GOVERNMENT OF GOA QUALITY CONTROL LABORATORY WATER RESOURCES DFEPARTMENT

<u>Test Report No</u>.: WRD/Q.C./ F.6-4 /Aggr-T-135,136 /Lab/33/2022-23 Dated: 13 / 04 /2022. Laboratory: Bicholim – Goa. Sand -T:5273. Cement-T:1356. Sub Div: V(QC)/W.D.VIII/Bicholim Goa. Sub: Construction of OT of Branch – 2 of Bastora Minor – 2 of LBMC of TIP at Village Bastora in Bardez Taluka. **Ref to requisition No:**-SDI/WDVIII/WRD/WF.53/2022-23/03 Dated: 04/04/2022. **Date of Receipt**: 05/04/2022 **Tested on**:- 09,10,11 & 16/04/2022 **Ref to Specification**: CPWD 2009, Vol. I&IS:4031-4-1968 **Qty. Received:** 1 bags each Sample:Sand,20mm, **O.S. No.**8133, 8134, 8109 & 8194/S.S. Lab. Sample No.: 3757 to 3760 Tested by: Mrs. S. B. Naik Shirodkar J.E. 12.5mm size aggrt., Cement. **R E P O RT 01 OF 01** Sr. No. Description of sample **Tested for Results** Max. /Min. value permissible Remark It is single sized aggregate of 20 mm nominal size. $(Oty. rep. - --m^3)$ 20 mm Size Aggregate: Particle size distribution: 1. It is not single sized aggregate of 12.5 mm nominal size. (Qty. rep. $--m^3$) **12.5 mm Size Aggregate**: 2. Particle size distribution: **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:** i) Silt & Clay by S.A. method :- 5.40% (L.S.No.3759) ii) Silt by sedimentation : - 5.26% iii) Fineness Modulus : - 2.31% :- II iv) Grading Zone **REMARK:** The observed results are within the permissible limits of the Coarse & Fine sand. 5. i)Fineness of Cement : 1.13% ----- (It should not be more than 10%) **Cement:** J.K Cement, bearing IS:269 ii) Consistency of cement : 32.00 % (It should be in the neighborhood of 35%) iii) Initial Setting Time : 140 minutes ---- (It should not be less than 30 minutes) Ordinary Portland cement, Manuf. date:W,M -Invisible, Y-2022 iv) Final Setting Time : 285 minutes -- (It should not be more than 600 minutes) CM/L =0003401033 Qty. rep. – --. To be used for CC-1:2:4 **REMARK: The observed results are within the permissible limit for Ordinary Portland cement.**

Copy to: 1. The Assistant Engineer, SDI, WDVIII, WRD, Karaswada, 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, WDVIII, WRD, Karaswada, Bardez - Goa

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

Junior Engineer

Assistant Engineer