

REVISED EMBEDDED TAX RATES
AS PER BOCEs 23.03.2019
(SoR 2015-16)

Statement showing the Schedule of Rates with Revised embedded tax rates for the Irrigation work items of SoR 2015-16

SI No.	DESCRIPTION OF MATERIAL	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
1	2	3	4	9
1	Acetylene gas	cum	330	18.12
2	Asphalt 80/100 Grade	Kg	45	19.68
3	Binding wire	Kg	70	18.12
4	Burnt stone slab 10 cm thick	sqm	310	18.12
5(a)	Cement 43 Gr/53 Gr Note: As per Monthly rate fixed by Sub-Committee.	tonne	6300	28.81
6	Chequered plate	Kg	63	18.13
7	Coarse aggregate 10-4.75 mm (excluding Seignioragecharges)	cum	875	-
8	Coarse aggregate 20-10 mm (excluding Seigniorage charges)	cum	1210	-
9	Coarse aggregate 40-20 mm (excluding Seigniorage charges)	cum	1145	-
10	Coarse aggregate 80-40 mm (excluding Seigniorage charges)	cum	635	-
	The aggregate rates mentioned above (from SI.No.7 to SI.No.10) are exclusive of Seigniorage charges but 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, Dolomite, Dolerite and Trap. (Quartzite and Basalt with aggregate impact of less than 20)			
11	Coir brush	Each	40	18.1
12	Copper sheet 16 SWG	kg	680	18.13
13	Coursed rubble stone 30 x 30 x 45 cm (excluding Seigniorage charges)	Each	22	5
14	Coursed rubble stone 30 x 30 x 60 cm (excluding Seigniorage charges)	Each	28	5
15	Curing Compound	Ltr	130	28.81
16	D – cord	Rm	10	28.87
17	Delay - noiseless trunk	Each	21	14.5
18	Detonating fuse coil	Rm	11	28.81
19	Detonating shock tube / Cord relays	Rm	45	28.83
20	Detonator delay type	Each	23	28.78
21	Detonator electric	Each	13	28.84
22	Detonator ordinary	Each	7	28.91
23	Empty cement bag	Each	5	5.04
24	Explosive ANFO	kg	48	28.82
25	Explosive ANFO high strength booster	kg	68	28.81
26	Explosive small dia (Kelvex-220 or equivalent)	kg	70	28.79
27	Fine aggregate/ sand(un- screened) for Concrete & Filtering items) (excluding Seigniorage charges)	cum	560	5

SI No.	DESCRIPTION OF MATERIAL	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
28	Fine aggregate /Sand (Screened) for Mortar, Plastering items and Sand blasting items (excluding Seigniorage charges) (Rs.76 is added towards screening Charges)	cum	760	5
29	Geo-textile (filter fabric) 160 gsm	sqm	110	28.81
30	Geo-textile (filter fabric) 200 gsm	sqm	132	28.82
31	Geo-textile (filter fabric) 250 gsm	sqm	154	28.81
32	G I Pipe 100 mm dia B Class	Rm	785	18.13
33	G I Pipe 15 mm dia A class	Rm	110	18.13
34	G I pipe 25 mm dia A class	Rm	180	18.13
35	G I pipe 40 mm dia B class	Rm	290	18.13
36	G I pipe 50 mm dia A class	Rm	320	18.12
37	G I Pipe 80 mm dia B Class	Rm	490	18.12
38	G.I Bolts / Nuts and Washers	kg	106	18.13
39 (a)	G.I sheet (plain)	tonne	63000	18.13
39 (b)	G.I sheet (Corrugated)	tonne	66000	18.13
40	Hariyala turfing sods	sqm	28	14.52
41	Hectometer stone one line dressed	Each	260	5
42	Hemp yarn	kg	72	18.13
43	Honne wood planks	cum	56700	28.81
44	Hume pipe with collar 150 mm dia	Rm	350	18.13
45	Hume pipe with collar 300 mm dia	Rm	700	18.12
46	J- Bolts 30 cm long	Each	35	18.12
47	Jungle wood planks	cum	24600	14.5
48	Khandki stone 15 to 20 cm height	Each	11	4.96
49	Khandki stone 20 to 25 cm height	Each	13	5.01
50	Khandki stone 25 to 30 cm height	Each	16	4.99
51	Kilometer stone one line dressed	Each	470	5
52	LDPE sheet (Geo membrane) 500 micron thick	sqm	97	18.12
53	LDPE sheet (Geo membrane) 750 micron thick	sqm	137	18.12
54	LDPE sheet (Geo membrane) 1000 micron thick	sqm	189	18.13
55	M S Bolts / Nuts / Washers	kg	90	18.13
56	Murrum(including loading charges but excluding Seigniorage charges)	cum	115	0
57	Oxalic acid	Ltr	80	18.13
58	Oxygen gas	cum	45	18.11
59	PVC sealing strip	Rm	47	18.12
60	PVC water stopper 310 mm wide	Rm	485	18.13
61	PVC pipe of 100 mm dia (4Kg/cm2)	Rm	175	18.12
62 (a)	Reinforcement steel (HYSD/TMT) from integrated steel producers like TATA, SAIL, VSP, Jindal as approved by Ministry of Steel. *(Note: As per Monthly rate fixed by Sub-Committee)	tonne	40000	18.12

