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Office of the Engineer-in-Chief(AW/IW),
Curreney Nagar, Ramavarappadu, Vijayawada

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25-2-20

Addendum and correction slip to SoR 2019-20

Sub: SoR 2019-20 — Addendum in respect of 1) **Inclusion of the (a) MS pipes with submerged arc welding – Internal coating with food grade epoxy paint and external coating with 3LPE coating/ polyolefin coating & (b) HDPE Silicore pipes with same rates as that of SoR 2018-19 & 2) Inclusion Of Bore Wells Drilling Rates In SoR 2019-20 and correction slip in respect of lead charges calculations** issued -Reg.

Ref: 1.T/o Procs.No.ENC/IW/P&M/EE.1/DEE-2/AEE(K)/ SoR 2019-20/Vol.3 dt: 24.09.2019
2.8th BoCEs recommendations for the year 2019

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This is to inform that the final copy of SoR 2019-20 was uploaded on website of Water Resources Department viz. www.irrigationap.cgg.gov.in and the same was informed to all the Engineers-in-Chief/Chief Engineers vide this office proceedings 1st cited.

Addendum to SoR 2019-20

During the 8th BoCEs meeting held on 09.12.2019, the following 3 issues were discussed and the BoCEs recommended to incorporate the same in the SoR 2019-20.

1) Inclusion of the (a) MS pipes with submerged arc welding – Internal coating with food grade epoxy paint and external coating with 3LPE coating/ polyolefin coating & (b) HDPE Silicore pipes in SoR 2019-20 with same rates as that of SoR 2018-19.

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It is brought to the notice that during the finalisation of SoR 2019-20, the rates of above pipes were not included which were introduced in the SoR 2018-19. The Chief Engineer, ADCL in his letter addressed to the Engineer-in-Chief (PH) requested to include the above materials as these materials are being utilised in the projects taken up by Amaravathi Development Corporation Limited and requested to address the same to the BoCEs for inclusion of the above items duly adopting the SoR 2018-19 rates for the SoR 2019-20 also.

The BoCEs recommended for inclusion of the above-said pipes in the Public Health part of SoR 2019-20 keeping the same rates as approved during SoR 2018-19.

The rates as approved for the above said pipes by BoCEs for the SoR year 2019-20 are appended vide **Annexure-I**

2) Inclusion Of Bore Wells Drilling Rates In SoR 2019-20

During the special BoCEs meeting held to resolve the CFMS issues, it was opined that as the bore well digging is required in large scale in Rural areas, it may be appropriate to

incorporate the bore well digging rates in the Schedule of Rates to guide the field officers while taking up the digging of bore wells.

Accordingly, the Engineer-in-Chief (PH) has forwarded the request of Engineer-in-Chief(RWS&S) to consider the rates for the items of drilling of Bore Wells, bore well platforms, deepening of bore wells, flushing of bore wells, Blue casing pipes and pipe caps in the state for the works related to RWS&S department, and also for inclusion of the same as separate item in PH SoR 2019-20.

The same was discussed in the 8th Board of Chief Engineers meeting held on 09.12.2019. The BoCEs recommended for inclusion of the approved rates of drilling items in the Public Health part of SoR 2019-20. The approved rates of the items of drilling bore wells, bore wells platforms etc are appended vide **Annexure-II:**

Correction slip to SoR 2019-20 :

Correction in the lead charges calculation procedure for the materials classified in to categories (Ii) to (Iv):

It is brought to the notice that during the validation of CFMS database some deviations found in calculation procedure of lead charges. For lead charges up to 2 km the conveyance mode is considered as truck whereas for lead charges beyond 2 km the conveyance mode is considered by tipper for some categories of materials. The same was discussed in the 8th Board of Chief Engineers meeting held on 09.12.2019. The BoCEs recommended to correct the above discrepancies found in the process of lead charges calculation. The corrected lead charges are appended vide **Annexure-III**

The Addendum & correction slip to the SoR 2019-20 as mentioned above is herewith issued and uploaded in the Water Resources Department website.

