GOVERNMENT OF GOA QUALITY CONTROL LABORATORY WATER RESOURCES DFEPARTMENT

20.00 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 20 mm nominal size. (Qty. repm ³) 12.5 mm Size Aggregate: Particle size distribution: It is not single sized aggregate of 12.5 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. Coarse Sand: i) Silt & Clay by S.A. method : - 5.80% (L.S.No.2585) ii) Silt by sedimentation : - 5.40% iii) Fineness Modulus : - 2.50 iv) Grading Zone : - III To be used for REMARK: The observed results are within the permissible limits of the coarse sand.								
-Improvement and Strengthening of existing pond at Bhati Vaddo in ward No. VI village Parra in Calangute Constituency. or equisition NoSDI/WDI/WRD /F.24/2020-21/369 Dated: - 22/12/2021. Received: Date of Receipt: 31/12/2021 Tested on: 0.4 & 05/01/2022 Ref to Specification: CPWD 2009, Vol. 1&IS:4031-4-1968 Received: Date of Receipt: 31/12/2021 Tested on: 0.4 & 05/01/2022 Ref to Specification: CPWD 2009, Vol. 1&IS:4031-4-1968 Received: Lab. Sample No: - 2583 To 2586 Tested by: Mrs. S. B. Naik Shirodkar, J. E. Namsize aggrt., Cement Tested for Results Max./Min. value permissible Remarks 20.00 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 20 mm nominal size. (Qty. repm ³) I.2.5 mm Size Aggregate: Particle size distribution: It is not single sized aggregate of 12.5 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. (Qty. repm ³) REMARK: After	<u>Test R</u>	<u>eport No</u> .: WRD/Q.C./F.6-4	/Aggr-T- 9955, 9956/Lab/ 2	55/2021-22 Dat	ed:- 06 / 01 / 2022 .	Laboratory: Bicholi	im	
Orequisition No:-SDII/WDI/WRD/F.24/2020-21/369 Dated: - 22/12/2021. Received: i bags each Date of Receipt: 31/12/2021 Tested on:- 04 & 05/01/2022 Ref to Specification: CPWD 2009, Vol. 1&IS:4031-4-1968 pile:Sand,20mm, O.S.N:- 7274, 7275, 7283 & 7273 /SS Lab. Sample No.:- 2583 To 2586 Tested by:- Mrs. S. B. Naik Shirodkar. J. E. RE P OR T01 OF 01 RE P OR T01 OF 01 It is single sized aggregate of 20 mm nominal size. (Qty. repm ³) 20.00 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 12.5 mm nominal size. (Qty. repm ³) IEEMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. Coarse Sand: i) Silt & Clay by S.A. method : 5.80% (L.S.No.2585) ii) Silt by sedimentation : - 5.40% ii) Fineness of Cement : 2.53% J.K. Cement, bearing IS:269 ii) Fineness of Cement : 2.53% Ore steed w. 50, M-12, Year -2021 ii) Final Setting Time : 165 minutes (It should not be more than 10%) iii) Initial Setting Time : 305 minutes	Sand –T: 5226. Cement-1315 Sub Div: V (QC)/WRD/Bicholim Goa.							