SI No.	DESCRIPTION OF MATERIAL	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
62 (b)	Reinforcement steel (HYSD/TMT) BIS approved secondary producers confirming to IS:1786-2008 must have valid licence and well established TMT process of either Thermax, Tempcore, Evcon Turbo & Turboquench.	tonne	Monthly rate fixed by Sub-Committee	18.12
63	Resin bond Cement capsule	Each	65	18.14
64	Rough stone 20 x 20 x 75 cm (Including Loading charges but excluding Seigniorage Charges)	Each	23	5
65(a)	Shahabad stone slab (including loading charges but excluding Seigniorage charges)	sqm	240	5
65(b)	Shahabad stone slab (including loading charges but excluding Seigniorage charges)	sqm	140	5
66	Stone chips (at dump yard/Spoil)(including loading charges but excluding Seigniorage charges)	cum	185	5
67	Stone chips (at quarry)(including loading charges but excluding Seigniorage charges)	cum	360	5
68	Structural steel angle / channel / beam / bars Note: As per Monthly rate fixed by Sub-Committee	tonne	40000	18.12
69	Structural steel plate / flats Note: As per Monthly rate fixed by Sub-Committee	tonne	40000	18.12
70	Super Plasticizer (Conplast RP-264 or equivalent)	kg	95	14.5
71	Synthetic Enamel paint 1st quality	Ltr	240	28.81
72	Synthetic adhesive (Resin + Hardener)	Kg	348	28.81
73	Tar felt joint filler board 12 mm thick	sqm	420	30.53
74	Tar felt joint filler board 20 mm thick	sqm	650	30.53
75	Through stones 20 x 20 x 30 to 45 cm (including loading charges but excluding Seigniorage charges)	Each	23	5
76	Through stones 25 x 25 x 45 to 60 cm long (including loading charges but excluding Seigniorage charges)	Each	39	5
77	Through stones 30 x 30 x 65 to 75 cm long (including loading charges but excluding Seigniorage charges)	Each	59	5
78	Un-coursed rubble stones (at dump yard /Spoil) (including loading charges but excluding Seigniorage charges)	cum	165	5
79	Un-coursed rubble stones (at quarry) (including loading charges but excluding Seigniorage charges)	cum	330	5
80	Water proofing compound	kg	75	28.82
81	Welding electrodes 4 mm dia	Each	11	18.03
82	Wire brush	Each	41	18.12
83	Wire mesh 20 gauge	sqm	220	18.13
84	Zinc chromate red oxide primer paint	Ltr	175	28.81
85	Inorganic zinc silicate	Ltr	550	28.81
86	solvent less coal tar epoxy paint	Ltr	250	21.37
87	Zinc phosphate primer	Ltr	200	28.82
88	Allkyd based iron oxide paint	Ltr	185	28.81
89	a) Cost of hdpe (75mm dia) (6 Kg/cm ²)	Rm	220	18.13
	b) light black MS casing pipe 80 mm dia (8mm thick)	Rm	670	18.12

SI No.	DESCRIPTION OF MATERIAL	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
90	Welded steel wire fabric 100X100X5 mm size	Kg	165	18.13
91	Protective Mastic	Ltr	483	28.81
92	Solventless coal tar epoxy (brown)	Ltr	310	21.37
93	Excavation of drain with Excavator	cum	37	0
ADDITIONAL MATERIALS FOR GATES & HOISTS				
1	Alloy steel (IS : 1570-carbon steel) shafts	Kg	230	18.12
2	Alloy steel (IS : 1570-stainless steel) pins	Kg	420	18.12
3	Bolt / Nut / Washer (hot dipped galvanized)	Kg	120	18.12
4	Bolt / Nut / Washer (stainless steel)	Kg	360	18.13
5 (a)	Bronze (IS:305)bearings/bushes	Kg	920	18.12
5 (b)	Aluminum alloy(IS:305)bearings/bushes	Kg	912	18.13
6	Cast iron blocks	Kg	80	18.13
7	Cast steel drums / gears	Kg	220	18.13
8	Cast steel pinions	Kg	210	18.12
9	Cast steel wheels / pulleys / hubs / rollers /Retainers	Kg	180	18.13
10	Chemical for de-greasing/ de-rusting/phosphate Coating	Ltr	140	14.5
11	Coal tar epoxy paint	Ltr	220	21.37
12	Forged steel hooks / shackles	Kg	260	18.12
13	MS pipe 200 / 300 mm dia	Kg	175	18.12
14	MS pipe 32 mm dia	Rm	185	18.13
15	MS pipe 25 mm dia	Rm	150	18.12
16	Rubber bottom seal (IS : 11855)	Rm	780	28.81
17	Rubber side seal (music note type Teflon claded) (IS : 11855)	Rm	1670	28.81
18	Rubber side seal (music note type uncladed) (IS : 11855)	Rm	1210	28.81
19	Rubber side seal Z-type (IS : 11855)	Rm	1600	28.81
20	Rubber corner seal (Teflon claded) (IS :11855)	Each	1630	28.81
21	Rubber corner seal (un claded) (IS : 11855)	Each	1155	28.81
22	Stainless steel plates / flats	Kg	275	18.13
23	Welding electrode 4 mm dia x 450 mm (radiographic low hydrogen)	Each	18	18.11
24	Welding electrode 4 mm dia x 450 mm (stainless steel)	Each	27	18.16
25	Wire rope 6x36 constn (IS : 2266) (Dia from 16mm to 42mm)	Kg	200	18.12
26	Zinc	Kg	180	18.13
27	Zinc rich (zinc content : 90 %) epoxy primer	Ltr	700	28.81

