

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 9811, 9812 /Lab/327/2021-22 Dated: 12/ 04/2021. **Laboratory:** Bicholim –Goa.

Sand –T: 5134,5135 , Cement: 1242,1243, & 1244.

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

Sub:Construction of Open Type Bandhara across Bicholim river at Gaonkarwada in Bicholim.

Ref to requisition No: F.211/WRD/WDVI/SDI/630/20-21 Dated: 23/03/2021.

Qty. Received: 1 bags each **Date of Receipt:** 30/03/2021 **Tested on:**03,05,06 & 07/04/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample:Sand,20mm,**O.S. No.**5744,5745,5761,5774,5731,5746, & 5754/SS **Lab. Sample No.:** 1077 To 1083 **Tested by:** Mrs. Shirodkar.JE.
12.5mm size aggrt, cement.

R E P O R T 01 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	20 mm Size Aggregate:	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --- m ³)	
2.	12.5 mm Size Aggregate:	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – --- m ³)	
REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying therequired criteria for graded aggregate of 20 mm nominal size.					
3.	Coarse. Sand: (L.S.No.1079)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 5.00% : - 5.26% : - 3.16 : - I		
REMARK: The observed results are within the permissible limits of the coarse sand					
4.	CurshedSand: (L.S.No.1080)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 14.40% : - 14.89% : - 2.31 : - II	(Limit of Deleterious material is 15.00% for crushed sand)	
REMARK: The observed results are within the permissible limits for crushed sand (Fine Aggregate) vide table 2 of IS 383: 2016(Clause 5.2.1).					

Junior Engineer Assistant Engineer

R E P O R T 02 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
5.	<u>Cement:</u> JKcement, bearing IS:269 Ordinary Portland Cement, Manuf. date:Week11, Month 03, Year'2021. CM/L =0003401033 Qty. rep. –. To be used for –		i)Fineness of Cement : 1.01% ii) Consistency of cement : 31.00% iii) Initial Setting Time: 160minutes iv) Final Setting Time : 300 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)	
<u>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</u>					
6.	<u>Cement:</u> Jyoti Gold Super cement, bearing IS:269 Ordinary PortlandCement, Manuf. date:Week 08, Month 02, Year'2021. CM/L =6894808 Qty. rep. –. To be used for –		i)Fineness of Cement : 1.17 % ii) Consistency of cement : 32 .50 % iii) Initial Setting Time : 150 minutes iv) Final Setting Time : 320 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)	
<u>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</u>					
7.	<u>Cement:</u> Ultratech cement, bearing IS:269 Ordinary PortlandCement, Manuf. date:Week 11, Month 03, Year' 2021. CM/L =4799804 Qty. rep. –. To be used for		i)Fineness of Cement : 1.12 % ii) Consistency of cement : 33.00 % iii) Initial Setting Time : 180 minutes iv) Final Setting Time : 310minutes	----- (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)	
<u>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</u>					

Copy to: 1. The Assistant Engineer, SDI, WDV, WRD, Bicholim – Goa.

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

3. Copy Submitted to The Executive Engineer, W.D. VI, WRD, Bicholim – Goa.

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

Junior Engineer Assistant Engineer