RP-264 or equivalent )	kg	45
71	Synthetic Enamel paint 1st quality	Ltr	224
72	Synthetic adhesive ( Resin + Hardener )	Kg	292
73	Tar felt joint filler board 12 mm thick	sqm	336
74	Tar felt joint filler board 20 mm thick	sqm	510
75	Through stones 20 x 20 x 30 to 45 cm	Each	22
76	Through stones 25 x 25 x 45 to 60 cm long	Each	39
77	Through stones 30 x 30 x 65 to 75 cm long	Each	58
78	Un-coursed rubble stones ( at dump yard /Spoil)	cum	154
79	Un-coursed rubble stones ( at quarry)	cum	316
80	Water proofing compound	kg	67
81	Welding electrodes 4 mm dia	Each	12
82	Wire brush	Each	38

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
83	Wire mesh 20 gauge	sqm	214
84	Zinc chromate red oxide primer paint	Ltr	150
85	inorganic zinc silicate	Ltr	502
86	solvent less coal tar epoxy paint	Ltr	244
87	Zinc phosphate primer	Ltr	186
88	Allkyd based iron oxide paint	Ltr	150
	a) Cost of hdpe (90mm dia)	Rm	203
89	b) light black MS casing pipe 100 mm dia (4mm thick)	Rm	423
90	welded steel wire fabric 100X100X5 mm size	Kg	172
91	Protective Mastic	Ltr	416
92	Solventless coal tar epoxy (brown)	Ltr	256

#### ADDITIONAL MATERIALS FOR G A T E S & HOISTS FOR THE YEAR: 2019-20

#### **GUIDE LINES:**

a. For cast steel / Alloy steel / Forged steel / Bronze, aluminum alloy components the rates shall be inclusive of cost of basic metal for these components, casting / forging charges, machining charges and applicable excise duty on finished alloy component.

b. For other materials the rates shall be prevailing market rates.

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
1	Alloy steel ( IS : 1570-carbon steel ) shafts	Kg	222
2	Alloy steel ( IS : 1570-stainless steel ) pins	Kg	408
3	Bolt / Nut / Washer ( hot dipped galvanized )	Kg	132
4	Bolt / Nut / Washer ( stainless steel )	Kg	345
5	Bronze/Aluminum alloy(IS:305)bearings/bushes	Kg	890
6	Cast iron blocks	Kg	80
7	Cast steel drums / gears	Kg	215
8	Cast steel pinions	Kg	210
9	Cast steel wheels / pulleys / hubs / rollers / Retainers	Kg	179
10	Chemical for de-greasing/ de- rusting/phosphate	Ltr	116
11	Coal tar epoxy paint	Ltr	175
12	Forged steel hooks / shackles	Kg	254
13	MS pipe 200 / 300 mm dia	Kg	163
14	MS pipe 32 mm dia	Rm	174
15	MS pipe 25 mm dia	Rm	141
16	Rubber bottom seal ( IS : 11855 ) (100mmX14 mm)	Rm	632
17	Rubber side seal ( music note type Teflon claded ) ( IS : 11855 ) (36ØX113mmX14mm)	Rm	1350
18	Rubber side seal ( music note type uncladed ) ( IS : 11855 ) (36ØX113mmX14mm)	Rm	979
19	Rubber side seal Z-type ( IS : 11855 ) (36ØX120mmX19mm)	Rm	1295

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
20	Rubber corner seal ( Teflon claded ) ( IS : 11855 ) (36Ø)	Each	1359
21	Rubber corner seal ( un claded ) ( IS : 11855 ) (36Ø)	Each	959
22	Stainless steel plates / flats	Kg	
23	Welding electrode 4 mm dia x 450 mm ( radiographic low hydrogen )	Each	15
24	Welding electrode 4 mm dia x 450 mm ( stainless steel )	Each	21
25	Wire rope 6x37 constn ( IS : 2266 )	Kg	176
26	Zinc	Kg	180
27	Zinc rich ( zinc content : 90 % ) epoxy primer	Ltr	562

#### MATERIALS FOR POWER SUPPLY WORKS FOR THE YEAR : 2019-20

Sl No.	Description of Material	Unit	Rate Proposed by ENC(IW) for the year 2019-20
1	Electric pole with fixtures	Each	
2	Flood light 500 W	Each	For establishing Electrical
3	Flood light set	Each	Sub- Stations at the Project Sites wherever
4	Flouscent tube light 40 W	Each	necessary, the rates approved by APTRANSCO
5	Flouscent tube light set	Each	may be followed.
6	HT / LT Circuit breaker with accessories	Set	
7	HT / LT Line conductor	1000	
8	PVC Armoured cable 10 sqmm and below	Rm	
9	PVC Armoured cable 16 sqmm	Rm	
10	PVC Armoured cable 25 sqmm	Rm	
11	PVC Armoured cable 70 sqmm	Rm	

