## GOVERNMENT OF GOA QUALITY CONTROL LABORATORY WATER RESOURCES DEPARTMENT

 Test Report No.: WRD / QC / F.6-2 / Cube -T : 8277,8278,8283,8284, / Lab / **375** / 2019 - 20
 Dated:- 07 / 01 / 2020.
 Laboratory : Bicholim - Goa.

 8299,8300,8318,8319,8333,8334,8352 & 8353 .
 Sub Division V (QC)/WRD/ Bicholim- Goa.

Name of work :- Improvement to the R.B.M.C. of T.I.P. from Ch. 6.020 Kms To Ch. 12.400 Kms including providing R.C.C. lining for the bottom critical portion between ch.9.550 kms to Ch.9.650 km, Ch. 9.650 Kms To Ch. 9.950 Kms and Ch. 10.050 Kms to Ch. 10.465 kms at villages Chandel , Casarvarnem in Pernem Taluka.

Ref to requision No.:- WRD / SD I/WDVII/ F.354 /2019-20/**250** dated :- 11 / 12 / 2019.

Qty. Recived. : 12 Sets of cube Date of Receipt:- 11 / 12 / 2019. Tested on: - 01 /01 /2020 To 07/01/2020 as per due dates. Ref to CPWD : 2009, Vol. I

Sample: Cubes Mix of 1:3:6 & 1 : 1.5 : 3 O.S No. : 1416,1417 /AF, 2915,2916,2932,2933/SS,1434,1435,1460,1461,1474,1475/AF. Lab. Sample No.: 7207 To 7218 Tested By: Mr. Anil. R. Fadte., J.E. & Mrs. S.B.Naik Shirodkar. J.E.

SR.	DISCRIPTION OF SAMPLE TES	TESTED FOR	RESULTS		Max./Min.Value	% above	DEMARK
NO.	DISCRIPTION OF SAMPLE	IESIED FOR			permissable	or below	REMARK
1	Reinforced Cement concrete cube of mix <b>1:3:6</b> , cast on 04 /12/2019, PCC for Canal Base from ch. 9.550 Km To Ch. 9.750 Km.	28 <sup>th</sup> day	108.73	Kg/Cm <sup>2</sup>	100.00 Kg/cm <sup>2</sup>	14.77	1) Qty represents - 40.00 Cum for two sets of cubes cast on 04/12/2019
		compressive	129.12	Kg/Cm <sup>2</sup>			
		strength	106.47	Kg/Cm <sup>2</sup>			
		Average	114.77	Kg/Cm <sup>2</sup>			
2	Reinforced Cement concrete cube of mix <b>1:3:6</b> , cast on 04 /12/2019, PCC for Canal Base from ch. 9.550 Km To Ch. 9.750 Km.	28 <sup>th</sup> day	101.94	Kg/Cm <sup>2</sup>	100.00 Kg/cm <sup>2</sup>	13.26	Do
		compressive	126.85	Kg/Cm <sup>2</sup>			
		strength	111.00	Kg/Cm <sup>2</sup>			
		Average	113.26	Kg/Cm <sup>2</sup>			
	Reinforced Cement concrete cube of mix <b>1:3:6</b> , cast on 05 /12/2019, PCC for Canal Base from ch. 9.750 Km To Ch. 9.850 Km.	28 <sup>th</sup> day	124.59	Kg/Cm <sup>2</sup>	100.00 Kg/cm <sup>2</sup>	26.10	1) Qty represents - 20.00 Cum. 2) 28 th day test is due on 02 / 01 / 2020 , which may please be wittnessed .
2		compressive	135.92	Kg/Cm <sup>2</sup>			
		strength	117.79	Kg/Cm <sup>2</sup>			
		Average	126.10	Kg/Cm <sup>2</sup>			
	Reinforced Cement concrete cube of mix <b>1 : 1.5 : 3</b> , cast on 05 /12/2019, RCC for Canal Lining from Ch. 9.550 Km To Ch. 9.585 Km.	28 <sup>th</sup> day	285.42	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	5.71	1) Qty represents - 20.00 Cum.
		compressive	271.83	Kg/Cm <sup>2</sup>			
4		strength	283.16	Kg/Cm <sup>2</sup>			
		Average	280.14	Kg/Cm <sup>2</sup>			
	Reinforced Cement concrete cube of mix <b>1 : 1.5 : 3</b> , cast on 06 /12/2019, RCC for Canal Lining from Ch. 9.585 Km To Ch. 9.655 Km.	28 <sup>th</sup> day	262.77	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	3.72	1) Qty represents - 40.00 Cum for two sets of cubes cast on 06/12/2019 .
5		compressive	271.83	Kg/Cm <sup>2</sup>			
		strength	289.95	Kg/Cm <sup>2</sup>			
		Average	274.85	Kg/Cm <sup>2</sup>			