The Heads of Departments mentioned below are requested to communicate the above to their sub-ordinate officers. The above changes shall come in to force with effect from the date of ^{issuance} of Addendum and Correction slip for SoR 2019-20 and shall be applicable for all Engineering Departments.

Sd/-K.Srinivas, dt: 30.01.2020,
Engineer-in-Chief(AW/IW)&
Chairman, BoCEs.

TO

1. Engineer-in-Chief (R&B), Admn, NH&CRF, Roads & Buildings Department.
2. ✓ Engineer-in-Chief (P.H.), Public Health Department.
3. Engineer-in-Chief (P.R.), Panchayath Raj Department.
4. Engineer-in-Chief (RWS) R W S, Department.
5. Chief Engineer (Buildings&RSW), R&B Department.

6. Copy to all the Engineers-in-Chief, Chief Engineers and Regional Superintending Engineers of Irrigation Circles of Vijayawada, Guntur, Dowlaiswaram and Chittoor of Water Resources Department for taking necessary action.

[Signature]
for Engineer-in-Chief(IW)
28/06/20

Annexure-I

ARC WELDED M.S.PIPES FOR THE YEAR 2019-20(Same as that of SoR 2018-19 rates)

Manufacture, supply and delivery of submerged ARC welded M.S Pipe having bevelled ends from plate or coil conforming to IS-3589 and/or IS-5504 with its latest revision / amendment with inside 406 micron thick food grade epoxy coating and outside 3LPE coating conforming to DIN 30670 / Polyolefin Tape coating conforming to AWWA C214 for the specified thickness & inner diameter of pipe, external field joint coating with polyolefin backing and internal field joint coating with chemically cured 2 part epoxy based solvent free liquid coating material for Drinking Water NSF approved etc., complete including all labour, materials and ROU/ROW as per specification and to the satisfaction of Engineer-in-charge excluding transportation

Inner Diameter (mm)	Outer Diameter (mm)	Thickness (mm)	MS Pipe Rate with Internal 406 micron thick food grade epoxy coating and 3LPE coating conforming to DIN 30670	MS Pipe Rate with Internal 406 micron thick food grade epoxy coating and Polyolefin Tape coating conforming to AWWA C214
500	510	5	5723	5634
500	511.20	5.60	6165	6084
500	512.6	6.30	6681	6600
500	522	11	10186	10104
600	611.60	5.80	7558	7462
600	612.60	6.30	7998	7902
600	625	12.50	13522	13424
700	712.60	6.30	9285	9204
700	714.20	7.10	10101	10024
700	728.40	14.20	17422	17390
800	814.20	7.10	11526	11440
800	816	8	12573	12494
800	836	18	24369	24365
900	916	8	14125	14040
900	917.60	8.80	15172	15093
900	920	10	16745	16677
900	935	17.50	26672	26669
1000	1017.60	8.8	16837	16752
1000	1020	10	18581	18508
1000	1040	20	33269	33296
1050	1067.60	8.80	17670	17583
1050	1070	10	19499	19423

1050	1072	11	21026	20961
1100	1117.6	8.8	18587	18412
1100	1120	10	20515	20339
1100	1122	11	22124	21947
1200	1220	10	22362	22170
1200	1222	11	24114	23922
1200	1225	12.50	26748	26556
1300	1325	12.50	28952	28744
1300	1328.4	14.20	32189	31980
1400	1425	12.50	31155	30931
1400	1428.40	14.20	34634	34410
1500	1528.40	14.20	37082	36841
1500	1532	16	41031	40792
1600	1628.40	14.20	39528	39274
1600	1632	16	43733	43480
1700	1728.40	14.20	41973	41705
1700	1732	16	46435	46169
1700	1735	17.50	50160	49898
1800	1828.40	14.20	44419	44137
1800	1832	16	49137	48859
1800	1835	17.50	53077	52801
1900	1932	16	51839	51548
1900	1935	17.50	55993	55704
1900	1940	20	62930	62646
2000	2032	16	54542	54236
2000	2035	17.50	58909	58608
2000	2040	20	66203	65907
2100	2135	16	61826	61512
2100	2140	17.50	69476	69169
2100	2144.40	20	76224	75921
2200	2235	17.50	64742	64415
2200	2240	20	72750	72429
2200	2244.40	22.20	79811	79498
2300	2340	20	76023	75691
2300	2344.40	22.20	83399	83074
2300	2350	25	92806	92489
2400	2440	20	79296	78951
2400	2444.40	22.20	86986	86648
2400	2450	25	96793	96465
2500	2540	20	82569	82213
2500	2544.40	22.20	90573	90224
2500	2550	25	100780	100441

