GOVERNMENT OF GOA

QUALITY CONTROL LABORATORY

WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T : 8440 To 8445, 8470 To 8475, 8485 To 8490,8494 To 8499 / Lab / **388** / 2019 - 20 Dated: 17 / 01 / 2020. Sub Division V (QC)/WRD/ Bicholim- Goa.

Name of work: Construction of 10 cm thich P.C.C. lining including filter media from Ch. 6.00 Kms to Ch, 7.500 Kms of L.B.M.C. of T.I.P. in Nandoda village in Bicholim Taluka.

Ref. to Requisition No.: S.D. II /W.D. VIII /W.R.D. / F.160 / 2019-20 / **153** Dated :- 06 / 01 / 2020.

Qty. Recived: 24 Sets of cube Date of Receipt:- 07/01/2020. Tested on: - 12/01/2020 To 15/01/2020 as per due dates. Ref to CPWD: 2009, Vol. I

Sample: Cube Mix 1:1.5:3 O.S No.: 1498 To 1503/AF,3033 To 3038, 3044 To 3049,3057 To 3062/SS. Lab. Sample No.: 7564 To 7587.

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Tested By: Mr. Anil. R. Fadte J.E & Mrs. S.B. Naik Shirodkar. J.E.

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1	Plain Cement concrete cube of mix 1:1.5:3 , cast on 15/12/2019, for Canal lining from Ch. 6.555 Kms To 6.730 Kms.	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	5.71	Quantity represents 175.00 Cum for six sets of cubes cast on 15/12/2019.
			278.63	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	280.14	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3 , cast on 15/12/2019, for Canal lining from Ch. 6.555 Kms To 6.730 Kms.	28 th day	274.10	Kg/Cm ²	- 265.00 Kg/cm ²	6.28	do
		compressive	283.16	Kg/Cm ²			
		strength	287.69	Kg/Cm ²			
		Average	281.65	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3 , cast on 15/12/2019, for Canal lining from Ch. 6.555 Kms To 6.730 Kms.	compressive	262.77	Kg/Cm ²	265.00 Kg/cm ²	5.14	do
			278.63	Kg/Cm ²			
		strength	294.48	Kg/Cm ²			
		Average	278.63	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3 , cast on 15/12/2019, for Canal lining from Ch. 6.555 Kms To 6.730 Kms.	28 th day	265.04	Kg/Cm ²	265.00 Kg/cm ²	4.00	do
		compressive	278.63	Kg/Cm ²			
4		strength	283.16	Kg/Cm ²			
		Average	275.61	Kg/Cm ²			

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SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RES	SULTS	Max./Min.Value permissable	% above or below	REMARK
5	Plain Cement concrete cube of mix 1:1.5:3, cast on 15/12/2019, for Canal lining from Ch. 6.555 Kms To 6.730 Kms.	28 th day	276.36	Kg/Cm ²	265.00 Kg/cm ²	3.72	Quantity represents 175.00 Cum for six sets of cubes cast on 15/12/2019.
		compressive	265.04	Kg/Cm ²			
		strength	283.16	Kg/Cm ²			
		Average	274.85	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3, cast on 15/12/2019, for Canal lining from Ch. 6.555 Kms To 6.730 Kms.	28 th day	289.95	Kg/Cm ²	265.00 Kg/cm ²	3.43	do
6		compressive	267.30	Kg/Cm ²			
0		strength	265.04	Kg/Cm ²			
		Average	274.10	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3, cast on 16/12/2019, for Canal lining from Ch. 6.730 Kms To 6.880 Kms.	28 th day	285.42	Kg/Cm ²		3.72	Quantity represents 180.40 Cum for six sets of cubes cast on 16 / 12 / 2019.
7		compressive	267.30	Kg/Cm ²	265.00 Kg/cm ²		
′		strength	271.83	Kg/Cm ²	203.00 Kg/CIII		
		Average	274.85	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3, cast on 16/12/2019, for Canal lining from Ch. 6.730 Kms To 6.880 Kms.	28 th day	262.77	Kg/Cm ²	265.00 Kg/cm ²	2.29	do
R		compressive	276.36	Kg/Cm ²			
		strength	274.10	Kg/Cm ²			
		Average	271.08	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3,	28 th day	283.16	Kg/Cm ²	265.00 Kg/cm ²	3.15	do
9	cast on 16/12/2019, for Canal lining from Ch. 6.730 Kms To 6.880 Kms.	compressive	271.83	Kg/Cm ²			
		strength	265.04	Kg/Cm ²			
		Average	273.34	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3, cast on 16/12/2019, for Canal lining from Ch. 6.730 Kms To 6.880 Kms.	28 th day	269.57	Kg/Cm ²	265.00 Kg/cm ²	2.01	do
10		compressive strength	249.18	Kg/Cm ²			
			292.22 270.32	Kg/Cm ²			
		Average 28 th day	276.36	Kg/Cm ² Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3, cast on 16/12/2019, for Canal lining from Ch. 6.730 Kms To 6.880 Kms.	28 day compressive	255.97	Kg/Cm ²	265.00 Kg/cm ²	2.58	do
11		strength	283.16	Kg/Cm ²			
		Average	271.83	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3, cast on 16/12/2019, for Canal lining from Ch. 6.730 Kms To 6.880 Kms.	28 th day	260.51	Kg/Cm ²	265.00 Kg/cm ²	4.00	do
		compressive	280.89	Kg/Cm ²			
12		strength	285.42	Kg/Cm ²			
		Average	275.61	Kg/Cm ²			