#### DETAILS OF CAPITAL COST OF MACHINERY / EQUIPMENT FOR THE YEAR: 2019-20

#### **GUIDE LINES FOR FIXING CAPITAL COST OF MACHINERY / EQUIPMENT:**

- 1. The Capital cost of machinery / equipment shall be for new machinery / equipment and shall be exclusive of GST, duties, other levies.
- 2. The cost of transport vehicles / equipment shall be exclusive of cost of tyres and tubes.
- 3. The cost of drill rods / drill bits / air hose / water hose / road tax / insurance charges and Other consumable accessories shall not be included in the capital cost.
- 4. In cases, where the current capital cost of machinery / equipment could not be collected through enquiries, the capital cost considered for previous year may be updated on the basis of average percentage increase / decrease in the index for machinery published in the R.B.I Bulletin.

Sl No:	DESCRIPTION OF MACHINERY / EQUIPMENT	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
1	Agitator car / Transit mixer 2 cum ( excluding tyres )	Each	1787168
	tyres and tubes 6 sets		71488
2	Air compressor 5 cmm electric	Each	590185
3	Air compressor 7 cmm diesel	Each	789682
4	Air compressor 7 cmm electric	Each	719021
5	Air compressor 8.5 cmm diesel	Each	901895
6	Air compressor 8.5 cmm electric	Each	930993
7	Air compressor 15 cmm electric	Each	1138797
8	Angle Dozer 90 hp	Each	4551040
9	Batching plant 0.5 cum with accessories(6 Cum/hr)	Each	997486
10	Batching plant 2 x 1.00 cum with accessories ( 15 Cum/hr)	Each	3528615
11	Batching plant 2 x 1.50 cum with accessories ( 50 Cum/hr)	Each	5403066
12	Bending machine	Each	480414
13	Clamp shell and hoisting ropes	Each	27198
14	Concrete bucket 1.5 cum	Each	46549
15	Concrete hand mixer 45/30 ltr	Each	12884
16	Concrete mixer 300/200 ltr(diesel)	Each	124688
17	Concrete mixer 300/200 ltr ( electric )	Each	120530
18	Concrete mixer 600/400 ltr(diesel)	Each	216120
19	Concrete mixer 600/400 ltr ( electric )	Each	211962

Sl No:	DESCRIPTION OF MACHINERY / EQUIPMENT	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
20	Concrete paver 100 Sqm / hr	Each	1962563
21	Convey mucker ( excluding tyres )	Each	3204429
	tyres and tubes 6 sets		71488
22	Core drilling machine	Each	914360
23	Diesel generating set 30 KVA	Each	411459
24	Diesel generating set 50 KVA	Each	531989
25	Diesel Loco 45 hp	Each	1762228
26	Dewatering pump 5 hp diesel	Each	33246
27	Dewatering pump 5 hp electric	Each	20362
28	Dewatering pump 10 hp diesel	Each	49879
29	Dewatering pump 10 hp electric	Each	45721
30	Dewatering pump 20 hp diesel	Each	157934
31	Dewatering pump 20 hp electric	Each	83126
32	Drifter	Each	879449
33	Drilling jumbo ( excluding tyres )	Each	1082277
	tyres and tubes 6 sets		71488
34	Dumper 4.5 cum ( excluding tyres )	Each	1205299
	tyres and tubes 6 sets		71488
35	Geophysical Ele.resistivity meter	Each	444194
36	Grouting pump	Each	84791
37	Guniting / sand blasting equipment	Each	253800
38	Ice plant with accessories 30 t / day	Each	2132135
39	Jack hammer	Each	54027
40	Needle vibrator 40 mm petrol	Each	16623
41	Needle vibrator 40 mm electric	Each	17461
42	Needle vibrator 60 mm petrol	Each	17870
43	Needle vibrator 60 mm electric	Each	21200
44	Planing machine 4 m stroke	Each	707027
45	Plate shearing machine up to 12 mm	Each	385242