**Revised Embedded Tax Rates for Capital cost of Machinery/Equipment
(For the SoR 2015-16)**

SI No	DESCRIPTION OF MACHINERY / EQUIPMENT	UNIT	S. Rate for 2015-16	Total embedded Tax Rate (%)
1	2	3	4	9
1	Agitator car / Transit mixer 2 cum (excluding tyres)	Each	2,150,000	-
	tyres and tubes 6 sets	Each	86,000	-
2	Air compressor 5 cmm electric	Each	710,000	-
3	Air compressor 7 cmm diesel	Each	950,000	-
4	Air compressor 7 cmm electric	Each	865,000	-
5	Air compressor 8.5 cmm diesel	Each	1,085,000	-
6	Air compressor 8.5 cmm electric	Each	1,120,000	-
7	Air compressor 15 cmm electric	Each	1,370,000	-
8	Angle Dozer 90 hp	Each	5,475,000	-
9	Batching plant 0.5 cum with accessories	Each	1,200,000	-
10	Batching plant 2 x 1.00 cum with accessories	Each	4,245,000	-
11	Batching plant 2 x 1.50 cum with accessories	Each	5,425,000	-
12	Bending machine	Each	530,000	-
13	Clamp shell and hoisting ropes	Each	30,000	-
14	Concrete bucket 1.5 cum	Each	56,000	-
15	Concrete hand mixer 45/30 ltr	Each	15,500	-
16	Concrete mixer 300/200 ltr(diesel)	Each	150,000	-
17	Concrete mixer 300/200 ltr (electric)	Each	145,000	-
18	Concrete mixer 600/400 ltr(diesel)	Each	260,000	-
19	Concrete mixer 600/400 ltr (electric)	Each	255,000	-
20	Concrete paver 100 Sqm / hr	Each	2,361,000	-
21	Convey mucker (excluding tyres)	Each	3,855,000	-
	tyres and tubes 6 sets		86,000	-
22	Core drilling machine	Each	1,100,000	-
23	Diesel generating set 30 KVA	Each	495,000	-
24	Diesel generating set 50 KVA	Each	640,000	-
25	Diesel Loco 45 hp	Each	2,120,000	-
26	Dewatering pump 5 hp diesel	Each	40,000	-
27	Dewatering pump 5 hp electric	Each	24,500	-
28	Dewatering pump 10 hp diesel	Each	60,000	-
29	Dewatering pump 10 hp electric	Each	55,000	-
30	Dewatering pump 20 hp diesel	Each	190,000	-
31	Dewatering pump 20 hp electric	Each	100,000	-
32	Drifter	Each	1,058,000	-
33	Drilling jumbo (excluding tyres)	Each	1,302,000	-
	tyres and tubes 6 sets		86,000	-