Received: 1 bags each Date of Receipt: 31/12/2021 Tested on: - 04 & 05/01/2022 Ref to Specification: CPWD 2009, Vol. 1&US:4031-4-1968 Lab. Sample No.: - 2583 To 2586 Tested by: - Mrs. S. B. Naik Shirodkar. J. E. Ref to Specification: CPWD 2009, Vol. 1&US:4031-4-1968 Lab. Sample No.: - 2583 To 2586 Tested by: - Mrs. S. B. Naik Shirodkar. J. E. RE P O RT 01 OF 01 It is statisfying the regulate distribution: It is is single sized aggregate of 20 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. (L.S.No.2585) i) Silt & Clay by S.A. method : - 5.80% ii) Silt & Clay by S.A. method : - 5.40% iii) Fineness Modulus : - 2.50 iv) Grading Zone : - 2.50 iv) Grading Zone : - 2.53% J.K. Cement, bea	<u>Sub</u> :-Im	provement and Strengthenin	ng of existing pond at Bhati	Vaddo in ward No	. VI village Parra in Cal	angute Constituency		
Dete:Sand,20mm, O.S. N:- 7274, 7275, 7283 & 7273 /SS Lab. Sample No.:- 2583 To 2586 Tested by:- Mrs. S. B. Naik Shirodkar. J. E. REPORT01OF01 No. Description of sample Tested for Results Max. /Min. value permissible Remarks 20.00 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 20 mm nominal size. (Qty. repm ³) 12.5 mm Size Aggregate: Particle size distribution: It is not single sized aggregate of 12.5 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. (L.S.No.2585) i) Silt & Clay by S.A. method : - 5.40% iii) Silt by sedimentation : - 5.40% iiii) Fineness Modulus : - 2.53 j.K. Cement, bearing IS:269 i) Fineness of Cement : 2.53% ordinary Portland cement, Manuf. date: W-50, M-12, Year -2021 ii) Final Setting Time : 165 minutes (It should not be more than 600 minutes) CMAL = 0003401033 Oty. rep	Ref to re	equisition No:-SDII/WDI/WR	D/F.24/2020-21/369 Dated	d:- 22/12/2021.				
Imm size aggrt., Cement R E P O RT 01 OF 01 io. Description of sample Tested for Results Max./Min. value permissible Remarks 20.00 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 20 mm nominal size. (Qty. repm³) Remarks 12.5 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 12.5 mm nominal size. (Qty. repm³) It is not single sized aggregate of 12.5 mm nominal size. Qty. repm³ REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. Weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. Coarse Sand: i) Silt & Clay by S.A. method : - 5.80% ii) Silt by sedimentation : - 5.40% (L.S.No.2585) ii) Silt by sedimentation : - 5.40% iii) Fineness Modulus : - 2.50 iv) Grading Zone : - III To be used for REMARK: The observed results are within the permissible limits of the coarse sand. Cement: i) Fineness of Cement : 2.53%								
Image: Section of sample Tested for Results Max./Min. value permissible Remarks 20.00 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 20 mm nominal size. (Qty. repm ³) 12.5 mm Size Aggregate: Particle size distribution: It is not single sized aggregate of 12.5 mm nominal size. (Qty. repm ³) It is not single sized aggregate of 20 mm nominal size. (Qty. repm ³) It is not single sized aggregate of 12.5 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. (Qty. repm ³) Coarse Sand: i) Silt & Clay by S.A. method :- 5.80% : 5.40% (L.S.No.2585) ii) Silt by sedimentation :- 5.80% : : iii) Fineness Modulus :- 2.50 : : : : iv) Grading Zone :- III : III : : : To be used for REMARK: The observed results are within the permissible limits of the coarse sand. : : Cement: : : : : :			7275, 7283 & 7273 /SS <u>Lat</u>	5. Sample No .:- 258	33 To 2586 <u>Tested by</u> :	- Mrs. S. B. Naik Shir	odkar. J. E.	