Sl No:	DESCRIPTION OF MACHINERY / EQUIPMENT	UNIT	Rate Proposed by ENC(IW) for the year 2019- 20
1	2	3	4
46	Pneumatic placer 0.5 cum	Each	482120
47	Pneumatic tamper	Each	70651
48	Pug cutting machine	Each	14508
49	Pusher leg	Each	47131
50	Road roller diesel 10 t	Each	706557
51	Shovel 0.50 cum 75 hp	Each	3117156
52	Shovel 0.85 cum 110 hp	Each	5303318
53	Stationery derrick crane 5 t	Each	542799
54	Tipper 5 cum ( excluding tyres )	Each	1350769
	tyres and tubes 6 sets		71488
55	Tipping tub 1.5 cum	Each	199497
56	Tower crane 5 tonne	Each	6213520
57	Transformer 250 KVA	Each	433395
58	Truck 10 t ( excluding tyres )	Each	1226081
	tyres and tubes 6 sets		71488
59	Truck mounted derrick crane 5 t ( excluding tyres	Each	1629233
	tyres and tubes 6 sets		71488
60	Upright drilling machine	Each	46549
61	Ventilation fan 20 hp	Each	235676
62	Vibratory pad foot roller 8 t	Each	2452162
63	Wagon drill	Each	540306
64	Water tanker 8000 ltr (excluding tyres)	Each	1329773
	tyres and tubes 6 sets		71488
65	Welding set	Each	43218
66	Winch 35 hp electric	Each	311721
67	Hydraulic Truck Crane 30T	Each	12039897
	tyres and tubes 6 sets		153960
68	Hydraulic Truck Crane 16T	Each	8637319
	tyres and tubes 6 sets		153960

Sl No:	DESCRIPTION OF MACHINERY / EQUIPMENT	UNIT	Rate Proposed by ENC(IW) for the year 2019- 20
1	2	3	4
69	Heavy Duty Airless Spray Painting Equipment	Each	405451
70	Concrete Placer Pump(25 Cum/hr)(Electric)	Each	2829905

#### ACCESSORIES TO MACHINERY / EQUIPMENT FOR THE YEAR : 2019-20

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
1	Casing shoe bit	Each	10480
2	Diamond core bit BX size	Each	10580
3	Diamond core bit NX size	Each	12700
4	Double tube core barrel	Each	13540
5	Extension drill rod with coupling sleeve	Rm	1921
6	Jack hammer drill rod 1.5 m	Each	3647
7	Jack hammer drill rod 2.5 m	Each	5670
8	Nozzle for Guniting / sand blasting gun	Each	633
9	Paving Cylinder	Each	28030
10	Rails 30R ( 30 kg / m )	tonne	51400
11	Reamer shell	Each	5140
12	T.C. Cross bit 50 mm dia	Each	4990
13	T.C. Cross bit 75 mm dia	Each	9980
14	T.C. Cross bit 100 mm dia	Each	11980
15	Tyres and Tubes for truck	Set	14580
16	Wire rope 16 mm dia	Rm	260
17	Excavation of drain with Excavator	cum	38

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019- 20
1	2	3	4
1	Jaw crusher 900 x 500 mm (120 tph) with 50 hp motor	Each	
2	Jaw crusher 500 x 300 mm ( 60 tph ) with 30 hp motor	Each	These items are no where being used in the Standard Data. Hence this may be deleted from SoR
3	Jaw crusher 400 x 225 mm (10 tph) with 25 hp motor	Each	
4	Jaw plates 900 x 500 mm ( serreted )	Set	
5	Jaw plates 500 x 300 mm ( serreted )	Set	
6	Jaw plates 400 x 225 mm ( serreted )	Set	
7	Nylon Conveyor belt 3 ply 600 mm width	Rm	
	Nylon Conveyor belt 3 ply 1000 mm width <b>QSTS ON MATERIAL / MACHINERY / EQUIPMENT</b> YEAR: 2019-20	Rm	

#### AGGREGATE CRUSHING & PROCESSING PLANT

# 1. The rate provided for 'SUNDRIES' (Lump sum provision for unquantified inputs in the data rates) shall be updated on the basis of general percentage increase / decrease in the market rates or on the basis of R.B.I 'All Commodity' index.

2 .The rate for structural steel fabrication shall include cost of all materials (except structural steel), machinery, labour and one coat of primer painting.

- 3. Demand charges and electric power charges shall be as per prevailing APEPDCL tariff.
- 4. Rate of interest on capital cost shall be as approved by Govt or other competent authority.