SI No	DESCRIPTION OF MACHINERY / EQUIPMENT	UNIT	S. Rate for 2015-16	Total embedded Tax Rate (%)
34	Dumper 4.5 cum (excluding tyres)	Each	1,450,000	-
	tyres and tubes 6 sets		86,000	-
35	Geophysical Ele.resistivity meter	Each	475,000	-
36	Grouting pump	Each	102,000	-
37	Guniting / sand blasting equipment	Each	280,000	-
38	Ice plant with accessories 30 t / day	Each	2,280,000	-
39	Jack hammer	Each	65,000	-
40	Needle vibrator 40 mm petrol	Each	20,000	-
41	Needle vibrator 40 mm electric	Each	21,000	-
42	Needle vibrator 60 mm petrol	Each	21,500	-
43	Needle vibrator 60 mm electric	Each	25,500	-
44	Planing machine 4 m stroke	Each	780,000	-
45	Plate shearing machine up to 12 mm	Each	425,000	-
46	Pneumatic placer 0.5 cum	Each	580,000	-
47	Pneumatic tamper	Each	85,000	-
48	Pug cutting machine	Each	16,000	-
49	Pusher leg	Each	52,000	-
50	Road roller diesel 10 t	Each	850,000	-
51	Shovel 0.50 cum 75 hp	Each	3,750,000	-
52	Shovel 0.85 cum 110 hp	Each	6,380,000	-
53	Stationery derrick crane 5 t	Each	653,000	-
54	Tipper 5 cum (excluding tyres)	Each	1,625,000	-
	tyres and tubes 6 sets		86,000	-
55	Tipping tub 1.5 cum	Each	240,000	-
56	Tower crane 5 tonne	Each	7,475,000	-
57	Transformer 250 KVA	Each	425,000	-
58	Truck 10 t (excluding tyres)	Each	1,475,000	-
	tyres and tubes 6 sets		86,000	-
59	Truck mounted derrick crane 5 t (excluding tyres)	Each	1,960,000	-
	tyres and tubes 6 sets		86,000	-
60	Upright drilling machine	Each	56,000	-
61	Ventilation fan 20 hp	Each	260,000	-
62	Vibratory pad foot roller 8 t	Each	2,950,000	-
63	Wagon drill	Each	650,000	-
64	Water tanker 8000 ltr (excluding tyres)	Each	1,422,000	-
	tyres and tubes 6 sets		86,000	-
65	Welding set	Each	48,000	-
66	Winch 35 hp electric	Each	375,000	-
67	Hydraulic Truck Crane 30T	Each	14,484,250	-
	tyres and tubes 6 sets		185,220	-

SI No	DESCRIPTION OF MACHINERY / EQUIPMENT	UNIT	S. Rate for 2015-16	Total embedded Tax Rate (%)
68	Hydraulic Truck Crane 16T	Each	10,390,875	-
	tyres and tubes 6 sets		185,220	-
69	Heavy Duty Airless Spray Painting Equipment	Each	487,770	-
<u>ACCESSORIES TO MACHINERY / EQUIPMENT</u>				
1	Casing shoe bit	Each	10,500	-
2	Diamond core bit BX size	Each	10,600	-
3	Diamond core bit NX size	Each	12,720	-
4	Double tube core barrel	Each	13,704	-
5	Extension drill rod with coupling sleeve	Rm	2,226	-
6	Jack hammer drill rod 1.5 m	Each	4,150	-
7	Jack hammer drill rod 2.5 m	Each	6,400	-
8	Nozzle for Guniting / sand blasting gun	Each	700	-
9	Paving Cylinder	Each	28,080	-
10	Rails 30R (30 kg / m)	tonne	52,530	-
11	Reamer shell	Each	5,150	-
12	T.C. Cross bit 50 mm dia	Each	5,000	-
13	T.C. Cross bit 75 mm dia	Each	10,000	-
14	T.C. Cross bit 100 mm dia	Each	12,000	-
15	Tyres and Tubes for truck	Set	18,000	-
16	Wire rope 16 mm dia	Rm	265	-
<u>OTHER COSTS ON MATERIAL / MACHINERY / EQUIPMENT</u>				
1	Air hose 25 mm dia	Rm	185	18.13
2	Air hose 50 mm dia	Rm	298	18.12
3	Demand charges (HT-I : General-11 KV category) on power supply	KVA /month	350	0
4	Diesel	Ltr	59.1	0
5	Electric power (HT-VIII Category) including tax (1.5 times of the Tariff of HT-I(A):General-11 KVA Category)	Kwhr	8.6	0
6	Excise duty on Gates / Hoist supplies	%	0%	
7	Insurance charges on machinery	% / annum	1%	
8	Interest on capital cost	% / annum	11.00%	
9	Lubricants	Ltr	275	18.13
10	Petrol	Ltr	74.73	
11	Rivets	Kg	100.00	18.12
12	Road tax on transport vehicles	Rs./annu m	As per RTA	
13	Shalimatic sealing compound	Kg	105	14.5
14	Shutter oil	Ltr	45	14.5

SI No	DESCRIPTION OF MACHINERY / EQUIPMENT	UNIT	S. Rate for 2015-16	Total embedded Tax Rate (%)
15	Structural steel fabrication	Kg	24	0
16	Sundries (Lump sum for un quantified inputs)	LS	20	0
17	Water hose (pressure) 20 mm dia	Rm	185	18.13
18	Steel wedges	LS	16	18.08
19	Elbows / Nipple / Plugs etc.,	LS	17	18.14
20	Soldering materials	LS	17	18.14
21	Steam circulation arrangement	LS	17	18.14
22	Fuel charges (gas for heating)	LS	17	5
23	Vulcanizing materials	LS	17	12.51
24	Gas cutting set (2 No's 15 m hose and nozzle unit)	Each	14,250	18.13
25	Grease	Kg	260	18.12
26	Welding holder set (cable / holder / gloves / mask etc)	Each	7650	18.13
27	Use rate of ropes	LS	150	0
<u>MATERIALS FOR GATES AND HOISTS</u>				
1	Worm reducers	Each	224,400	28.81
2	Electric motor 20 hp(Double Shaft)	Each	121,000	28.81
3	Electric motor 17.5 hp(Double Shaft)	Each	85,800	28.81
4	Electric motor 12.5 hp(Double Shaft)	Each	72,600	28.81
5	Electric motor 5 hp(Double Shaft)	Each	33,000	28.81
6	Electric motor 3 hp (Double Shaft)	Each	23,100	28.81
7	Electric motor 2 hp (Double Shaft)	Each	12,100	28.81
8	Floating shaft 300 mm dia	Kg	180	28.81
9	Manual operating system	Each	28,820	14.5
10	Gate position indicator	Each	195,800	28.81
11	Ele-magnetic brake	Each	35,200	28.81
12	Electric cable / switch / control panel etc	LS	50,380	18.13
13	Wire rope sockets	Each	4,620	18.13

