# GOVERNMENT OF GOA <br> QUALITY CONTROL LABORATORY WATER RESOURCES DFEPARTMENT 

## Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 317,318/Lab/52/2023-24 Dated:-10/05/2023. Laboratory: Bicholim-Goa Sand-T:- 5387. Cement-T:- 1444. Sub Div: V (QC)/WRD/Bicholim Goa.

Sub:- Construction of Open Type Bandhara to the nalla at Chimulwada Mayem in Bicholim Taluka.
Ref to requisition No:- F.211/WRD/WDVI/SDI/46/2022-23 Dated :- 02/05/2023
Qty. Received: 1 bags each Date of Receipt:- 03/05/2023 Tested on:- 05,06,08 \& 09/05/2023. Ref to Specification: CPWD 2009, Vol. I\&IS:4031-4-1968 Sample:Sand,20mm, O.S. NO:-792,793,802,788/SS. Lab. Sample No :- 7029 to 7032 Tested by:- Mrs. S. B. Naik Shirodkar J.E.
12.5 mm size Aggr, and Cement

## REPORT 01 OF 01

| Sr. No. | Description of sample | Tested for | Results | Max. /Min. value permissible |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 .}$ | 20.00 mm Size Aggregate: | Particle size distribution: | It is single sized aggregate of 20 mm nominal size. | (Qty. rep. $-\cdots{ }^{3}$ - ${ }^{3}$ ) |
| 2. | $\underline{\mathbf{1 2 . 5 m m} \text { Size Aggregate: }}$ | Particle size distribution: | It is not single sized aggregate of 12.5 mm nominal size. (Qty. rep. $---\mathrm{m}^{3}$ ) |  |

REMARK: After blending $\mathbf{2 0} \mathrm{mm}$ aggregate with 12.5 mm aggregates at the ratio of $\underline{1: 1}$ by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.
3. Coarse Sand:
(L.S.No.7031)
4. Cement:
i) Silt \& Clay by S.A. method :- $13.80 \%$
ii) Silt by sedimentation :- $13.04 \%$
iii) Fineness Modulus :- $2.72 \%$
iv) Grading Zone
:- II

REMARK: The observed results are within the permissible limits of the Coarse sand.
i) Fineness of Cement :- $1.24 \%$----------- (It should not be more than $10 \%$ )

JK Super OPC 43 Cement, bearing IS:269
Ordinary Portland cement,
ii) Consistency of cement :- $31.50 \%$ (It should be in the neighborhood of $35 \%$ )

Manuf. date: W-Invisible, M-03, Y-2023
iii) Initial Setting Time
iv) Final Setting Time
:- 145 minutes ---- (It should not be less than 30 minutes)
:- 255 minutes -- (It should not be more than 600 minutes)
CM/L $=0003401033$
Qty. rep. -.
To be used for - REMARK: The observed results are within the permissible limit for Ordinary Portland cement.

> Copy to:1. The Assistant Engineer, SDI, WDVI, WRD, Bicholim- Goa.
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim - Goa for kind information.
3. Copy Submitted to The Executive Engineer, WDVI, WRD, Bicholim- Goa.
4. Q.C. Lab file 5. Bill File.