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the vear
1	2	3	4
1	Air hose 25 mm dia	Rm	164
2	Air hose 50 mm dia	Rm	254
3	Demand charges (HT-I : General-11 KV category) on power supply(as per APEPDCL tariff)	KVA / month	475
4	Diesel	Ltr	76
5	Electric power (HT-VIII Category) including tax ( 1.5 times of the Tariff of HT-I(A):General-11 KVA Category) (as per APEPDCL tariff)	Kwhr	10
6	Excise duty on Gates / Hoist supplies	%	0%
7	Insurance charges on machinery	% / annum	1%
8	Interest on capital cost	% / annum	11.00%

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
9	Lubricants	Ltr	220
10	Petrol	Ltr	84
11	Rivets	Kg	85
12	Road tax on transport vehicles	Rs./annum	As per rta
13	Shalimatic sealing compound	Кд	85
14	Shutter oil	Ltr	44
15	Structural steel fabrication	Кд	28
16	Sundries ( Lump sum for un quantified inputs )	LS	31
17	Water hose ( pressure ) 20 mm dia	Rm	164
18	Steel wedges	LS	15
19	Elbows / Nipple / Plugs etc.,	LS	15
20	Soldering materials	LS	15
21	Steam circulation arrangement	LS	15
22	Fuel charges ( gas for heating )	LS	17
23	Vulcanizing materials	LS	18
24	Other accessories / controls / junctions	LS	Deleted
25	Miscellaneous fittings / switches etc	LS	Deleted
26	Anchors / supports for cables / lights	LS	Deleted
27	Civil works for foundations / pedestals / duct etc	LS	Deleted
28	Gas cutting set ( 2 No's 15 m hose and nozzle	Each	12797
29	Grease	Кд	243
30	Welding holder set ( cable / holder / gloves / mask	Each	6884
31	Use rate of ropes	LS	156

#### MATERIALS FOR GATES AND HOISTS FOR THE YEAR : 2019-20

Sl No.	DESCRIPTION OF MATERIAL	UNIT	Rate Proposed by ENC(IW) for the year 2019-20
1	Worm reducers	Each	177990
2	Electric motor 20 hp(Double Shaft)	Each	96009
3	Electric motor 17.5 hp(Double Shaft)	Each	68055
4	Electric motor 12.5 hp(Double Shaft)	Each	57583
5	Electric motor 5 hp(Double Shaft)	Each	26176
6	Electric motor 3 hp (Double Shaft)	Each	18319
7	Electric motor 2 hp (Double Shaft)	Each	10002
8	Floating shaft 300 mm dia	Kg	153
9	Manual operating system	Each	26809
10	Gate position indicator	Each	161899
11	Ele-magnetic brake	Each	27923
12	Electric cable / switch / control panel etc	LS	45425
13	Wire rope sockets	Each	4393

#### Materials other than covered under WR Work items For the year 2019-20 GENERAL GUIDE LINES FOR REVISING RATES OF MATERIALS:

- 1. Average of the prevailing market rates, ignoring freak rates, is the criteria for Fixing market rates for materials.
- 2 .The rates for materials is inclusive of GST, duties and other local levies.
- 3 .The rates for materials are **exclusive of** Seigniorage charges wherever applicable.
- 4 .The rates for materials, except those for which lead charges are admissible as per the Statement of lead charges is for all leads.

Sl. No.	Descripti on	Unit	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
M-002	Quarried stone 150 - 200 mm size for Hand Broken	Cum	145
M-003	Boulder with minimum size of 300 mm for Pitching	Cum	160
M-004	Coarse sand for filling	Cum	Rate as per item no.27(b) of material of WRD
M-005	Coarse sand for mortar	Cum	Rate as per item no.27(a) of material of WRD
M-006	Fine Sand	Cum	Rate as per item no.28 of material of WRD
M-007	Murrum	Cum	Rate as per item no.56 of Material rates of WRD.
M-008	Gravel/Quarry spall	Cum	113
M-009	Granular Material or hard Murrum for GSB works	Cum	Deleted
M-010	Granular Material or hard Murrum for GSB works	Cum	95
M-011	Fly ash conforming to IS: 3812 ( Part II $\&$ I)	Cum	64
	<ul> <li>For item No.M-012 to M-055 the note shall be as follows</li> <li>1) The rates mentioned are exclusive of Seigniorage charges but inclusive of blasting charges of Rs.70/cum and 25% machine crushing charges. However, if the metal is obtained by hand broken, machine crushing charges shall be deducted.</li> <li>2) If the material is obtained by hand broken from surface boulders/canal spoil, the blasting and crushing charges shall be deducted.</li> <li>3)The material shall be HB Stone of Granite, Dolamite, Dolerite and Trap.(Quartzite and Basalt with aggregate impact of less than 20)</li> </ul>		