**Revised embedded tax rates for the Materials other than covered under
Irrigation Work items for the SoR 2015 - 16**

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-002	Quarried stone 150 - 200 mm size for Hand Broken	Cum	147	5
M-003	Boulder with minimum size of 300 mm for Pitching (Excluding Seigniorage)	Cum	164	5
M-004	Coarse sand for filling (Excluding Seigniorage)	Cum	Rate as per item no.27 of material of I&CAD	
M-005	Coarse sand for mortar(Excluding Seigniorage)	Cum	Rate as per item no.27 of material of I&CAD	
M-006	Fine Sand (Excluding Seigniorage charges)	Cum	Rate as per item no.27 of material of I&CAD	
M-007	Murrum (Excluding Seigniorage charges)	Cum	Rate as per item no.56 of material of I&CAD	
M-008	Gravel/Quarry spall(Excluding Seigniorage Charges)	Cum	103	0
M-009	Granular Material or hard Murrum for GSB works	Cum	Deleted	
M-010	Granular Material or hard Murrum for GSB works (Excluding Seigniorage charges)	Cum	92	0
M-011	Fly ash conforming to IS: 3812 (Part II & I)	Cum	72	12.5
	For item No.M-012 to M-055 the note shall be as follows 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. 2) If the material is obtained by hand broken from surface boulders/canal spoil, the blasting and crushing charges shall be deducted. 3) The material shall be HB Stone of Granite, Dolomite, Dolerite and Trap. (Quartzite and Basalt with aggregate impact of less than 20)			
M-012	Filter media/Filter Material as per Table 300-3 (MoRT&H Specification) (excluding Seigniorage Charges)	Cum	345	5
M-013	Close graded Granular sub-base Material 53 mm to 9.5 mm (excluding Seigniorage Charges)	Cum	667	-

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-014	Close graded Granular sub-base Material 37.5 mm to 9.5 mm (excluding Seigniorage Charges)	Cum	685	-
M-015	Close graded Granular sub-base Material 26.5 mm to 9.5 mm (excluding Seigniorage Charges)	Cum	711	-
M-016	Close graded Granular sub-base Material 9.5 mm to 4.75 mm (excluding Seigniorage Charges)	Cum	592	-
M-017	Close graded Granular sub-base Material 9.5 mm to 2.36 mm (excluding Seigniorage Charges)	Cum	582	-
M-18	Close graded Granular sub-base Material 4.75 mm to 2.36 mm (excluding Seigniorage Charges)	Cum	510	5
M-019	Close graded Granular sub-base Material 4.75mm to 75 micron mm(excluding Seigniorage Charges)	cum	489	5
M-020	Close graded Granular sub-base Material 2.36 mm (excluding Seigniorage Charges)	Cum	489	5
M-021	Stone crusher dust finer than 3mm with not more than10% passing 0.075 sieve. (excluding Seigniorage Charges)	Cum	357	5
M-022	Coarse graded Granular sub-base Material 2.36 mm & below (excluding Seigniorage Charges)	Cum	438	5
M-023	Coarse graded Granular sub-base Material 4.75mm to 75 micron mm (excluding Seigniorage Charges)	cum	474	5
M-024	Coarse graded Granular sub-base Material 4.75 mm to 2.36 mm (excluding Seigniorage Charges)	Cum	474	5
M-025	Coarse graded Granular sub-base Material 9.5 mm to 4.75 mm (excluding Seigniorage Charges)	Cum	561	-
M-026	Coarse graded Granular sub-base Material 26.5 mm to 4.75 mm (excluding Seigniorage Charges)	Cum	619	-
M-027	Coarse graded Granular sub-base Material 26.5 mm to 9.5 mm (excluding Seigniorage Charges)	Cum	620	-
M-028	Coarse graded Granular sub-base Material 37.5 mm to 9.5 mm (excluding Seigniorage Charges)	Cum	685	-

