## BOQ for Proposed Structural Repairing Work At 4th Floor, C & D Wing, GITC Building, At Sector 11, CBD Belapur, Navi Mumbai.

SR.	PARTICULARS	QTY.	UNIT
	DEMOLITION & CARTING AWAY DEBRIS Examining concrete by tapping with light hammer and carefully removing carbonated concrete around the rebars up to 15-40 mm depth by low impact high frequency hammer/chipper without damaging the sound concrete. The chipped concrete shall be cleaned using high pressure water jet with clean potable water. Daily cleaning and stacking of debris at prescribed location in polypropylene/ paper bags, disposing off the debris so generated on weekly basis out side the premises, etc. The area to be marked in straight line geometrical forms, The demarked area shall be grove cut by cutter on periphery to make perfect wedge shapes up to 25 mm depth. Complete including stacking the serviceable material as directed at site & carting away unserviceable material/ debris to a place approved by Navi Mumbai Municipal Corporation. Complete as directed by the Architect / SBIIMS. The rate is inclusive of necessaryscafolding, formwork, plates and metal supports etc. as directed by the Architect/SBIIMS) (60% of Floor Area 1368.00 Sq.Mts. = 825 Sq.mt.)	825.00	SQ.MT.
2	Alkaline rust converting primer for exposed reinforcement bars Clean existing reinforcement with wire brush/ rotary wire brush to make surface free from rust scales, loose material, dirt etc. complete and Providing & applying Alkaline Rust converting primer Feovert in two coats conforming to ASTM-B-117 & ASTM-G-60-86 to exposed existing rebars after removing & cleaning loose rust by wire brush and leave it for 6-8 hours. The rust converter shall have a minimum pH of 7.5 and shalll be able to convert both hematite and magnetite forms of rust shall pass 400 alternate immersion cycles in 3.5 % NaCl. wherever directed it should be cleaned using high pressure water jet with clean potable water. Complete as directed by the Architect / Consultant / SBIIMS. The rate is inclusive of necessary scafolding, formwork, plates and metal supports etc. as directed by the Architect/SBIIMS) KRISHNA CONCHEM/BASF/FOSROC/SUNANDA/SIKA	820.00	SQ.MT.

## TENDER FOR PROPOSED STRUCTURAL REPAIRING WORK AT 4TH FLOOR, C D WING, GITC BUILDING, AT SECTOR 11, CBD BELAPUR, NAVI MUMBAI.

SR.	PARTICULARS	QTY.	UNIT
3	Corrosion protection of exposed rebars using anti-corrosive protective coating		
	Providing and applying anti-corrosive coating IPNet-RB (CSIR/CBRI know how) in 2 coats with time interval of minimum 6 hours. The coating shall have ECorr value of -45 mV against SCE in 3.5 NaCL for 100 hours and electrochemical evaluation of max 0.5 mA /cm2. This coating shall be applied over Feovert coated rebars. Complete as directed by the Architect/SBIIMS. The rate is inclusive of necessary scafolding. KRISHNA CONCHEM / BASF / FOSROC / SUNANDA/SIKA	820.00	SQ.MT.
4	Corrosion protection of unexposed/hidden rebars using corrosion inhibiting coating		
	Providing and applying concrete penetrating, migratory bipolar corrosion inhibitor EPCO KP-100 conforming to ASTMG-109) by brush/spray with dosage of 4Sqm/ ltr, over the entire chipped off / exposed concrete area including material, equipment, labour etc. complete in order to arrest further corrosion of reinforcement bars. The application of EPCO-KP-100shall reduce the corrosion in terms of coulombs by 30% minimum upon migration through the embedded side of concrete as measured by mA - hrs. Complete as directed by the Architect/Consultant/SBIIMS. <b>KRISHNA CONCHEM/BASF/FOSROC/SUNANDA/SIKA</b>	1368.00	SQ.MT.
5	<b>Teflon nozzles compatible with epoxy injector</b> Drilling Holes of 12mm dia, upto 100mm deep holes in structural members at the intervals of 500mm c/c for slab , 300 mm c/c for column and beam in staggered manner or along the crack as directed by the consultants in RCC structural element including cleaning of the holes by air blower and Inserting 12mm dia. Teflon nozzles compatible with epoxy injector and having machined external end to receive outlet of grouting gun. Fix it inside the holes by applying thixotropic epoxy putty to ensure complete sealing and allow to cure the system for min.8 hrs before grouting including removing nozzle projections, excess putty if any over concrete element grinding, levelling and finishing the external surface, after completion of the work, etc complete as directed by The Architect/SBIIMS.	8000.00	NOS
6	<b>Epoxy Injection Grouting</b> Grouting Injecting/Gravity pouring / deck flooding over porous slab or concrete area with low viscosity high molecular weight thermosett polymer grout Monopol 250 H or equivalent to improve the micro structure of concrete, Including mixing material		
	components part a and part b in required quantities as per mfg instruction by weigh batching spreading on area by broom brush at a rate of 1kg/sqm. Monitor leakages through other side of the member and seal them as per the requirement. Broadcast quartz sand over tacky surfaces to ensure mechanical keys for subsequent coating. Allowing the system to cure etc. complete. Test the system for pull out at 3 loactions. Complete as directed by the Architect/SBIIMS.	2000.00	KG
7	Structural grade bonding in moisturous surface areas Providing and applying two component non-remulsifiable epoxy resin bond coat (EL Monobond) on old concrete face confirming to ASTM-C- 1059-86 Type II prior to application of any type of mortar or section build-up using cementious media to ensure bond between old concrete & new concrete by brush application. Complete as directed by the Architect/Consultant/SBIIMS. KRISHNA CONCHEM/BASF/FOSROC/SUNANDA/SIKA	1368.00	SQ.MT.