#### Part I - Materials not covered under WR Work items basic data- Common SoR 2019-20

Sl. No.	Description	Unit	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
M-012	Filter media/Filter Material as per Table 300-3 (MoRT&H Specification)	Cum	335
M-013	Close graded Granular sub-base Material 53 mm to 9.5 mm	Cum	650
M-014	Close graded Granular sub-base Material 37.5 mm to 9.5 mm	Cum	670
M-015	Close graded Granular sub-base Material 26.5 mm to 9.5 mm	Cum	709
M-016	Close graded Granular sub-base Material 9.5 mm to 4.75 mm	Cum	590
M-017	Close graded Granular sub-base Material 9.5 mm to 2.36 mm	Cum	580
M-018	Close graded Granular sub-base Material 4.75mm to 2.36 mm	Cum	510
M-019	Close graded Granular sub-base Material 4.75mm to 75 micron mm.	cum	485
M-020	Close graded Granular sub-base Material 2.36 mm	Cum	485
M-021	Stone crusher dust finer than 3mm with not more than 10% passing 0.075 sieve.	Cum	350
M-022	Coarse graded Granular sub-base Material 2.36 mm & below	Cum	430
M-023	Coarse graded Granular sub-base Material 4.75mm to 75 micron mm	cum	465
M-024	Coarse graded Granular sub-base Material 4.75 mm to 2.36 mm	Cum	465
M-025	Coarse graded Granular sub-base Material 9.5 mm to 4.75 mm	Cum	565
M-026	Coarse graded Granular sub-base Material 26.5 mm to 4.75 mm	Cum	618
M-027	Coarse graded Granular sub-base Material 26.5 mm to 9.5 mm	Cum	619
M-028	Coarse graded Granular sub-base Material 37.5 mm to 9.5 mm	Cum	684
M-029	Coarse graded Granular sub-base Material 53 mm to 26 .5mm	Cum	848
M-030	Aggregates below 5.6 mm	Cum	557
M-031	Aggregates 22.4 mm to 2.36 mm	Cum	911
M-032	Aggregates 22.4 mm to 5.6 mm	Cum	1037
M-033	Aggregates 45 mm to 2.8 mm	Cum	660

Sl. No.	Desc ripti	Unit	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
M-034	Aggregates 45 mm to 22.4 mm	Cum	Rate as per item no.9 of Material rates of WRD.
M-035	Aggregates 53 mm to 2.8 mm	Cum	911
M-036	Aggregates 53 mm to 22.4 mm	Cum	860
M-037	Aggregates 63 mm to 2.8 mm	Cum	705
M-038	Aggregates 63 mm to 45 mm	Cum	655
M-039	Aggregates 90 mm to 45 mm	Cum	Rate as per item no.10 of Material rates of WRD.
M-040	Aggregates 10 mm to 5 mm	Cum	Rate as per item no.7 of Material rates of WRD.
M-041	Aggregates 11.2 mm to 0.09 mm	Cum	700
M-042	Aggregates 13.2 mm to 0.09 mm	Cum	795
M-043	Aggregates 13.2 mm to 5.6 mm	Cum	915
M-044	Aggregates 13.2 mm to 10 mm	Cum	1020
M-045	Aggregates 20 mm to 10 mm	Cum	Rate as per item no.8 of Material rates of WRD.
M-046	Aggregates 25 mm to 10 mm	Cum	1120
M-047	Aggregates 19 mm to 6 mm	Cum	1035
M-048	Aggregates 37.5 mm to 19 mm	Cum	1095
M-049	Aggregates 37.5 mm to 25 mm	Cum	1135
M-050	Aggregates 6 mm nominal size	Cum	725
M-051	Aggregates 10 mm nominal size	Cum	920
M-052	Aggregates 13.2/12.5 mm nominal size	Cum	1080
M-053	Aggregates 20 mm nominal size	Cum	1340
M-054	Aggregates 25 mm nominal size	Cum	1290