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-029	Coarse graded Granular sub-base Material 53 mm to 26 .5mm (excluding Seigniorage Charges)	Cum	850	-
M-030	Aggregates below 5.6 mm(excluding Seiniorage Charges)	Cum	557	5
M-031	Aggregates 22.4 mm to 2.36 mm (excluding Seiniorage Charges)	Cum	914	-
M-032	Aggregates 22.4 mm to 5.6 mm (excluding Seiniorage Charges)	Cum	1040	-
M-033	Aggregates 45 mm to 2.8 mm (excluding Seiniorage Charges)	Cum	667	-
M-034	Aggregates 45 mm to 22.4 mm (excluding Seiniorage Charges)	Cum	Rate as per item no.9 of material of I&CAD	-
M-035	Aggregates 53 mm to 2.8 mm (excluding Seiniorage Charges)	Cum	914	-
M-036	Aggregates 53 mm to 22.4 mm (excluding Seiniorage Charges)	Cum	872	-
M-037	Aggregates 63 mm to 2.8 mm (excluding Seiniorage Charges)	Cum	714	-
M-038	Aggregates 63 mm to 45 mm (excluding Seiniorage Charges)	Cum	662	-
M-039	Aggregates 90 mm to 45 mm (excluding Seiniorage Charges)	Cum	Rate as per item no.10 of material of I&CAD	-
M-040	Aggregates 10 mm to 5 mm (excluding Seiniorage Charges)	Cum	Rate as per item no.7 of material of I&CAD	-
M-041	Aggregates 11.2 mm to 0.09 mm (excluding Seiniorage Charges)	Cum	704	-
M-042	Aggregates 13.2 mm to 0.09 mm(excluding Seiniorage Charges)	Cum	798	-
M-043	Aggregates 13.2 mm to 5.6 mm (excluding Seiniorage Charges)	Cum	919	-
M-044	Aggregates 13.2 mm to 10 mm(excluding Seiniorage Charges)	Cum	1029	-
M-045	Aggregates 20 mm to 10 mm (excluding Seiniorage Charges)	Cum	Rate as per item no.8 of material of I&CAD	-

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-046	Aggregates 25 mm to 10 mm (excluding Seiniorage Charges)	Cum	1129	-
M-047	Aggregates 19 mm to 6 mm (excluding Seiniorage Charges)	Cum	1040	-
M-048	Aggregates 37.5 mm to 19 mm(excluding Seiniorage Charges)	Cum	1103	-
M-049	Aggregates 37.5 mm to 25 mm(excluding Seiniorage Charges)	Cum	1145	-
M-050	Aggregates 6 mm nominal size(excluding Seiniorage Charges)	Cum	735	-
M-051	Aggregates 10 mm nominal size(excluding Seiniorage Charges)	Cum	935	-
M-052	Aggregates 13.2/12.5 mm nominal size(excluding Seiniorage Charges)	Cum	1097	-
M-053	Aggregates 20 mm nominal size(excluding Seiniorage Charges)	Cum	1365	-
M-054	Aggregates 25 mm nominal size(excluding Seiniorage Charges)	Cum	1313	-
M-055	Aggregates 40 mm nominal size(excluding Seiniorage Charges)	Cum	845	-
M-056	AC pipe 100 mm dia	Metre	Rate as per PH item	
M-057	Acrylic polymer bonding coat	Litre	474	18.12
M-058	Aluminum Paint	Litre	330	28.81
M-059	Aluminum alloy plate 2mm Thick	Sqm	381	18.12
M-060	Aluminum alloy/Galvanized steel	Tonne	70931	18.13
M-061	Aluminum sheeting fixed with encapsulated lens type reflective sheeting including 2% towards lettering, cost of angle iron, cost of drilling holes, nuts, bolts etc. and signs as applicable	Sqm	968	18.13
M-062	Aluminum studs 100 x 100 mm fitted with lens	No's	As per local market rate	
M-063	Barbed wire	Kg	80	18.13
M-064	Bearing (Cost of parts)	No's	570	18.12

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-065	Bearing (Cast steel rocker bearing assembly of 250 tonne)	No's	785	18.13
M-066	Bearing (Elastomeric bearing assembly consisting of 7 internal layers of elastomer bonded to 6 nos. internal reinforcing steel laminates by the process of vulcanization,)	Cm3	As per Market Competitive rates.	
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		
M-069	Bearing (PTFE sliding plate bearing assembly of 80 tonne)	No's		
M-070	Bearing (Supply of sliding plate bearing of 80 tonne)	No's		
M-071	Bentonite	Kg	8	14.5
M-072	Binding wire	Kg	Rate as per item no.3 of Material rates of I&CAD.	
M-073	Bitumen (Cationic Emulsion)	Tonne	As per rates fixed by R&B Dept based on refinery rates	
M-074	Bitumen (60-70 grade)(Excluding taxes)	Tonne	As per rates fixed by R&B Dept based on refinery rates	
M-075	Bitumen (80-100 grade) (Excluding taxes)	Tonne	As per rates fixed by R&B Dept based on refinery rates	
M-076	Bitumen (Cutback)	Tonne	As per rates fixed by R&B Dept based on refinery rates	
M-077	Bitumen (emulsion)(Excluding taxes)	Tonne	As per rates fixed by R&B Dept based on refinery rates	

