

**GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT**

Test Report No.: WRD / QC / F.6-2 / Cube -T-7654,7655,7694 To 7697, 7718 To 7721, 7727,7728,7739 To 7742,7750 TO 7753, 7759, 7760, 7772 To 7775,7781 To 7784,7799,7800,7807 To 7810,7822 To 7825,7836,7837/ Lab / **259**/ 2019 - 20 Dated:- 06/ 07 / 2019

Laboratory : Bicholim - Goa.

Sub Division V (QC)/WRD/ Bicholim- Goa.

Name of Work: - Improvement to the damaged existing bund from Candolim bridge to Sinqerim in V.P. Candolim in Calangute Constituency.

Ref. to Requisition No.: SDII/WDI/WRD/ F.24 /2019-20/175 dated :-01/07/2019.

Qty. Recived. : 42 Sets of cubes Date of Receipt: 02/07/2019. Tested on: 05/07/2019 To 20/07/2019. as per due dates. Ref to CPWD :2002, Vol. I

Sample: Cube 1:2:4 Mix O.S No. :2487, 2488, 2517 to 2520, 2540 to 2543, 2549,2550, 2561 to 2564, 2568 To 2571, 2577, 2578, 2586 to 2589, 2595 to 2598, 2612, 2613, 2620 to 2623, 2635 To 2638, 2649 & 2650/SS

Lab. Sample No.: 6549 to 6590

Tested By: Mrs. S.B. Naik Shirodkar. J.E.

REPORT PAGE 01 OF 05

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1	Plain Cement concrete cube of mix 1:2:4 , cast on 07/06/2019, for second lift ch.120.00 to 180.00 mt.	28 th day compressive strength	215.20	Kg/Cm2	210 kg/cm2	14.34	Quantity represents 36.00 Cum for two sets of cubes.
			246.91	Kg/Cm2			
			258.24	Kg/Cm2			
		Average	240.12	Kg/Cm2			
2	Plain Cement concrete cube of mix 1:2:4 , cast on 07/06/2019, for second lift ch.120.00 to 180.00 mt.	28 th day compressive strength	210.67	Kg/Cm2	210 kg/cm2	6.07	... Do ...
			219.73	Kg/Cm2			
			237.85	Kg/Cm2			
		Average	222.75	Kg/Cm2			
3	Plain Cement concrete cube of mix 1:2:4 , cast on 10/06/2019, for foundation ch.240.00 to 270.00 mt.	28 th day compressive strength	224.26	Kg/Cm2	210 kg/cm2	6.07	Quantity represents 30.00 Cum for two sets of cubes.
			212.93	Kg/Cm2			
			231.06	Kg/Cm2			
		Average	222.75	Kg/Cm2			
4	Plain Cement concrete cube of mix 1:2:4 , cast on 10/06/2019, for foundation ch.240.00 to 270.00 mt.	28 th day compressive strength	206.14	Kg/Cm2	210 kg/cm2	8.23	... Do ...
			235.59	Kg/Cm2			
			240.12	Kg/Cm2			
		Average	227.28	Kg/Cm2			
5	Plain Cement concrete cube of mix 1:2:4 , cast on 10/06/2019, for foundation ch.270.00 to 300.00 mt.	28 th day compressive strength	219.73	Kg/Cm2	210 kg/cm2	4.27	Quantity represents 30.00 Cum for two sets of cubes.
			210.67	Kg/Cm2			
			226.53	Kg/Cm2			
		Average	218.98	Kg/Cm2			
6	Plain Cement concrete cube of mix 1:2:4 , cast on 10/06/2019, for foundation ch.270.00 to 300.00 mt.	28 th day compressive strength	237.85	Kg/Cm2	210 kg/cm2	6.43	... Do ...
			203.87	Kg/Cm2			
			228.79	Kg/Cm2			
		Average	223.51	Kg/Cm2			