Ko. Description of sample Tested for Results Max. /Min. value permissible Remarks 20.00 mm Size Aggregate: 12.5 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 20 mm nominal size. (Qty. repm ³) 12.5 mm Size Aggregate: Particle size distribution: It is not single sized aggregate of 12.5 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. Coarse Sand: i) Silt & Clay by S.A. method :- 5.80% : 5.80% (L.S.No.2585) ii) Silt by sedimentation :- 5.40% : 2.50 iv) Grading Zone : III iii) Fineness Modulus : 2.53% To be used for REMARK: The observed results are within the permissible limits of the coarse sand. i) Fineness of Cement J.K. Cement, bearing IS:269 ii) Consistency of cement : 3.100% (It should not be more than 10%) J.K. Cement, bearing IS:269 iii) Initial Setting Time : 165 minutes (It should not be less than 30 minutes) Ordinary Portland cement, iii) Initial Setting Time : 305 minutes (It should not be more than 600 minutes) CM/L = 0003401033 Qty. rep iv) Fina	12.5mm	size aggrt., Cement						
20.00 mm Size Aggregate: Particle size distribution: It is single sized aggregate of 20 mm nominal size. (Qty. repm ³) 12.5 mm Size Aggregate: Particle size distribution: It is not single sized aggregate of 12.5 mm nominal size. (Qty. repm ³) REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. Coarse Sand: i) Silt & Clay by S.A. method : - 5.80% (L.S.No.2585) ii) Silt by sedimentation : - 5.40% iii) Fineness Modulus : - 2.50 iv) Grading Zone : - III To be used for REMARK: The observed results are within the permissible limits of the coarse sand. Cement: i) Fineness of Cement : 2.53% J.K. Cement, bearing IS:269 ii) Consistency of cement : 31.00% (It should not be more than 10%) J.K. Cement, bearing IS:269 ii) Initial Setting Time : 165 minutes (It should not be less than 30 minutes) Manuf. date: W-50, M-12, Year -2021 iv) Final Setting Time : 305 minutes (It should not be more than 600 minutes) CM/L = 0003401033 Qty. rep iv) Final Setting Time : 305 minutes (It should not be more than 600 minutes) <th></th> <th></th> <th>RE</th> <th>C P O RT 01 OF 01</th> <th></th> <th></th> <th></th>			RE	C P O RT 01 OF 01				
Image: Image: Image: 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 the required criteria for graded aggregate of 20 mm nominal size. Coarse Sand: (L.S.No.2585) i) Silt & Clay by S.A. method :- 5.80% ii) Silt by sedimentation :- 5.40% iii) Fineness Modulus :- 2.50 iv) Grading Zone :- III To be used for REMARK: The observed results are within the permissible limits of the coarse sand. Cement: J.K. Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W-50, M-12, Year -2021 CM/L = 0003401033 Qty. rep i) Final Setting Time iv) Final Setting Time : 165 minutes (It should not be more than 600 minutes) CM/L = 0003401033 Qty. rep Call of the coarse sand. : 305 minutes (It should not be more than 600 minutes)	Sr. No.	Description of sample	Tested for	Results	Max. /Min. v	alue permissible	Remarks	
REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size. Coarse Sand: (L.S.No.2585) i) Silt & Clay by S.A. method : - 5.80% (L.S.No.2585) ii) Silt by sedimentation : - 5.40% iii) Fineness Modulus : - 2.50 iv) Grading Zone : - III To be used for REMARK: The observed results are within the permissible limits of the coarse sand. i) Fineness of Cement : 2.53% (It should not be more than 10%) J.K. Cement, bearing IS:269 ii) Consistency of cement : 31.00% (It should be in the neighborhood of 35%) Ordinary Portland cement, Manuf. date: W-50, M-12, Year -2021 CM/L = 0003401033 iii) Initial Setting Time : 165 minutes (It should not be more than 600 minutes) CM/L = 0003401033 yrep	1.	20.00 mm Size Aggregate:	Particle size distribution:				2	
satisfying the required criteria for graded aggregate of 20 mm nominal size. Coarse Sand: (L.S.No.2585) i) Silt & Clay by S.A. method : - 5.80% ii) Silt by sedimentation : - 5.40% iii) Fineness Modulus : - 2.50 iv) Grading Zone : - III To be used for REMARK: The observed results are within the permissible limits of the coarse sand. Cement: J.K. Cement, bearing IS:269 i) Fineness of Cement : 2.53% (It should not be more than 10%) Ordinary Portland cement, Manuf. date: W-50, M-12, Year -2021 ii) Initial Setting Time : 165 minutes (It should not be less than 30 minutes) CM/L = 0003401033 iv) Final Setting Time : 305 minutes (It should not be more than 600 minutes)	2.	12.5 mm Size Aggregate :	<u>Aggregate</u> : Particle size distribution: It is not single sized aggregate of 12.5 mm nominal size. (Qty. rep. m^3)					