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-078	Bitumen (modified graded)	Tonne	As per rates fixed by R&B Dept based on refinery rates	
M-079	Brick	Each	As per Building SSR	-
M-080	C.I. shoes for the pile	Kg	54	18.11
M-081	Cement	Tonne	Rate as per item no.5 of Material rates of I&CAD.	
M-082	Cold twisted bars (HYSD/TMT Bars)	Tonne	Rate as per item no.62 of Material rates of I&CAD	
M-083	Collar for joints 300 mm dia	No's	165	28.82
M-084	Compressible Fibre Board(20mm thick)	Sqm	541	14.5
M-085	Connectors/ Staples	Each	82	28.81
M-086	Copper Plate(12m long x 250mm wide)	Kg	536	28.81
M-087	Corrosion resistant Structural steel	Tonne	59225	18.13
M-088	Corrugated sheet, 3 mm thick, "Tie" beam section railing	Kg	206	18.13
M-089	Credit for excavated rock found suitable for use	Cum	194	5
M-090	Curing compound	Liter	130	28.81
M-091	Delineators from ISI certified firm as per the standard drawing given in IRC - 79	Each	As per local competitive quotations	
M-092	Earth Cost or compensation for earth taken from private land(Excluding Seigniorage Charges)	Cum	40	0
M-093	Elastomeric slab seal expansion joint assembly manufactured by using chloroprene, elastomer for elastomeric slab unit conforming to clause 915.1 of IRC: 83 (part II),	Metre	As per local competitive quotations	
M-094	Electric Detonators @ 1 detonator for 1/2 gelatin stick of 125 gms each	100 no's	Rate as per item No. 21 of I&CAD	
M-095	Epoxy compound with accessories for preparing epoxy mortar	Kg	361	28.81
M-096	Epoxy mortar	Kg	118	28.81

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-097	Epoxy primer	Kg	613	28.81
M-098	Epoxy resin-hardener mix for prime coat	Kg	633	28.81
M-099	Flag of red color cloth 600 x 600 mm	Each	25	5
M-100	Flowering Plants	Each	40	4.99
M-101	Galvanized MS flat clamp	No's	195	18.12
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	180	18.13
M-103	Galvanized structural steel plate 200 mm wide, 6 mm thick, 24 m long	Kg	932	18.12
M-104	Gelatin 80%	Kg	73	28.79
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 I&CAD	
	(b) Geo membrane 750 micron thick	Sqm	Rate as per item no.53 of I&CAD	
	(c) Geo membrane 1000 micron thick	Sqm	Rate as per item no.54 of I&CAD	
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 I&CAD	
	(b) Geo textile 200 gsm	Sqm	Rate as per item no.30 of I&CAD	
	(c) Geo textile 250 gsm	Sqm	Rate as per item no.31 of I&CAD	
M-109	Geo textile filter fabric	Sqm	As per local competitive quotations	
M-110	GI bolt 10 mm Dia	No's	23	28.78
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)	Kg	6	14.5
M-113	Grass (Fine)	Kg	8	0
M-114	HDPE pipes 75mm dia	Metre	Rate as per PH items	
M-115	HDPE pipes 90mm dia	Metre	Rate as per PH items	
M-116	Hedge plants	Each	Rate as per local competitive quotations	

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-117	Helical pipes 600mm diameter	Metre	Rate as per local competitive quotations	
M-118	Hot applied thermoplastic compound	Litre	Rate as per local competitive quotations	
M-119	HTS strand	Tonne	Rate as per local competitive quotations	
M-120	Joint Sealant Compound	Kg	Rate as per local competitive quotations	
M-121	Jute netting, open weave, 2.5 cm square opening for seeding and Mulching	Sqm	90	28.81
M-122	LDO for steam curing	Litre	65	30.52
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	46865	18.13
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 representative	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	20	18.13
M-130	Nuts and bolts	Kg	100	18.12
M-131	Paint	Litre	255	28.81
M-132	Pavement Marking Paint	Litre		

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-133	Paving Fabric	Sqm	Rate as per local competitive quotations	
M-134	Perforated geo synthetic pipe 150 mm dia	Metre		
M-135	Perforated pipe of cement concrete, internal dia 100 mm	Metre		
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	Rate as per local competitive quotations	
M-139	Plastic tubes 50 cm dia , 1.2 m high	No's		
M-140	Polymer braids	Metre		
M-141	Pre moulded Joint filler, 25 mm thick for expansion joint	Sqm		
M-142	Pre-coated stone chips of 13.2 mm nominal size	Cum		
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.	Meter	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	Primer	Kg	AS per Building SSR	
M-147	Quick setting compound	Kg	AS per Local market rate	
M-148	Random Rubble Stone(Including Loading Charges but excluding Seignorage Charges)	Cum	252	5