Sl. No.	Descript ion	Unit	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
M-055	Aggregates 40 mm nominal size	Cum	830
M-056	AC pipe 100 mm dia	Metre	Rate as per PH item
M-057	Acrylic polymer bonding coat	Litre	465
M-058	Aluminum Paint	Litre	265
M-059	Aluminum alloy plate 2mm Thick	Sqm	335
M-060	Aluminum alloy/Galvanized steel	Tonne	61,250
M-061	Aluminum sheeting fixed with encapsulated lens type reflective sheeting including 2% towards lettering, cost of angle iron, cost of drilling	Sqm	835
M-062	Aluminum studs 100 x 100 mm fitted with lens reflectors	No's	As per local market rate
M-063	Barbed wire	К	70
M-064	Bearing (Cost of parts)	No's	500
M-065	Bearing (Cast steel rocker bearing assembly of 250 tonne )	No's	690
M-066	Bearing (Elastomeric bearing assembly consisting of 7 internal layers of elastomer bonded to 6 nos. internal reinforcing steel laminates by the	Cm <sup>3</sup>	
M-067	Bearing (Forged steel roller bearing of 250 tonne)	No's	
M-068	Bearing (Pot type bearing assembly consisting of a metal piston supported by a disc, PTFE pads providing sliding surfaces against stainless steel mating together with cast steel assemblies/fabricated structural steel assemblies duly painted with all components	No's	As per Market Competitive rates.
M-069	Bearing (PTFE sliding plate bearing assembly of 80 tonnes )	No's	
M-070	Bearing (Supply of sliding plate bearing of 80	No's	
M-071	Bentonite	K	7.0
M-072	Binding wire	K g	Rate as per item no.3 of Material rates of WRD.
M-073	Bitumen ( Cationic Emulsion )	Tonne	
M-074	Bitumen (60-70 grade)	Tonne	
M-075	Bitumen (80-100 grade )	Tonne	As per rates fixed by R&B Dept based on refinery rates

Sl. No.	D e	Unit	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
M-076	Bitumen (Cutback )	Tonne	As per rates fixed by R&B Dept based on refinery rates
M-077	Bitumen (emulsion)	Tonne	
M-078	Bitumen (modified graded)	Tonne	
M-079	Brick	Each	As per Building SSR
M-080	C.I. shoes for the pile	Kg	50
M-081	Cement	Tonne	Rate as per item no.5 of Material rates of WRD.
M-082	Cold twisted bars (HYSD/TMT Bars)	Tonne	Rate as per item no.62 of Material rates of WRD
M-083	Collar for joints 300 mm dia	No's	133
M-084	Compressible Fibre Board(20mm thick)	Sqm	490
M-085	Connectors/ Staples	Each	67
M-086	Copper Plate(12m long x 250mmwide)	Kg	265
M-087	Corrosion resistant Structural steel	Tonne	51645
M-088	Corrugated sheet, 3 mm thick, "Tie" beam section	Kg	181
M-089	Credit for excavated rock found suitable for	Cum	202
M-090	Curing compound	Liter	105
M-091	Delineators from ISI certified firm as per the standard drawing given in IRC - 79	Each	As per local competitive guotations
M-092	Earth Cost or compensation for earth taken from	Cum	60
M-093	Elastomeric slab seal expansion joint assembly manufactured by using chloroprene, elastomer for elastomeric slab unit	Metre	As per local competitive quotations
M-094	Electric Detonators @ 1 detonator for 1/2 gelatin stick	100 no's	Rate as per item No. 21 of WRD
M-095	Epoxy compound with accessories for preparing	Kg	290
M-096	Epoxy mortar	Kg	95
M-097	Epoxy primer	Kg	496
M-098	Epoxy resin-hardener mix for prime coat	Kg	512
M-099	Flag of red color cloth 600 x 600 mm	Each	25

Sl. No.	Descripti on	Unit	Rate Proposed by ENC(IW) for the year 2019-20
1	2	3	4
M-100	Flowering Plants	Each	42
M-101	Galvanized MS flat clamp	No's	172
M-102	Galvanized steel wire crates of mesh size 100 mm x 100 mm woven with 4mm dia. GI wire in rolls of required size.	Sqm	159
M-103	Galvanized structural steel plate 200 mm wide, 6 mm	K	820
M-104	Gelatin 80%	К	59
M-105	Geo grids	Sqm	As per local competitive quotations
M-106	(a)Geo membrane 500 micron thick	Sqm	Rate as per item No. 52 of WRD
	(b) Geo membrane 750 micron thick	Sqm	Rate as per item No. 53 of WRD
	(c) Geo membrane 1000 micron thick	Sqm	Rate as per item No. 54 of WRD
M-107	Geo nets	Sqm	As per local competitive quotations
M-108	(a)Geo textile 160 gsm	Sqm	Rate as per item No. 29 of WRD
	(b) Geo textile 200 gsm	Sqm	Rate as per item No. 30 of WRD
	(c) Geo textile 250 gsm	Sqm	Rate as per item No. 31 of WRD
M-109	Geo textile filter fabric	Sqm	As per local competitive quotations
M-110	GI bolt 10 mm Dia	No's	19
M-111	Grouting pump with agitator	Hour	Rate covered in Item No.36 of hire charges of machinery of Water Resources work items
M-112	Grass (Doob)	Кд	6
M-113	Grass (Fine)	Кд	8
M-114	HDPE pipes 75mm dia	Metre	
M-115	HDPE pipes 90mm dia	Metre	Rate as per PH items