satisfying the required criteria for graded aggregate of 20 mm nominal size. Coarse Sand: (L.S.No.2585) i) Silt & Clay by S.A. method : - 5.80% ii) Silt by sedimentation : - 5.40% iii) Fineness Modulus : - 2.50 iv) Grading Zone : - III To be used for REMARK: The observed results are within the permissible limits of the coarse sand. Cement: J.K. Cement, bearing IS:269 i) Fineness of Cement : 2.53%(It should not be more than 10%) Ordinary Portland cement, Manuf. date: W-50, M-12, Year -2021 ii) Initial Setting Time : 165 minutes (It should not be more than 600 minutes) CM/L = 0003401033 iv) Final Setting Time : 305 minutes (It should not be more than 600 minutes)			REMARK · After blendi	ng 20 mm aggregat	e with 12 5 mm aggrega	tes at the ratio of 1.1	hy weight: it is	
Coarse Sand: (L.S.No.2585)i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone iv) Grading Zone iv) Grading Zone iii) Fineness of Cement i) Fineness of Cement i) Fineness of Cement iii) Consistency of ce				0 00 0	66 6			
(L.S.No.2585)ii) Silt by sedimentation:- 5.40%iii) Fineness Modulus:- 2.50iv) Grading Zone:- IIITo be used for REMARK: The observed results are within the permissible limits of the coarse sand. Cement:i) Fineness of CementJ.K. Cement, bearing IS:269ii) Consistency of cementOrdinary Portland cement,iii) Initial Setting TimeManuf. date: W-50, M-12, Year -2021iv) Final Setting TimeCM/L = 0003401033iv) Final Setting TimeQty. rep	3.							
iii) Fineness Modulus:-2.50iv) Grading Zone:-IIITo be used for REMARK: The observed results are within the permissible limits of the coarse sand. <u>Cement:</u> i) Fineness of Cement: 2.53%J.K. Cement, bearing IS:269ii) Consistency of cement: 31.00%Ordinary Portland cement,iii) Initial Setting Time: 165 minutesManuf. date: W-50, M-12, Year -2021iv) Final Setting Time: 305 minutesCM/L = 0003401033Qty. rep:	З.							
iv) Grading Zone :- III To be used for REMARK: The observed results are within the permissible limits of the coarse sand. <u>Cement:</u> i) Fineness of Cement : 2.53%(It should not be more than 10%) J.K. Cement, bearing IS:269 ii) Consistency of cement : 31.00% (It should be in the neighborhood of 35%) Ordinary Portland cement, iii) Initial Setting Time : 165 minutes (It should not be less than 30 minutes) Manuf. date: W-50, M-12, Year -2021 iv) Final Setting Time : 305 minutes (It should not be more than 600 minutes) CM/L = 0003401033 Qty. rep		(L.S.NO.2585)	, .					
To be used for REMARK: The observed results are within the permissible limits of the coarse sand. Cement:i) Fineness of Cement: 2.53% (It should not be more than 10%)J.K. Cement, bearing IS:269ii) Consistency of cement: 31.00%(It should be in the neighborhood of 35%)Ordinary Portland cement,iii) Initial Setting Time: 165 minutes (It should not be less than 30 minutes)Manuf. date: W-50, M-12, Year -2021iv) Final Setting Time: 305 minutes (It should not be more than 600 minutes)CM/L = 0003401033Qty. rep			,					
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Ordinary Portland cement, Manuf. date: W-50, M-12, Year -2021 CM/L = 0003401033 Qty. repiii) Initial Setting Time iv) Final Setting Time: 165 minutes : 305 minutes (It should not be less than 30 minutes) : 305 minutes	7.							
Manuf. date: W-50, M-12, Year -2021 iv) Final Setting Time : 305 minutes (It should not be more than 600 minutes) CM/L = 0003401033 Qty. rep								
CM/L = 0003401033 Qty. rep. –.				C				
Qty. rep. –.		,	, $1 \text{ cal} - 2021$ IV) F1	nai setting Time	. 505 minutes (It	should not be more	man oou minutes)	
to be used for REWARK: The observed results are within the permissible limit for Urdinary Portland cement.		- • •		•				
		10 be used for <u>KEMARK</u>	: The observed results are v	within the permissil	ble limit for Ordinary I	<u>cortland cement.</u>		

Copy to: 1. The Assistant Engineer, SDII, WDI, WRD, Mapusa -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.I, WRD, Porvorim – Goa

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

Assistant Engineer