**HDPE ELECTRICAL PIPE CONDUITS FOR THE YEAR 2019-20(Same as that of SoR
2018-19 rates)**

Supply of the HDPE Electrical pipe conduits with permanent Lubricant inner layer with ribs , dimensional ratio of 13.5, deflection not greater than 5% when exposed to the normal operating temperature 90 degrees centigrade under the overburden soil pressure and other physical properties confirming to ASTM F 2160 and / or NEMA TC 7 (The expected service life of HDPE Pipe conduit and accessories shall not be less than 50 years)including transportation and excluding GST

Diameter	Rate per Rmt
160mm	1221
200mm	1981
225mm	2902
7 way (Multi duct for ICT)	955

BORE WELL DRILLING RATES

Annexure - 2

S.No	Type of Bore Well	Proposed Rate in Rs.
1	Drilling of Bore well with DTH Rig per RM	
	Drilling of Bore well by down the hole hammer drilling to a finished dia of 112/165 mm dia in all formations suitable for down the hole hammer drilling such as medium hard rock formation to hard rock formation, all consolidated formation etc. and drilling in over burden to dia not less than 200 mm etc and reaming the bore well to suit insertion of suitable casing pipe etc., including insertion of casing pipe with couplings, caps any other relevant materials upto required depth as directed by the department including transportation of drilling rigs and supporting vehicle and including bore development (Flushing of Bore Well at an average pressure of 150 PSI) conducting yield test, consumables charges, Crew charges required in fixation of pipe assembly completely done to the satisfaction of the department and including all labour charges and all taxes, but excluding the cost of casing pipe, couplings, cap etc., The entire work should be carried out as per IS -2800 Part I & II 1979 and amended from time to time.	
	Drilling of Bore well 112 mm dia. up to 150.00 m depth	390
	Drilling of Bore well 112 mm dia. beyond 150.00 m depth	445
	Drilling of Bore well 112 mm dia for Agency area	10% over plain area rates
	Drilling of Bore well 165 mm dia. up to 90.00 m depth	500
	Drilling of Bore well 165 mm dia. above 90.00 m up to 150.00 m depth	535
	Drilling of Bore well 165 mm dia. above 150.00 m up to 250.00 m depth	600
	Drilling of Bore well 165 mm dia. above 250.00 m to 350.00 m depth	730
	Drilling of Bore well 165 mm dia. beyond 350.00 m depth	790
	Drilling of Bore well 165 mm dia for Agency area	10% over plain area rates