Junior Engineer

Assistant Engineer

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
7	Plain Cement concrete cube of mix 1:2:4 , cast on 11/06/2019, for first lift ch.240.00 to 270.00 mt.	28 th day compressive strength	201.61	Kg/Cm2	210 kg/cm2	5.71	Quantity represents 25.00 Cum for two sets of cubes.
			222.00	Kg/Cm2			
			242.38	Kg/Cm2			
			Average	222.00			
8	Plain Cement concrete cube of mix 1:2:4 , cast on 11/06/2019, for first lift ch.240.00 to 270.00 mt.	28 th day compressive strength	233.32	Kg/Cm2	210 kg/cm2	6.07	... Do ...
			226.53	Kg/Cm2			
			208.40	Kg/Cm2			
			Average	222.75			
9	Plain Cement concrete cube of mix 1:2:4 , cast on 11/06/2019, for first lift ch.270.00 to 300.00 mt.	28 th day compressive strength	215.20	Kg/Cm2	210 kg/cm2	6.79	Quantity represents 25.00 Cum for two sets of cubes.
			222.00	Kg/Cm2			
			235.59	Kg/Cm2			
			Average	224.26			
10	Plain Cement concrete cube of mix 1:2:4 , cast on 11/06/2019, for first lift ch.270.00 to 300.00 mt.	28 th day compressive strength	206.14	Kg/Cm2	210 kg/cm2	3.20	... Do ...
			226.53	Kg/Cm2			
			217.47	Kg/Cm2			
			Average	216.71			
11	Plain Cement concrete cube of mix 1:2:4 , cast on 12/06/2019, for second lift ch.240.00 to 300.00 mt.	28 th day compressive strength	231.06	Kg/Cm2	210 kg/cm2	6.07	Quantity represents 36.00 Cum for two sets of cubes.
			217.47	Kg/Cm2			
			219.73	Kg/Cm2			
			Average	222.75			
12	Plain Cement concrete cube of mix 1:2:4 , cast on 12/06/2019, for second lift ch.240.00 to 300.00 mt.	28 th day compressive strength	212.93	Kg/Cm2	210 kg/cm2	5.35	... Do ...
			224.26	Kg/Cm2			
			226.53	Kg/Cm2			
			Average	221.24			
13	Plain Cement concrete cube of mix 1:2:4 , cast on 13/06/2019, for foundation ch.300.00 to 330.00 mt.	28 th day compressive strength	215.20	Kg/Cm2	210 kg/cm2	7.87	Quantity represents 30.00 Cum for two sets of cubes.
			226.53	Kg/Cm2			
			237.85	Kg/Cm2			
			Average	226.53			
14	Plain Cement concrete cube of mix 1:2:4 , cast on 13/06/2019, for foundation ch.300.00 to 360.00 mt.	28 th day compressive strength	244.65	Kg/Cm2	210 kg/cm2	6.43	... Do ...
			217.47	Kg/Cm2			
			208.40	Kg/Cm2			
			Average	223.51			
15	Plain Cement concrete cube of mix 1:2:4 , cast on 13/06/2019, for foundation ch.330.00 to 360.00 mt.	28 th day compressive strength	206.14	Kg/Cm2	210 kg/cm2	3.55	Quantity represents 30.00 Cum for two sets of cubes.
			233.32	Kg/Cm2			
			212.93	Kg/Cm2			
			Average	217.47			

