

GOVERNMENT OF GOA  
QUALITY CONTROL LABORATORY  
WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T : 3555,3574,3592,3607,3625,3641,/ Lab / **34** / 2022 - 23 Dated:- 16/04/2022. Laboratory : Bicholim - Goa.  
3663,3683,3709,3733,3360,3780,3797,3811,3823,3824,3843,3844,3851,3852,3875,3876,3894 & 3895. Sub Division V (QC)/WRD/ Bicholim- Goa.

**Name of work :Improvement to Kodo Katar bund along the bank of Chapora river at Camurlim in Tivim Constituency.**

Ref. to Requisition No.: SDII/WDI/WRD/F.24/2021-22/478 Dt.:-16/ 03/ 2022

Qty. Recived. : 24 Sets of cube Date of Receipt:- 17/ 03 / 2022. Tested on: 23,24,25,26,27,28,29,30,31/03/2022 & 01,02,03,04,05,06,07,08,09 & 11/04/2022 as per due dates. Ref to CPWD :2009, Vol. I

Sample: Cube Mix 1:2:4 O.S No. :232,253,275,292,311,328,350,370,396,420,447 & 467/R.K , 7991,8008,8025,8026,8051,8052,8070,8071,8098,8099,8118 & 8119/SS Lab.

Sample No.: 3347 to 3370 Tested By: Mrs. R.R.Kadam A.E. & Mrs. S. B. Naik Shirodkar. J.E.

**REPORT PAGE 01 OF 04**

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1	Cement concrete cube of mix 1:2:4, cast on 23/02/2022. For Foundation Ch 400m to Ch 430m.	28 th day compressive strength	222.00	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	6.43	Qty represents - 16.50 M3.
			228.79	Kg/Cm <sup>2</sup>			
			219.73	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>223.51</b>			
2	Cement concrete cube of mix 1:2:4, cast on 24/02/2022. For 1st step Ch 330m to Ch 360m.	28 th day compressive strength	233.32	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	10.75	Qty represents - 16.20 M3.
			237.85	Kg/Cm <sup>2</sup>			
			226.53	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>232.57</b>			
3	Cement concrete cube of mix 1:2:4, cast on 25/02/2022. For 2nd step Ch 265m to Ch 300m.	28 th day compressive strength	240.12	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	10.39	Qty represents - 12.60 M3.
			224.26	Kg/Cm <sup>2</sup>			
			231.06	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>231.81</b>			
4	Cement concrete cube of mix 1:2:4, cast on 26/02/2022. For foundation Ch 430m to Ch 460m.	28 th day compressive strength	253.71	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	13.98	Qty represents - 16.50 M3.
			228.79	Kg/Cm <sup>2</sup>			
			235.59	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>239.36</b>			
5	Cement concrete cube of mix 1:2:4, cast on 27/02/2022. For 1st step Ch 360m to Ch 390m.	28 th day compressive strength	222.00	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	11.11	Qty represents - 16.20 M3.
			246.91	Kg/Cm <sup>2</sup>			
			231.06	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>233.32</b>			
6	Cement concrete cube of mix 1:2:4, cast on 28/02/2022. For 2nd step Ch 300m to Ch 340m.	28 th day compressive strength	231.06	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	12.54	Qty represents - 14.40 M3.
			249.18	Kg/Cm <sup>2</sup>			
			228.79	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>236.34</b>			

Junior Engineer

Assistant Engineer

**REPORT PAGE 02 OF 04**

<b>SR. NO</b>	<b>DISCRIPTION OF SAMPLE</b>	<b>TESTED FOR</b>	<b>RESULTS</b>		<b>Max./Min.Value permissable</b>	<b>% above or below</b>	<b>REMARK</b>
7	Cement concrete cube of mix 1:2:4, cast on 01/03/2022. For 1st step Ch 390m to Ch 420m.	28 th day compressive strength	242.38	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	10.75	Qty represents - 16.20 M3.
			231.06	Kg/Cm <sup>2</sup>			
			224.26	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>232.57</b>			
8	Cement concrete cube of mix 1:2:4, cast on 02/03/2022. For 2nd step Ch 340m to Ch 380m.	28 th day compressive strength	210.67	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	5.35	Qty represents - 14.40 M3.
			222.00	Kg/Cm <sup>2</sup>			
			231.06	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>221.24</b>			
9	Cement concrete cube of mix 1:2:4, cast on 03/03/2022. For 1st step Ch 420m to Ch 450m.	28 th day compressive strength	251.44	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	14.34	Qty represents - 16.20 M3.
			231.06	Kg/Cm <sup>2</sup>			
			237.85	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>240.12</b>			
10	Cement concrete cube of mix 1:2:4, cast on 04/03/2022. For 2nd step Ch 380m to Ch 420m.	28 th day compressive strength	215.20	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	9.67	Qty represents - 14.40 M3.
			240.12	Kg/Cm <sup>2</sup>			
			235.59	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>230.30</b>			
11	Cement concrete cube of mix 1:2:4, cast on 05/03/2022. For foundation Ch 460m to Ch 479m.	28 th day compressive strength	224.26	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	13.62	Qty represents - 10.45 M3.
			253.71	Kg/Cm <sup>2</sup>			
			237.85	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>238.61</b>			
12	Cement concrete cube of mix 1:2:4, cast on 06/03/2022. For 1st step Ch 450m to Ch 479m.	28 th day compressive strength	260.51	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	22.61	Qty represents - 15.66 M3.
			240.12	Kg/Cm <sup>2</sup>			
			271.83	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>257.48</b>			
13	Cement concrete cube of mix 1:2:4, cast on 07/03/2022. For 2nd step Ch 420m to Ch 460m.	28 th day compressive strength	237.85	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	16.50	Qty represents - 14.40 M3.
			249.18	Kg/Cm <sup>2</sup>			
			246.91	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>244.65</b>			
14	Cement concrete cube of mix 1:2:4, cast on 08/03/2022. For 2nd step Ch 460m to Ch 479m.	28 th day compressive strength	224.26	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	11.11	Qty represents - 6.80 M3.
			242.38	Kg/Cm <sup>2</sup>			
			233.32	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>233.32</b>			
15	Cement concrete cube of mix 1:2:4, cast on 09/03/2022. For 3rd step Ch 0.00m to Ch 125m.	28 th day compressive strength	219.73	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	10.75	Qty represents - 30.00 M3 for two sets of cubes.
			237.85	Kg/Cm <sup>2</sup>			
			240.12	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>232.57</b>			