Sl. No.	Description	Unit	Rate Propose d by
1	2	3	4
M-116	Hedge plants	Each	Rate as per local
M-117	Helical pipes 600mm diameter	Metre	competitive
M-118	Hot applied thermoplastic compound	Litre	quotations
M-119	HTS strand	Tonne	36,265
M-120	Joint Sealant Compound	Kg	60
M-121	Jute netting, open weave, 2.5 cm square opening for seeding and Mulching	Sqm	79
M-122	LDO for steam curing	Litre	59
M-123	M.S. Clamps	Kg	Deleted
M-124	M.S. Clamps	Kg	Rate as per local competitive quotations
M-125	M.S. shoes @ 35 Kg per pile of 15 m	Kg	Rate as per local competitive quotations
M-126	Mild Steel bars	Tonne	40,470
M-127	Modular strip/box seal expansion joint including anchorage catering to a horizontal movement beyond 70 mm and up to 140mm assembly comprising of edge beams, central beam,2 modules chloroprene seal, anchorage elements, support and control system, all steel sections protected against corrosion and installed by the manufacturer or his authorized	Metre	Rate as per local competitive quotations
M-128	Modular strip/box seal expansion joint catering to a horizontal movement beyond 140mm and up to 210mm box/box seal joint assembly containing 3 modules/cells and comprising of edge beams, two central beams, chloroprene seal, anchorage elements, support and control system, all steel sections protected against corrosion and installed by the manufacturer or his authorized representative	Metre	Rate as per local competitive quotations
M-129	Nipples 12mm	No's	18
M-130	Nuts and bolts	Kg	89
M-131	Paint	Litre	206
M-132	Pavement Marking Paint	Litre	
M-133	Paving Fabric	Sqm	Rate as per local
M-134	Perforated geo synthetic pipe 150 mm dia	Metre	competitive quotations
M-135	Perforated pipe of cement concrete, internal dia 100 mm	Metre	

Sl. No.	Description	Unit	Rate Proposed by ENC(IW)	
1	2	3	4	
M-136	Pesticide	Kg	Rate as per local competitive quotations	
M-137	R.C.C Pipes 200 mm dia, 2.5 m long for drainage	Metre	Rate as per PH item	
M-138	Plastic sheath, 1.25 mm thick for dowel bars	Sqm	49	
M-139	Plastic tubes 50 cm dia , 1.2 m high	No's	Rate as per local	
M-140	Polymer braids	Metre	competitive quotations	
M-141	Pre moulded Joint filler, 25 mm thick for expansion joint.	Sqm	273	
M-142	Pre-coated stone chips of 13.2 mm nominal size	Cum	Rate as per local competitive quotations	
M-143	Preformed continuous chloroprene elastomer or closed cell foam sealing element with high tear strength, vulcanized in a single operation for the full length of a joint to ensure water tightness.	Metre	Rate as per local competitive quotations	
M-144	Pre-moulded asphalt filler board	Sqm		
M-145	Pre-packed cement based polymer concrete of strength 45 Mpa at 28 days	Kg	Rate as per local competitive quotations	
M-146	Sealant Primer	Kg	154	
M-147	Quick setting compound	Kg	28	
M-148	Random Rubble Stone	Cum	250	
M-149	RCC Pipe NP 4 heavy duty non pressure pipe 1000 mm dia	Metre		
M-150	RCC Pipe NP 4 heavy duty non pressure pipe 1200 mm dia	Metre	Rate as per PH items	
M-151	RCC Pipe NP 4 heavy duty non pressure pipe 300 mm dia	Metre		
M-152	Reflectorising glass beads	Kg		
M-153	Reinforcement strips 60 mm wide 5 mm thick as per clause 3102. (Copper Strips)	Metre		
M-154	Reinforcement strips 60 mm wide 5 mm thick as per clause 3102. (Galvanized carbon steel strips)	Metre	<ul> <li>Rate as per local</li> <li>competitive quotations</li> </ul>	
M-155	Reinforcement strips 60 mm wide 5 mm thick as per clause 3102. (Glass reinforced polymer/ fiber reinforced polymer/polymeric strips)	Metre		