2	Drilling of Bore well with Rotary Rig per RM	
	Drilling of Bore hole (which may be carried out by pilot bore hole) to a finished dia of 200/225/300 /350/450 mm hole (for insertion of 110/140/160/180/200mm PVC Pipe / 175/200mm PVC Blue casing pipe) by Rotary drilling rig in all formations suitable for Rotary drilling such as alluvium, Loamy, clayey, sandy, burried channels, highly disturbed and bouldary zones high sheared and fractured zones followed by jointed to massive soft, medium rock, all formations typical and suitable for rotary drilling etc. including insertion of casing pipe , couplings, cap, plug fixation, and including filling the peripheral gap with rebullied pebbled gravel packing, bore development, conducting yield test, and all other required in the fixation of pipes assembly etc. but excluding the cost of casing pipe, couplings, dummys, clamps etc., as recommended by the departmental Geologist. The bore should be developed with compressor air until clear water free from sand and other materials continuously discharged. The size of gravel used for gravel packing should be as per ISI specification used for rotary tube well. The pebbled gravel packing should be carried out in such a way that the theoritical quantity consumed completely.	
	The entire work to be carried out as per I.S. 2800 Part - I & II of 1979 and including cost of all materials and all labour charges and all taxes etc.,	
	Drilling of Bore well of 200/225/300 mm dia for insertion of pipe dia of 100/125 mm	1120
	Drilling of Bore well 350/450mm dia for insertion of pipe dia of 160/175/200 mm	1450
	Drilling of Bore wells for Agency area	10% over plain area rates
3	Drilling of Bore Wells with Hand Bore Set per RM	
	Drilling of Bore well with Hand Bore set to a finished dia of 112/165/175/180 mm justify both sides in all kinds of formations suitable for hand bore set drilling such as black cotton soils, sandy and alluvial soils and insertion of PVC/PVC blue casing pipe with couplings including slotting of pipe where ever required and fixing of bore well with cap and bail plug as per directions of the department for a finished item of work including conducting yield test, crew charges, cost of consumables, transportation charges and bore development charges and all other charges required in	

	fixation of pipe assembly, Flushing of bore with required pressure excluding cost of all required materials such as cap, bail plug, clamp sets, bolts and nuts etc., including all taxes excluding cost of PVC casing pipe, slotting charges .	
	Drilling of Bore well of finished dia of 112 mm	450
	Drilling of Bore well of finished dia of 112 mm for Agency	10% over plain area rates
	Drilling of Bore well of finished dia of 165/175/180 mm	645
	Drilling of Bore well of finished dia of 165/175/180 mm for Agency area	10% over plain area rates
4	Construction of bore well platform	
	Construction of bore well platform of 1.85 m dia and 3.00 m length drain and foot rest of 1.00 x 1.00 m with CC (1:2:4) using 20 mm HBG metal including cost and conveyance of all materials labour charges, centering, curing, seigniorage charges & excluding taxes etc., complete as per UNICEF type design .	
	For Plain Areas per 1No	8800
	For Agency Areas per 1No	10% over plain area rates
5	Flushing of bore well	
	Flushing of bore well of dia 165/150 mm with power rig at an average pressure of 150 PSI, including crew charges, completely done to the satisfaction of the department including detachable of all accessories and refix all materials as per the original condition including all labour charges, but excluding cost of materials & excluding taxes etc., complete.	
	for 112 mm dia Bore wells per 1 Job	8000
	for 165/150 mm dia Bore wells per 1 Job	9500
	For Agency Areas	10% over plain area rates
6	Deepening of existing bore wells	
	Deepening of existing bore wells of dia 165/150mm by using DTH rig including flushing the bore well, conducting yield test etc. excluding taxes.	
	for depth up to 150 mm per RM	525
	for depth from 150 mm to 250mm per RM	600
	for depth from 250 mm to 350mm per RM	730
	above 350 mm depth per RM	790
7	Supply, Delivery of ISI marked fully hot dipped galvanized deep well Inida Mark-II Hand Pump assembly complete unit with 10	