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SR.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value	% above	REMARK			
NO.					permissable	or below				
	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 06 /12/2019, RCC for Canal Lining from Ch. 9.585 Km To Ch. 9.655 Km.	28 <sup>th</sup> day	260.51	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>		1) Qty represents - 40.00 Cum for two sets of cubes cast on 06/12/2019 .			
		compressive	287.69	Kg/Cm <sup>2</sup>						
		strength	303.55	Kg/Cm <sup>2</sup>						
		Average	283.91	Kg/Cm <sup>2</sup>						
	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 07 /12/2019, RCC for Canal Lining from Ch. 9.655 Km To Ch. 9.725 Km.	28 <sup>th</sup> day	344.32	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	23.09	1) Qty represents - 40.00 Cum for two sets of cubes cast on 07/12/2019.			
		compressive	305.81	Kg/Cm <sup>2</sup>						
		strength	328.46	Kg/Cm <sup>2</sup>						
		Average	326.20	Kg/Cm <sup>2</sup>						
	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 07 /12/2019, RCC for Canal Lining from Ch. 9.655 Km To Ch. 9.725 Km.	28 <sup>th</sup> day	308.08	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	17.96	Do			
		compressive	323.93	Kg/Cm <sup>2</sup>						
		strength	305.81	Kg/Cm <sup>2</sup>						
		Average	312.61	Kg/Cm <sup>2</sup>						
	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 09 /12/2019, RCC for Canal Lining from Ch. 9.725 Km To Ch. 9.795 Km.	28 <sup>th</sup> day	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	3.72	1) Qty represents - 40.00 Cum for two sets of cubes cast on 09/12/2019 .			
		compressive	262.77	Kg/Cm <sup>2</sup>						
		strength	289.95	Kg/Cm <sup>2</sup>						
		Average	274.85	Kg/Cm <sup>2</sup>						
	Reinforced Cement concrete cube of mix 1:1.5:3, cast on 09/12/2019, RCC for Canal Lining from Ch. 9.725 Km To Ch. 9.795 Km.	28 <sup>th</sup> day	278.63	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	7.71	Do			
		compressive	265.04	Kg/Cm <sup>2</sup>						
		strength	312.61	Kg/Cm <sup>2</sup>						
		Average	285.42	Kg/Cm <sup>2</sup>						
	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 10/12/2019, RCC for Canal Lining from Ch. 9.795 Km To Ch. 9.865 Km.	28 <sup>th</sup> day	267.30	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	1.72	1) Qty represents - 40.00 Cum for two sets of cubes cast on 10/12/2019.			
		compressive	276.36	Kg/Cm <sup>2</sup>						
		strength	265.04	Kg/Cm <sup>2</sup>						
		Average	269.57	Kg/Cm <sup>2</sup>						
	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 10 /12/2019, RCC for Canal Lining from Ch. 9.795 Km To Ch. 9.865 Km.	28 <sup>th</sup> day	269.57	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	3.15	Do			
		compressive	287.69	Kg/Cm <sup>2</sup>						
		strength	262.77	Kg/Cm <sup>2</sup>						
		Average	273.34	Kg/Cm <sup>2</sup>						

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Copy to: 1. The Assistant Engineer , SDI , WD VII, WRD, Dhargal - Pernem - Goa.

2. Copy submitted to The Superintending Engineer ,CPO,WRD, Sinchai Bhavan, Porvorim Goa for kind Information.

3. Copy submitted to The Executive Engineer ,WD VII ,WRD, Dhargal - Pernem - Goa.

4. QC Lab File. 5. Bill File.