Junior Engineer

Assistant Engineer

**REPORT PAGE 03 OF 04**

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
16	Cement concrete cube of mix 1:2:4, cast on 09/03/2022. For 3rd step Ch 0.00m to Ch 125m.	28 th day compressive strength	226.53	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	13.26	Qty represents - 30.00 M3 for two sets of cubes.
			249.18	Kg/Cm <sup>2</sup>			
			237.85	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>237.85</b>			
17	Cement concrete cube of mix 1:2:4, cast on 10/03/2022. For 3rd step Ch 125m to Ch 200m.	28 th day compressive strength	226.53	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	11.11	Qty represents - 31.50 M3 for two sets of cubes.
			237.85	Kg/Cm <sup>2</sup>			
			235.59	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>233.32</b>			
18	Cement concrete cube of mix 1:2:4, cast on 10/03/2022. For 3rd step Ch 125m to Ch 200m.	28 th day compressive strength	226.53	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	12.54	----- do -----
			237.85	Kg/Cm <sup>2</sup>			
			244.65	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>236.34</b>			
19	Cement concrete cube of mix 1:2:4, cast on 11/03/2022. For 3rd step Ch 200m to Ch 275m.	28 th day compressive strength	219.73	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	11.82	Qty represents - 27.60 M3 for two sets of cubes.
			237.85	Kg/Cm <sup>2</sup>			
			246.91	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>234.83</b>			
20	Cement concrete cube of mix 1:2:4, cast on 11/03/2022. For 3rd step Ch 200m to Ch 275m.	28 th day compressive strength	226.53	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	15.06	----- do -----
			244.65	Kg/Cm <sup>2</sup>			
			253.71	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>241.63</b>			
21	Cement concrete cube of mix 1:2:4, cast on 12/03/2022. For 3rd step Ch 275m to Ch 365m.	28 th day compressive strength	242.38	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	13.26	Qty represents - 34.50 M3 for two sets of cubes.
			226.53	Kg/Cm <sup>2</sup>			
			244.65	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>237.85</b>			
22	Cement concrete cube of mix 1:2:4, cast on 12/03/2022. For 3rd step Ch 275m to Ch 365m.	28 th day compressive strength	237.85	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	10.03	----- do -----
			228.79	Kg/Cm <sup>2</sup>			
			226.53	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>231.06</b>			

Junior Engineer

Assistant Engineer

**REPORT PAGE 04 OF 04**

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
23	Cement concrete cube of mix 1:2:4, cast on 14/03/2022. For 3rd step Ch 365m to Ch 479m.	28 th day compressive strength	237.85	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	15.06	Qty represents - 28.00 M3 for two sets of cubes.
			240.12	Kg/Cm <sup>2</sup>			
			246.91	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>241.63</b>	<b>Kg/Cm<sup>2</sup></b>			
24	Cement concrete cube of mix 1:2:4, cast on 14/03/2022. For 3rd step Ch 365m to Ch 479m.	28 th day compressive strength	246.91	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	10.39	----- do -----
			226.53	Kg/Cm <sup>2</sup>			
			222.00	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>231.81</b>	<b>Kg/Cm<sup>2</sup></b>			

Copy to: 1. The Assistant Engineer , SD II , WDI, WRD, Mapusa, Bardez - Goa.

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

3. Copy submitted to The Executive Engineer , WDI ,WRD, Porvorim - Goa.

4. QC Lab File.      5. Bill File.

Junior Engineer

Assistant Engineer