	well Inida Mark-II Hand Pump assembly complete unit with 10 Nos of connecting rods (bright bar of 12mm dia and 3.00 mts length each confirmming to IS 9301/1990 & IS 14101 to 14104:1994 with their amendaments / revisions but excluding taxes.	
	Indian Mark -II Hand Pump Assembly Set	10900
8	Labour charges for erection of IM-II Hand Pump Assembly with all its accessories and with the required number of 32mm dia CI-B GI pipes including all taxes and as per the directions of the department officers but excluding taxes.	
	For Plain area	1000
	For Agency area	10% over plain area rates
9	Casing Pipes and Bore caps excluding taxes.	
	Cost and supply of 175 mm dia PVC blue casing pipe per RM	1100
	Slotting charges for 175 mm dia PVC blue casing pipe per RM	350
	180 mm dia PVC Casing pipe perforation charges per RM	325
	175 mm dia MS Casing pipe perforation charges per RM	395
	Supply & Fixing of 180 mm dia PVC Bore Cap per 1No	300
10	Geological Survey Charges excluding taxes.	
	for plain area-1Job	1200
	for Agency area-1Job	10% over plain area rates
11	32mm dia GI B-Class pipes per RM	
	for 32mm dia GI B-Class pipes per RM	440

Sd/-(R.V. Krishna Reddy)

Engineer-In-Chief, RWS&S

Gollapudi, Vijayawada.

//Authenticated//

T. J. J. Babu
17.6.2019
Deputy Executive Engineer, RWS&S
O/o Engineer-in-Chief, Gollapudi
Vijayawada

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17/6/19

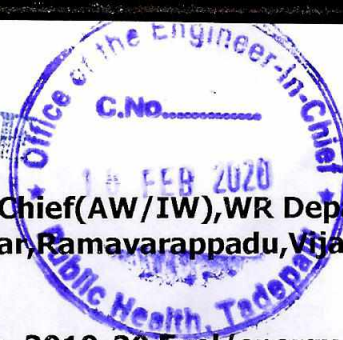
Annexure-III

CATEGORY : Coarse aggregate / Rubble stone / Size stone / Cut stone-					
for			Read as		
Lead in km	Vehicle Used	rate per Cum	Lead in km	Vehicle Used	rate per Cum
For total lead upto 1 km	Truck	27.40	For total lead upto 1 km	Truck	27.40
For total lead more than 1 km upto 2 km	Truck	38.4	For total lead more than 1 km upto 2 km	Truck	38.4
For total lead more than 2 km upto 3 km	Tipper	52.7	For total lead more than 2 km upto 3 km	Truck	51.2
For total lead more than 3 km upto 4 km	Tipper	64	For total lead more than 3 km upto 4 km	Truck	62.2
For total lead more than 4 km upto 5 km	Tipper	75.3	For total lead more than 4 km upto 5 km	Truck	73.2
For lead beyond 5 km upto 30 km for every km	Tipper	11.3	For lead beyond 5 km upto 30 km for every km	Truck	11
For lead beyond 30 km for every km	Tipper	9.4	For lead beyond 30 km for every km	Truck	9.1
CATEGORY : Cement/ Steel/ Pipes/ RCC poles/ AC & GI sheets/ Packed materials					
for			Read as		
Lead in km	Vehicle Used	rate per Cum	Lead in km	Vehicle Used	rate per Cum
For total lead upto 1 km	Truck	17.1	For total lead upto 1 km	Truck	17.1
For total lead more than 1 km upto 2 km	Truck	24	For total lead more than 1 km upto 2 km	Truck	24
For total lead more than 2 km upto 3 km	Tipper	33	For total lead more than 2 km upto 3 km	Truck	32
For total lead more than 3 km upto 4 km	Tipper	40	For total lead more than 3 km upto 4 km	Truck	38.9
For total lead more than 4 km upto 5 km	Tipper	47.1	For total lead more than 4 km upto 5 km	Truck	45.7
For lead beyond 5 km upto 30	Tipper	7.1	For lead beyond 5 km upto 30 km	Truck	6.9

km for every km				for every km		
For lead beyond 30 km for every km	Tipper	5.9		For lead beyond 30 km for every km	Truck	5.7