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
16	Plain Cement concrete cube of mix 1:2:4 , cast on 13/06/2019, for foundation ch.330.00 to 360.00 mt.	28 th day compressive strength	240.12	Kg/Cm2	210 kg/cm2	10.75	Quantity represents 30.00 Cum for two sets of cubes.
			222.00	Kg/Cm2			
			235.59	Kg/Cm2			
		Average	232.57	Kg/Cm2			
17	Plain Cement concrete cube of mix 1:2:4 , cast on 14/06/2019, for first lift ch.300.00 to 330.00 mt.	28 th day compressive strength	215.20	Kg/Cm2	210 kg/cm2	10.75	Quantity represents 25.00 Cum for two sets of cubes.
			237.85	Kg/Cm2			
			244.65	Kg/Cm2			
		Average	232.57	Kg/Cm2			
18	Plain Cement concrete cube of mix 1:2:4 , cast on 14/06/2019, for first lift ch.300.00 to 330.00 mt.	28 th day compressive strength	237.85	Kg/Cm2	210 kg/cm2	11.47	... Do ...
			226.53	Kg/Cm2			
			237.85	Kg/Cm2			
		Average	234.08	Kg/Cm2			
19	Plain Cement concrete cube of mix 1:2:4 , cast on 14/06/2019, for first lift ch.330.00 to 360.00 mt.	28 th day compressive strength	208.40	Kg/Cm2	210 kg/cm2	5.71	Quantity represents 25.00 Cum for two sets of cubes.
			215.20	Kg/Cm2			
			242.38	Kg/Cm2			
		Average	222.00	Kg/Cm2			
20	Plain Cement concrete cube of mix 1:2:4 , cast on 14/06/2019, for first lift ch.330.00 to 360.00 mt.	28 th day compressive strength	226.53	Kg/Cm2	210 kg/cm2	10.03	... Do ...
			246.91	Kg/Cm2			
			219.73	Kg/Cm2			
		Average	231.06	Kg/Cm2			
21	Plain Cement concrete cube of mix 1:2:4 , cast on 15/06/2019, for second lift ch.300.00 to 360.00 mt.	28 th day compressive strength	237.85	Kg/Cm2	210 kg/cm2	12.18	Quantity represents 36.00 Cum for two sets of cubes.
			244.65	Kg/Cm2			
			224.26	Kg/Cm2			
		Average	235.59	Kg/Cm2			
22	Plain Cement concrete cube of mix 1:2:4 , cast on 15/06/2019, for second lift ch.300.00 to 360.00 mt.	28 th day compressive strength	219.73	Kg/Cm2	210 kg/cm2	4.99	... Do ...
			226.53	Kg/Cm2			
			215.20	Kg/Cm2			
		Average	220.49	Kg/Cm2			
23	Plain Cement concrete cube of mix 1:2:4 , cast on 17/06/2019, for foundation ch.360.00 to 390.00 mt.	28 th day compressive strength	231.06	Kg/Cm2	210 kg/cm2	6.43	Quantity represents 30.00 Cum for two sets of cubes.
			206.14	Kg/Cm2			
			233.32	Kg/Cm2			
		Average	223.51	Kg/Cm2			
24	Plain Cement concrete cube of mix 1:2:4 , cast on 17/06/2019, for foundation ch.360.00 to 390.00 mt.	28 th day compressive strength	215.20	Kg/Cm2	210 kg/cm2	8.23	... Do ...
			228.79	Kg/Cm2			
			237.85	Kg/Cm2			
		Average	227.28	Kg/Cm2			
25	Plain Cement concrete cube of mix 1:2:4 , cast on 17/06/2019, for foundation ch.390.00 to 420.00 mt.	28 th day compressive strength	226.53	Kg/Cm2	210 kg/cm2	5.71	Quantity represents 30.00 Cum for two sets of cubes.
			208.40	Kg/Cm2			
			231.06	Kg/Cm2			
		Average	222.00	Kg/Cm2			

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
26	Plain Cement concrete cube of mix 1:2:4 , cast on 17/06/2019, for foundation ch.390.00 to 420.00 mt.	28 th day compressive strength	219.73	Kg/Cm2	210 kg/cm2	6.07	Quantity represents 30.00 Cum for two sets of cubes.
			237.85	Kg/Cm2			
			210.67	Kg/Cm2			
		Average	222.75	Kg/Cm2			
27	Plain Cement concrete cube of mix 1:2:4 , cast on 18/06/2019, for first lift ch.360.00 to 390.00 mt.	28 th day compressive strength	244.65	Kg/Cm2	210 kg/cm2	4.63	Quantity represents 25.00 Cum for two sets of cubes.
			197.08	Kg/Cm2			
			217.47	Kg/Cm2			
		Average	219.73	Kg/Cm2			
28	Plain Cement concrete cube of mix 1:2:4 , cast on 18/06/2019, for first lift ch.360.00 to 390.00 mt.	28 th day compressive strength	231.06	Kg/Cm2	210 kg/cm2	4.27	... Do ...
			215.20	Kg/Cm2			
			210.67	Kg/Cm2			
		Average	218.98	Kg/Cm2			
29	Plain Cement concrete cube of mix 1:2:4 , cast on 18/06/2019, for first lift ch.390.00 to 420.00 mt.	28 th day compressive strength	226.53	Kg/Cm2	210 kg/cm2	5.71	Quantity represents 25.00 Cum for two sets of cubes.
			217.47	Kg/Cm2			
			222.00	Kg/Cm2			
		Average	222.00	Kg/Cm2			
30	Plain Cement concrete cube of mix 1:2:4 , cast on 18/06/2019, for first lift ch.390.00 to 420.00 mt.	28 th day compressive strength	237.85	Kg/Cm2	210 kg/cm2	2.84	... Do ...
			208.40	Kg/Cm2			
			201.61	Kg/Cm2			
		Average	215.95	Kg/Cm2			
31	Plain Cement concrete cube of mix 1:2:4 , cast on 19/06/2019, for second lift ch.360.00 to 420.00 mt.	28 th day compressive strength	215.20	Kg/Cm2	210 kg/cm2	4.63	Quantity represents 36.00 Cum for two sets of cubes.
			208.40	Kg/Cm2			
			235.59	Kg/Cm2			
		Average	219.73	Kg/Cm2			
32	Plain Cement concrete cube of mix 1:2:4 , cast on 19/06/2019, for second lift ch.360.00 to 420.00 mt.	28 th day compressive strength	206.14	Kg/Cm2	210 kg/cm2	7.15	... Do ...
			219.73	Kg/Cm2			
			249.18	Kg/Cm2			
		Average	225.02	Kg/Cm2			
33	Plain Cement concrete cube of mix 1:2:4 , cast on 20/06/2019, for Foundation ch.420.00 to 450.00 mt.	28 th day compressive strength	231.06	Kg/Cm2	210 kg/cm2	5.71	Quantity represents 30.00 Cum for two sets of cubes.
			199.34	Kg/Cm2			
			235.59	Kg/Cm2			
		Average	222.00	Kg/Cm2			

