

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

**Test Report No.:** WRD/Q.C./F.6-4/Aggr-T- 269,270/Lab/305/2022-23 **Dated:-**13/03/2023.

**Laboratory:** Bicholim

**Sand –T:-** 5361. **Cement-T:-** 1419.

**Sub Div:** V (QC)/WRD/Bicholim Goa.

**Sub:-** Improvement to the Surrounding of CADA building at Tillari Irrigation Project Complex, Karaswada Bardez Goa.

**Ref to requisition No:-** SDIII/WDVIII/WRD/WF.03/2022-23/259 **Dated :-** 28/02/2023

**Qty. Received:** 1 bags each **Date of Receipt:-** 04/03/2023 **Tested on:-** 08 & 09/03/2023. **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

**Sample:** Sand, 20mm, **O.S. NO:-** 990/RK & 366,367,378/SS. **Lab. Sample No :-** 6399 to 6402 **Tested by:-** Mrs. R.R. Kadam A.E. & Mrs. S. B. Naik Shirodkar J.E.

12.5mm size Aggr, and Cement

**R E P O R T 01 OF 01**

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	<b>20.00 mm Size Aggregate:</b>	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m <sup>3</sup> )	
2.	<b>12.5 mm Size Aggregate:</b>	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – -- m <sup>3</sup> )	
<b>REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.</b>					
3.	<b>Coarse Sand:</b> (L.S.No.6401)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.00% : - 4.34% : - 2.55% : - II		
<b>REMARK: The observed results are within the permissible limits of the Coarse sand.</b>					
4.	<b>Cement:</b> JK 43 Grade Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W-Invisible, M-02, Y-2023 CM/L = 0003401033 Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: - 1.08% : - 33.00% : - 165 minutes : - 250 minutes	----- (It should not be more than 10%) (It should be in the neighborhood of 35%) ---- (It should not be less than 30 minutes) -- (It should not be more than 600 minutes)	
To be used for 1:2:4 mix concrete - <b>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</b>					

Copy to:1. The Assistant Engineer, SDIII, WDVIII, WRD, Karaswada Bardez– Goa.

2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.

3. Copy Submitted to The Executive Engineer, WDVIII, WRD, Karaswada Bardez– Goa.

4. Q.C. Lab file 5. Bill File.

**Junior Engineer**

**Assistant Engineer**