GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DFEPARTMENT

Test Report No.: WRD/Q.C. / F.6-4 /Aggr-T- 205,206/Lab/194/2022-23 **Dated: 17/11/2022.** **Laboratory:** Bicholim-Goa
Sand –T: 5316, Cement-T: 1386 **Sub Div: V (QC)/W.D.VIII/Bicholim Goa.**

Sub: Construction of Outlets OL 9A and 9B of Tail Minor II (1650 to 2500 m) of B/1 distributory of RBMC of TIP at Ibrampur in V.P. Ibrampur in Pernem taluka.
Ref to requisition No:- SDIII/WDVII/WRD/F.197/2022-23/75 Dated: 02/11/2022.
Qty. Received: 1 bags each **Date of Receipt**: 11/11/2022 **Tested on**: 14,15 & 16/11/2022. **Ref to Specification:** CPWD 2009, Vol. I&IS: 4031-4-1968
Sample: Sand, 20mm, **O.S. No.** 9473,9474,9477,9472/SS. **Lab. Sample No**.: 5382 To 5385 **Tested by**: Mrs. S.B. Naik Shirodkar J.E.
12.50mm size Aggr, Sand, and Cement

R E P O RT 01 OF 01

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remark
1.	**20 mm Size Aggregate:**	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m^3)	
2.	**12.50 mm Size Aggregate**:	Particle size distribution:	It is not single sized aggregate of 12.50 mm nominal size.	(Qty. rep. – -- m^3)	

REMARK: After blending 20 mm aggregate with 12.50 mm aggregates at the ratio of 1:1 by weight; it is Satisfying the required criteria for graded aggregate of 20 mm nominal size.

3. **Crushed Sand:** (L.S.No.5384)
   - i) Silt & Clay by S.A. method : - 14.80 %**(Limit of Deleterious material is 15.00% for crushed sand)**
   - ii) Silt by sedimentation : - 12.76 %
   - iii) Fineness Modulus : - 2.26 %
   - iv) Grading Zone : - II

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).

4. **Cement:**
   JK Cement, bearing IS:269
   Ordinary Portland cement,
   Manuf. date:W- 41, M- 10, Y-2022
   CM/L = 0003401033
   Qty. rep. –____--.
   To be used for –
   - i) Fineness of Cement : 1.25 % ---------- (It should not be more than 10%)
   - ii) Consistency of cement : 32.00 % (It should be in the neighborhood of 35%)
   - iii) Initial Setting Time : 160 minutes ---- (It should not be less than 30 minutes)
   - iv) Final Setting Time : 315 minutes -- (It should not be more than 600 minutes)

REMARK: The observed results are within the permissible limit for Ordinary Portland cement.

Copy to: 1. The Assistant Engineer, SD III, WD VII, W.R.D. Dhargal Pernem- 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 VII, W.R.D. Dhargal Pernem- Goa.
4. Q.C. Lab file 5. Bill File.

Junior Engineer **Assistant Engineer**