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SR.	PARTICULARS	QTY.	UNIT
8	Centering, Shuttering, Formwork for Columns, Beams & Slabs.		
	<b>Providing &amp; making</b> Centering, shuttering, Formworks for columns, beams & slabs including strutting, propping etc. and removal of form for (a) columns, pillars, Piers, Abutments, Posts and Struts. Complete as directed by the Architect/SBIIMS.	50.00	SQ.MT.
9	Repairing concrete areas using non shrink, free flow, corrosion inhibiting microconcrete		
	MOLITH-MC		
	Rebuilding the section of damaged RCC elements to its original size or as per consultants		
	recommandations by providing and casting with microconcrete of grade M40 all lead lift,		
	mixing, placing,		
	levelling the surface by grinding off cementitious slurry or construction joint differences if any to satisfaction of engg. incharge, curing etc. complete.(Rate including- cube test to be conducted for every 5 M.T. workdone.6 no's of sample required per test). Ensure the quality of water by testing water as per IS 456 and document the same. Ensure temperature at time of mixing should be between 25 to 40 degree celcius by electronic temperature gaugeComplete as directed by the Architect/Consultant/SBIIMS. <b>KRISHNA CONCHEM/BASF/FOSROC/SUNANDA/SIKA</b>	69000.00	KG
10	providing and applying over the newly deshuttered / laid concrete surface a coat of curing compound water based acrylic emulsion as per manufactures specifications, etc complete.	1368.00	SQ.MT.
11	Providing and fixing additional corrosion resistant steel rebar Fe 415 or higher grade 10mm		
	dia 150mm Centre to Centre bothways in various structural elements like column, beams		
	and Slab etc to replace the lost rebars section due to corrosion including cutting, bending and fixing the bar, tieing with preleft bars by GI binding wire, retouching local damages in coating if any of with Zinc spray, etc. complete.	7000.00	KG
12	Providing, Supplying, transporting materials, drilling holes by rotary hammer drill, dust		
	removing, batching, mixing of resin and hardner Hilti HY 200, inserting & anchoring rebars		
	of 8 mm dia rebar in 12 mm dia holes and 110 mm deep using HY 200dia. in existing	500.00	EACH
	concrete surfaces using resin based anchoring grout and necessary rebaring of		
	reinforcement steel (steel rebars to be paid seperately)		
13	Repairing concrete areas using Corrosion inhibiting fiber reinforced polymer modified		
	mortar		
	component ready to use corrosion inhibiting fiber reinforced repair morter MOUTH		
	PMMFCI capable of applying 20 mm avg. thick in single layer initially by hand and finishing	1000 00	KG
	with trowel, carefully compacting the same around the rebars and finishing to bring it in	1000.00	
	line with existing concrete surface. Complete as directed by the		
	Architect/Consultant/SBIIMS.		
	KRISHNA CONCHEM/BASF/FOSROC/SUNANDA/SIKA		

14	ANTICOLANS	QIY.	UNIT
14	REATMENT OF EXPANSION JOINT WITH POLYSULPHIDE SEALENT ("TECHSEAL"RDL 941 /		
9	940 OR EQUIVALENT)		
F	Providing and laying expansion joint with Polysulphide Sealent with Average size of joint is		
a	around 100mm, have to be reduced to 50-60 mm with filling of MICRO CONCRETE with		
F	proper curing as the direction of the Architect/SBIIMS.		
	Contractor should Open up the joints. Cleaning of the surface with wire brush so as to		
	emove the loose particles.		
	Prepation of edge: -apply one coat of Mastercrete urp mix with cement into proportion of		
	1:1 as a bond coat on entire surfaces of edges. Prepare edges with our microconcrete		
r	nasterock basic.		
	Back up material: insert compressible thermacol foam, as back up material to control		
	depth of sealant in the joint and to provide support for tooling of the sealant. surface.		
4	Application of primer: Apply primer RDL 942 by brush on the concrete surface. After that		
c r	apply masking tape on top of the joints.		
	-ixing bond breaker tape such as sen adhesive on back-up material to avoid adhesion of		
S	searant to the third Application of reciseal. Mixing base and		
â	accelerator compound of polysulphide sealant uniformly and fill-up the joints of the same		
f	inishing with the soap water. The Contractor should use Techseal RDL 940 or equivalent		
f	or vertical walls And Techseal RDL 941 or equivalent for floor surface. (The joint size	40.00	RMT
Ŀ	petween 25mm to 50mm). Complete as directed by the Architect. The contractor should		
g	zive 5 vears warranty for above system.		
	Primer Sealant Rond breaking tape		
	Backsr.rod		
	1202 1/18 693 CO 219		