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			KES	SULTS	Max./Min.Value permissable	% above or below	REMARK
	Plain Cement concrete cube of mix 1:1.5:3, cast on 17/12/2019, for Canal lining from Ch. 6.880 Kms To 7.000 Kms.	28 th day	271.83	Kg/Cm ²	265.00 Kg/cm ²	2.58	Quantity represents 165.60 Cum for six sets of cubes cast on 17 / 12 / 2019.
		compressive	283.16	Kg/Cm ²			
		strength	260.51	Kg/Cm ²	205.00 kg/ciii		
		Average	271.83	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3, cast on 17/12/2019, for Canal lining from Ch. 6.880 Kms To 7.000 Kms.	28 th day	276.36	Kg/Cm ²		2.01	do
		compressive	253.71	Kg/Cm ²	265.00 Kg/cm ²		
		strength	280.89	Kg/Cm ²	203.00 Ng/CIII		
		Average	270.32	Kg/Cm ²			
ſ	Plain Cement concrete cube of mix 1:1.5:3, cast on 17 / 12 / 2019, for Canal lining from Ch. 6.880 Kms To 7.000 Kms.	28 th day	262.77	Kg/Cm ²	_	2.86	do
		compressive	283.16	Kg/Cm ²	265.00 Kg/cm ²		
		strength	271.83	Kg/Cm ²			
		Average	272.59	Kg/Cm ²			
F	Plain Cement concrete cube of mix 1:1.5:3, cast on 17/12/2019, for Canal lining from Ch. 6.880 Kms To 7.000 Kms.	28 th day	278.63	Kg/Cm ²	265.00 Kg/cm ²	3.43	do
		compressive	258.24	Kg/Cm ²			
		strength	285.42	Kg/Cm ²			
		Average	274.10	Kg/Cm ²			
F	Plain Cement concrete cube of mix 1:1.5:3, cast on 17/12/2019, for Canal lining from Ch. 6.880 Kms To 7.000 Kms.	28 th day	289.95	Kg/Cm ²	265.00 Kg/cm ²	4.00	do
17 c		compressive	271.83	Kg/Cm ²			
ϵ		strength	265.04	Kg/Cm ²			
\vdash		Average	275.61	Kg/Cm ²			
F	Plain Cement concrete cube of mix 1:1.5:3, cast on 17/12/2019, for Canal lining from Ch. 6.880 Kms To 7.000 Kms.	28 th day	276.36	Kg/Cm ²	265.00 Kg/cm ²	4.57	do
18 (compressive strength	292.22 262.77	Kg/Cm ²			
ϵ			202.77 277.12	Kg/Cm ²			
	Plain Cement concrete cube of mix 1:1.5:3, cast on 18/12/2019, for Canal lining from Ch. 7.00 Kms To 7.128 Kms.	Average	276.36	Kg/Cm ²	265.00 Kg/cm ²	2.29	Quantity represents 175.36Cum for six sets of cubes cast on 18 / 12 / 2019.
		28 th day compressive	265.04	Kg/Cm ²			
19 c		strength	271.83	Kg/Cm ²			
7		Average	271.08	Kg/Cm ²			
 	Plain Cement concrete cube of mix 1:1.5:3, cast on 18/12/2019, for Canal lining from Ch. 7.00 Kms To 7.128 Kms.	28 th day	280.89	Kg/Cm ²	265.00 Kg/cm ²	2.86	do
		28 " day compressive	262.77	Kg/Cm ²			
		strength	274.10	Kg/Cm ²			
7		Average	272.59	Kg/Cm ²			

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SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
	Plain Cement concrete cube of mix 1:1.5:3, cast on 18/12/2019, for Canal lining from Ch. 7.00 Kms To 7.128 Kms.	28 th day compressive strength Average	271.83 285.42 262.77 273.34	Kg/Cm ² Kg/Cm ² Kg/Cm ² Kg/Cm ²	265.00 Kg/cm ²	3.15	Quantity represents 175.36Cum for six sets of cubes cast on 18 / 12 / 2019.
	Plain Cement concrete cube of mix 1:1.5:3, cast on 18/12/2019, for Canal lining from Ch. 7.00 Kms To 7.128 Kms.	28 th day compressive strength Average	253.71 271.83 292.22 272.59	Kg/Cm ² Kg/Cm ² Kg/Cm ² Kg/Cm ²	265.00 Kg/cm ²	2.86	do
	Plain Cement concrete cube of mix 1:1.5:3, cast on 18/12/2019, for Canal lining from Ch. 7.00 Kms To 7.128 Kms.	28 th day compressive strength Average	283.16 267.30 271.83 274.10	Kg/Cm ² Kg/Cm ² Kg/Cm ² Kg/Cm ²	265.00 Kg/cm ²	3.43	do
	Plain Cement concrete cube of mix 1:1.5:3, cast on 18/12/2019, for Canal lining from Ch. 7.00 Kms To 7.128 Kms.	28 th day compressive strength	276.36 269.57 280.89 275.61	Kg/Cm ² Kg/Cm ² Kg/Cm ² Kg/Cm ²	265.00 Kg/cm ²	4.00	do

Copy to: 1. The Assistant Engineer , SDII , WD VIII, WRD, Tivim, Bardez - Goa.

Junior Engineer

Assistant Engineer

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

^{3.} Copy submitted to The Executive Engineer, WD VIII, WRD, Karaswada -Bardez - Goa.

^{4.} QC Lab File. 5. Bill File.