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-149	RCC Pipe NP 4 heavy duty non pressure pipe 1000mm dia	Metre	Rate as per PH items	
M-150	RCC Pipe NP 4 heavy duty non pressure pipe 1200 mm dia	Metre		
M-151	RCC Pipe NP 4 heavy duty non pressure pipe 300 mm dia	Metre		
M-152	Reflectorising glass beads	Kg	Rate as per local competitive quotations	
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		
M-155	Reinforcement strips 60 mm wide 5 mm thick as per clause 3102. (Glass reinforced polymer/ fiber reinforced polymer/polymeric strips)	Metre		
M-156	Reinforcement strips 60 mm wide 5 mm thick as per clause 3102. (Stainless steel strips)	Metre	Rate as per local competitive quotations	
M-157	Reinforcement strips 60 mm wide 5 mm thick as per clause 3102. (Aluminum strips)	Metre		
M-158	Rivets	Each	7	18.04
M-159	Sand bags (Cost of sand and Empty cement bag)	Per bag	18	5
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	80	18.13
M-162	Seeds(Grass)	Kg	18	0
M-163	Cost of Selected earth (Excluding Seignorage Charges)	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 quotations	
M-165	Sheathing duct	Metre		
M-166	Shrubs	Each	15	0
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	

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-169	Square Rubble Coursed Stone(Including Loading Charges but excluding Seigniorage charges)	Cum	2236	5
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 Electricity/Municipal Departments	
M-171	Steel circular hollow pole of standard specification for street lighting to mount light at 9 m height above road level	Each	Rate to be obtained from Electricity/Municipal Departments	
M-172	Steel drum 300 mm dia 1.2 m high/empty bitumen drum	No's	As per local competitive market rate	
M-173	Steel helmet and cushion block on top of pile head during driving.	Kg	As per local competitive market rate	
M-174	Steel pipe 25 mm external dia as per IS:1239	Metre	288	18.13
M-175	Steel pipe 50 mm external dia as per IS:1239	Metre	561	18.13
M-176	Steel wire rope 20 mm	Kg	185	18.13
M-177	Steel wire rope 40 mm	Kg	211	18.13
M-178	Strip seal expansion joint	Metre	Rate as per local competitive quotations	
M-179	Structural Steel(HYSD/TMT bars)	Tonne	Rate as for item no.62 of material rates of I&CAD.	
M-180	Super plasticizer admixture IS marked as per 9103-1999	Kg	Rate as for item no.70 of material rates of I&CAD.	
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 for item no.75 of material rates of I&CAD.	
	Through and bond stone (b) 25X25x45 to 60 cm long		Rate as for item no.76 of material rates of I&CAD.	
	Through and bond stone (c) 30X30x65 to 75 cm long	Each	Rate as for item no.77 of material rates of I&CAD.	
M-183	Tie rods 20mm diameter	No's	54	28.82
M-184	Tiles size 300 x 300 mm and 25 mm thick	Each	As per Building SSR	
M-185	Timber	Cum	As per Building SSR	
M-186	Traffic cones with 150 mm reflective sleeve	No's	Rate as per local competitive quotations	

Sl. No.	Description	Unit	S.Rate for 2015-16	Total embedded Tax Rate (%)
M-187	Tube anchorage set complete with bearing plate, permanent wedges etc	No's	Rate as per local competitive quotations	
M-188	Un slaked lime	Tonne	2616	5
M-189(a)	Water charges(Urban)	KiloLitre	103	5
(b)	Water charges(Rural)	KiloLitre	77	5
M-190	Water based cement paint	Litre	As per Building SSR	
M-191	Welded steel wire fabric	Kg	155	18.12
M-192	Wire mesh 50mm x 50mm size of 3mm wire	Kg	252	18.13
M-193	Wooden ballies 2" Dia for bracing	Each	As per Building SSR	
M-194	Wooden ballies 8" Dia and 9 m long	Each	As per Building SSR	
M-195	Wooden packing	Cum	1265	18.12
M-196	Wooden staff for fastening of flag 25 mm dia, one m long	Each	75	12.49
Item 8.3	Printing new letter and figures of any shade (ii) English Roman	per cm height per letter	1.60	0
Item 8.8	Painting Two Coats on New Concrete Surfaces	Sqm	As per Building SSR	
Item 8.9	Painting angle iron post Two Coats	Sqm	As per Building SSR	
Miscellaneous Items				
1	Benching old embankment slopes 0.45M X 0.45M	RM	5	0
2	Laying Sand Bags in the stipulated places including cost of empty cement bag, sand, thread, stitching charges and labour charges with 13.615 % overhead charges and contractors profits.	per bag	26	0
3	Rough stone for revetment 225mm thick (including Loading charges but excluding Seigniorage charges)	Cum	160	5
4	Eradication of Weed growth from Drains, Canals by spraying Chemicals	Sqm	2	0
5	Thinner	Ltr	80	28.8

Sd/- C. Muralidhar
Engineer-in-Chief (Irrigation)
Irrigation &CAD Department

Sd/- B. Nagendra Rao
Engineer-in-Chief (AW)
Irrigation &CAD Department and
Chairman, Board of Chief Engineers