REPORT PAGE 05 OF 05

SR.N O.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
34	Plain Cement concrete cube of mix 1:2:4 , cast on 20/06/2019, for Foundation ch.420.00 to 450.00 mt.	28 th day compressive strength	249.18	Kg/Cm2	210 kg/cm2	8.23	Quantity represents 30.00 Cum for two sets of cubes.
			217.47	Kg/Cm2			
			215.20	Kg/Cm2			
		Average	227.28	Kg/Cm2			
35	Plain Cement concrete cube of mix 1:2:4 , cast on 20/06/2019, for Foundation ch.450.00 to 480.00 mt.	28 th day compressive strength	226.53	Kg/Cm2	210 kg/cm2	7.87	Quantity represents 30.00 Cum for two sets of cubes.
			208.40	Kg/Cm2			
			244.65	Kg/Cm2			
		Average	226.53	Kg/Cm2			
36	Plain Cement concrete cube of mix 1:2:4 , cast on 20/06/2019, for Foundation ch.450.00 to 480.00 mt.	28 th day compressive strength	210.67	Kg/Cm2	210 kg/cm2	6.07	... Do ...
			226.53	Kg/Cm2			
			231.06	Kg/Cm2			
		Average	222.75	Kg/Cm2			
37	Plain Cement concrete cube of mix 1:2:4 , cast on 21/06/2019, for first lift ch.420.00 to 450.00 mt.	28 th day compressive strength	208.40	Kg/Cm2	210 kg/cm2	4.99	Quantity represents 25.00 Cum for two sets of cubes.
			219.73	Kg/Cm2			
			233.32	Kg/Cm2			
		Average	220.49	Kg/Cm2			
38	Plain Cement concrete cube of mix 1:2:4 , cast on 21/06/2019, for first lift ch.420.00 to 450.00 mt.	28 th day compressive strength	212.93	Kg/Cm2	210 kg/cm2	3.91	... Do ...
			235.59	Kg/Cm2			
			206.14	Kg/Cm2			
		Average	218.22	Kg/Cm2			
39	Plain Cement concrete cube of mix 1:2:4 , cast on 21/06/2019, for first lift ch.450.00 to 480.00 mt.	28 th day compressive strength	210.67	Kg/Cm2	210 kg/cm2	4.63	Quantity represents 25.00 Cum for two sets of cubes.
			217.47	Kg/Cm2			
			231.06	Kg/Cm2			
		Average	219.73	Kg/Cm2			
40	Plain Cement concrete cube of mix 1:2:4 , cast on 21/06/2019, for first lift ch.450.00 to 480.00 mt.	28 th day compressive strength	233.32	Kg/Cm2	210 kg/cm2	6.43	... Do ...
			219.73	Kg/Cm2			
			217.47	Kg/Cm2			
		Average	223.51	Kg/Cm2			
41	Plain Cement concrete cube of mix 1:2:4 , cast on 22/06/2019, for second lift ch.420.00 to 480.00 mt.	28 th day compressive strength	226.53	Kg/Cm2	210 kg/cm2	3.91	Quantity represents 36.00 Cum for two sets of cubes.
			215.20	Kg/Cm2			
			212.93	Kg/Cm2			
		Average	218.22	Kg/Cm2			
42	Plain Cement concrete cube of mix 1:2:4 , cast on 22/06/2019, for second lift ch.420.00 to 480.00 mt.	28 th day compressive strength	235.59	Kg/Cm2	210 kg/cm2	4.63	... Do ...
			219.73	Kg/Cm2			
			203.87	Kg/Cm2			
		Average	219.73	Kg/Cm2			

Copy to: 1. The Assistant Engineer ,SD II,WD I,WRD, Mapusa - 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 I,WRD, Porvorim Goa.

4. QC Lab File. 5. Bill File.

Junior Engineer

Assistant Engineer