CATEGORY : PCC slabs/ Shahabad slabs/ BS slabs/ CC & Laterite blocks/ Wood						
for				Read as		
Lead in km	Vehicle Used	rate per Cum		Lead in km	Vehicle Used	rate per Cum
For total lead upto 1 km	Truck	40.4		For total lead upto 1 km	Truck	40.4
For total lead more than 1 km upto 2 km	Truck	56.5		For total lead more than 1 km upto 2 km	Truck	56.5
For total lead more than 2 km upto 3 km	Tipper	77.5		For total lead more than 2 km upto 3 km	Truck	75.3
For total lead more than 3 km upto 4 km	Tipper	94.2		For total lead more than 3 km upto 4 km	Truck	91.5
For total lead more than 4 km upto 5 km	Tipper	110.8		For total lead more than 4 km upto 5 km	Truck	107.6
For lead beyond 5 km upto 30 km for every km	Tipper	16.6		For lead beyond 5 km upto 30 km for every km	Truck	16.1
For lead beyond 30 km for every km	Tipper	13.9		For lead beyond 30 km for every km	Truck	13.5

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25-2-20

Office of the Engineer-in-Chief(AW/IW),WR Department,
Currency Nagar,Ramavarappadu,Vijayawada.

**CORRECTION SLIP TO A.P.Revised Standard Data 2019-20 Fuel/energy charges
for Batching plant for the items IRR-CAW 7-6 & 7-7 & 7-8 for canal and allied
works (Lining works)**

Sub: A.P Revised standard data – Deviations found in some of the data items i.e **Absence of fuel/energy charges for batching plant for the items IRR-CAW 7-6 & 7-7 & 7-8 for canal and allied works (Lining works).** – correction slip issued -Reg.

Ref: 1.T/o Procs.No.ENC/IW/P&M/EE.1/DEE-2/AEE(K)/ SoR 2019-20/Vol.3 dt: 24.09.2019
2.8th BoCEs recommendations for the year 2019

This is to inform that the final copy of A.P.Revised Standard Data with SoR 2019-20 rates was uploaded on website of Water Resources Department viz.www.irrigationap.cgg.gov.in and the same was informed to all the Engineers-in-Chief/Chief Engineers.

It is brought to the notice that during the validation of CFMS database some errors are found in some concrete items with batching plants wherein fuel charges of batching plants are not considered for the items IRR-CAW-7-6, IRR-CAW-7-7 & IRR-CAW-7-8.

The same was discussed in the 8th Board of Chief Engineers meeting held on 09.12.2019.The BoCEs recommended to amend the above errors found in the data items

Accordingly, the following correction slip is issued for the errors found in the data items

Item no	Approved rate per sqm in AP Revised Standard Data for SoR 2019-20 (with lubricant charges @ 5%)	Approved rate per sqm By considering Fuel/ Energy charges for SoR 2019-20.
	for	Read as
IRR-CAW 7-6	369.20	372.80
IRR-CAW 7-7	383.10	386.70
IRR-CAW 7-8	462.30	466.80
	Neither lubricant nor fuel/energy charges are considered	

The correction slip as mentioned above is herewith issued and uploaded in the Water Resources Department website.

The Heads of Departments mentioned below are requested to communicate the correction slip to their sub-ordinate officers. The above changes shall come in to force with effect from the date of issuance of this correction slip and shall be applicable for all Engineering Departments.

Sd/-K.Srinivas,dt:30.01.2020,
Engineer-in-Chief(AW/IW)&
Chairman,BoCEs.

To

1. Engineer-in-Chief (R&B),Admn,NH&CRF, Roads & Buildings Department.
2. Engineer-in-Chief (P.H.), Public Health Department.
3. Engineer-in-Chief (P.R.), Panchayath Raj Department.
4. Engineer-in-Chief (RWS) R W S, Department.
5. Chief Engineer (Buildings&RSW), R&B Department.
- 6.Copy to all the Engineers-in-Chief, Chief Engineers and Regional Superintending Engineers of Irrigation Circles of Vijayawada, Guntur, Dowlaiswaram and Chittoor of Water Resources Department for taking necessary action.

S. Srinivas
for Engineer-in-Chief(IW)
06/1/20