Sl. No.	Description	Unit	Rate Propose d by
1	2	3	4
M-156	Reinforcement strips 60 mm wide 5 mm thick as per clause 3102. (Stainless steel strips)	Metre	Rate as per local competitive
M-157	Reinforcement strips 60 mm wide 5 mm thick as per clause 3102. (Aluminum strips)	Metre	quotations
M-158	Rivets	Each	6
M-159	Sand bags (Cost of sand and Empty cement bag)	Per bag	Rate as per Item no.2 of miscellaneous items
M-160	Sapling 2 m high 25 mm dia	Each	Rate as per local competitive quotations
M-161	Scrap tyres of size 900 x 20	No's	70
M-162	Seeds(Grass)	Kg	18
M-163	Cost of Selected earth	Cum	Rate as per Item No. M-092
M-164	Separation Membrane of impermeable plastic sheeting 125 micron thick	Sqm	Rate as per local competitive
M-165	Sheathing duct	Metre	quotations
M-166	Shrubs	Each	15
M-167	Sludge / Farm yard manure @ 0.18 cum per 100 sqm at site of work for turfing	Cum	Rate as per local competitive quotations
M-168	Sodium vapour lamp	Each	As per Building SSR
M-169	Square Rubble Coursed Stone	Cum	2,195
M-170	Steel circular hollow pole of standard specification for street lighting to mount light at 5 m height above deck level	Each	Rate to be obtained from
M-171	Steel circular hollow pole of standard specification for street lighting to mount light at 9 m height above road level	Each	Electricity/Municipal Departments
M-172	Steel drum 300 mm dia 1.2 m high/empty bitumen drum	No's	As per local competitive market
M-173	Steel helmet and cushion block on top of pile head during driving.	Kg	rate
M-174	Steel pipe 25 mm external dia as per IS:1239	Metre	254
M-175	Steel pipe 50 mm external dia as per IS:1239	Metre	495
M-176	Steel wire rope 20 mm	Kg	164
M-177	Steel wire rope 40 mm	Kg	187
M-178	Strip seal expansion joint	Metre	Rate as per local competitive quotations

Sl. No.	Description	Unit	Rate Propose d by	
1	2	3	4	
M-179	Structural Steel(HYSD/TMT bars)	Tonne	Rate as per item no.62 of Material rates of WRD	
M-180	Super plasticizer admixture IS marked as per 9103- 1999	Kg	Rate as per item no.70 of Material rates of WRD	
M-181	Synthetic Geo grids as per clause 3102.8 and approved design and specifications.	Sqm	Rate as per local competitive quotations	
M-182	Through and bond stone (a) 20X20x30 to 45 cm long	Each	Rate as per item no.75 of Material rates of WRD.	
	Through and bond stone (b) 25X25x45 to 60 cm long	Each	Rate as per item no.76 of Material rates of WRD.	
	Through and bond stone (c) 30X30x65 to 75 cm long	Each	Rate as per item no.77 of Material rates of WRD.	
M-183	Tie rods 20mm diameter	No's	48	
M-184	Tiles size 300 x 300 mm and 25 mm thick	Each		
M-185	Timber	Cum	As per Building SSR	
M-186	Traffic cones with 150 mm reflective sleeve	No's	Rate as per local	
M-187	Tube anchorage set complete with bearing plate, permanent wedges etc	No's	- competitive quotations	
M-188	Un slaked lime	Tonne	2598	
M- 189(a)	Water charges(Urban)	KiloLitre	107	
(b)	Water charges(Rural)	KiloLitre	80	
M-190	Water based cement paint	Litre	As per Building SSR	
M-191	Welded steel wire fabric	Kg	135	
M-192	Wire mesh 50mm x 50mm size of 3mm wire	Kg	222	
M-193	Wooden ballies 2" Dia for bracing	Each	As per Building SSR	
M-194	Wooden ballies 8" Dia and 9 m long	Each		

Sl. No.	De	Unit	Rate Proposed by ENC(IW) for
1	2	3	4
M-196	Wooden staff for fastening of flag 25 mm dia, one m long	Each	70
ltem 8.3	Printing new letter and figures of any shade (ii) English Roman	per cm height per letter	1.6
ltem 8.8	Painting Two Coats on New Concrete Surfaces	Sqm	As per Building SSR
ltem 8.9	Painting angle iron post Two Coats	Sqm	As per Building SSR
	Miscellaneous Items		
1	Benching old embankment slopes 0.45 X 0.45 M	RM	4.2
2	Laying Sand Bags in the stipulated places including cost of empty cement bag, sand, thread, stiching charges and labour charges with 13.615 % overhead	per bag	8.5
3	Rough stone for revetment 225mm thick	Cum	145
4	Eradication of Weed growth from Drains, Canals by spraying Chemicals	Sqm	2
5	Thinner	Ltr	80
6	Gear Oil	Ltr	235
7	Cardium compound	kg	95