GOVERNMENT OF GOA QUALITY CONTROL LABORATORY WATER RESOURCES DFEPARTMENT

<u>Test Report No.</u>: WRD/Q.C./F.6-4/Aggr-T- 9887, 9888 /Lab/ 186 /2021-22

Dated: 18/10/2021.

Laboratory: Bicholim

Sand –T: 5181. Cement-1282

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

Sub:- Construction of road side drain from CADA garage to old water sump at T.I.P. Complex, Karaswada, Bardez-Goa.

Ref to requisition No:-SDIII/WDVIII/WRD/WF.75/2021-22/174 Dated: 05/10/2021.

Qty. Received: 1 bags each **Date of Receipt:** 05/10/2021 **Tested on:** 08 & 11/10/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand, 20mm, O.S. N:-6996, 6997, 7005, 7002/SS Lab. Sample No.: 2249 To 2252 Tested by: Mrs. Shirodkar.JE.

12.5mm size aggrt., Cement

REPORT 01 OF 01

Description of sample	Tested for	Results	Max. /Min. value perm	issible	Remarks
20 mm Size Aggregate:	Particle size distribution:	It is single sized a	ggregate of 20 mm nominal size.	(Qty. rep	m^3)
12.5 mm Size Aggregate:	Particle size distribution:	It is not single siz	ed aggregate of 12.5 mm nominal size	e. (Qty. rep.	m^3)
		0 00 0	66 6		y weight; it is
	satisfying the	required criteria fo	or graded aggregate of 20 mm nomi	nal size.	
Sand:	i) Silt & Clay by S.A. metl	nod :- 5.80%			
(L.S.No.2251)	ii) Silt by sedimentation	: - 5.40%			
	iii) Fineness Modulus	: - 2.53			
	iv) Grading Zone	: - II			
To be used for RE	MARK: The observed res	ults are within the p	ermissible limits of the coarse sand	•	
Cement:	i) Find	eness of Cement	: 1.42 % (It should	not be more	e than 10%)
Ultratech Cement, bearing IS:269 ii) Cor		nsistency of cement	: 32.50% (It should be in the nei	ghborhood o	of 35%)
Ordinary Portland cement, iii) In		tial Setting Time	: 150 minutes (It should not	be less than	30 minutes)
· /		C	`		•
•	<u> </u>	<i>B</i>	(,
-	concrete RFMARK. Th	e observed results o	re within the normissible limit for ()rdinary Pa	ortland coment
	20 mm Size Aggregate: 12.5 mm Size Aggregate: Sand: (L.S.No.2251) To be used for Cement: Ultratech Cement, bearin Ordinary Portland cemen Manuf. date: W – 38, M- CM/L =7171769 Qty. rep. –.	20 mm Size Aggregate: 12.5 mm Size Aggregate: Particle size distribution: Particle size distribution: REMARK: After blend satisfying the sa	20 mm Size Aggregate: Particle size distribution: It is single sized at 12.5 mm Size Aggregate: Particle size distribution: It is not single sized at 12.5 mm Size Aggregate: Particle size distribution: It is not single sized at 12.5 mm Size Aggregate: Particle size distribution: It is not single sized at 12.5 mm Size Aggregate: Particle size distribution: It is not single sized at 12.5 mm Size Aggregate: Particle size distribution: It is not single sized at 12.5 mm Size Aggregate: Particle size distribution: It is not single sized at 12.5 mm Size Aggregate: Particle size distribution: It is not single sized at 12.5 mm Size Aggregate: Particle size distribution: It is not single sized at 12.5 mm Size Aggregate: Particle size distribution: It is not single sized at 12.5 mm aggregate satisfying the required criteria for 15.80% (L.S.No.2251) Sand: (L.S.No.2251) ii) Silt & Clay by S.A. method : - 5.80% (iii) Fineness Modulus : - 2.53 (iv) Grading Zone : - II To be used for REMARK: The observed results are within the particle size distribution: It is not single sized at 15.80% (iii) Silt by sedimentation : - 5.40% (iii) Fineness of Cement iii) Fineness of Cement iii) Consistency of cement iii) Initial Setting Time CM/L =7171769 Qty. rep	20 mm Size Aggregate: 12.5 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting the required criteria for graded aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting the required criteria for graded aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting the required criteria for graded aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting the required criteria for graded aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting time in the permission of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting Time in the permission of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting Time in the permission of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting Time in the permission of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting Time in the permission of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the realisting aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregate of 20 mm nominal size. REMARK: After blending 20 mm aggregate with 12.5 mm aggregate of 20 mm nominal size. REMARK: The observed results are within the permissible	20 mm Size Aggregate: 12.5 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 20 mm nominal size. (Qty. rep. 12.5 mm Size Aggregate) Particle size distribution: It is not single sized aggregate of 12.5 mm nominal size. (Qty. rep. 12.5 mm Size Aggregate) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 b satisfying the required criteria for graded aggregate of 20 mm nominal size. Sand: (L.S.No.2251) ii) Silt & Clay by S.A. method :- 5.80% (L.S.No.2251) iii) Silt by sedimentation :- 5.40% iii) Fineness Modulus :- 2.53 iv) Grading Zone :- II To be used for REMARK: The observed results are within the permissible limits of the coarse sand. Cement: i) Fineness of Cement : 1.42 % (It should not be more 1.42 % (It should not be more 1.42 % (It should not be less than 1.42 % (It should not be more 1.42 % (It should not be less than 1.42 % (It should not be more 1.42 % (It should not be more 1.42 % (It should not be less than 1.42 % (It should not be more 1.42

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, W.D. VIII, WRD, Karaswada-Bardez Goa
- 4. Q.C. Lab file 5. Bill File.