

BHARAT HEAVY ELECTRICALS LIMITED JHANSI
FACTORY CIVIL DEPARTMENT
Blank Price bid

NAME OF WORK: Civil and allied work for Construction of UHV LAB at BHEL Jhansi.

Tender Enquiry Number - FCX/TW/24/05							
Part (A) DSR ITEMS							
Sl. No.	DSR 2021	Description of Work	% Allocation (Item-wise)	Unit	Quantity	Rate per Unit (in Rs.)	Amount (in Rs.)
1	1.1.2/82	By Mechanical Transport including loading, unloading and stacking Earth upto 1 km .	0.7321431%	Cum	2,477.00	#VALUE!	#VALUE!
2	1.1.4/82	Carriage of Excavated rock	1.1723342%	Cum	2,479.00	#VALUE!	#VALUE!
3	2.6.1/92	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5	0.8338071%	Cum	2,477.00	#VALUE!	#VALUE!
4	2.7.1/92	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. 2.7.1 Ordinary rock	1.0061017%	Cum	1,487.00	#VALUE!	#VALUE!
5	2.7.3/92	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.2.7.3 Hard rock (blasting prohibited)	1.9248942%	Cum	992.00	#VALUE!	#VALUE!
6	2.25/87	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	0.3095670%	Cum	744.00	#VALUE!	#VALUE!
7	2.26.1/95	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials. 2.26.1 All kinds of soil	0.0604400%	Cum	353.00	#VALUE!	#VALUE!
8	2.26.2/95	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials. 2.26.2 Ordinary or hard rock	0.1083871%	Cum	353.00	#VALUE!	#VALUE!
9	2.31/96	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	0.0475151%	Sqm	2,000.00	#VALUE!	#VALUE!
10	2.33.2/96	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 60 cm girth upto and including 120 cm girth	0.0641339%	Nos.	20.00	#VALUE!	#VALUE!
11	2.33.3/96	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 120 cm girth upto and including 240 cm girth	0.3720943%	Nos.	25.00	#VALUE!	#VALUE!
12	4.1.3/99	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : "1:2:4 (1 cement : 2 coarse sand (zone-II) : 4 graded stone aggregate 20 mm nominal size).	2.8419217%	Cum	332.00	#VALUE!	#VALUE!
13	4.1.6/99	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:3:6 (1 Cement : 3 coarse sand (zone-III): 6 graded stone aggregate 40 mm nominal size).	2.3593531%	Cum	277.00	#VALUE!	#VALUE!
14	5.1.2/112	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:1.5:3 (1 cement : 1.5 coarse sand (zone-II) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources	8.9472321%	Cum	960.00	#VALUE!	#VALUE!
15	5.1.3/112	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	0.2948449%	Cum	31.00	#VALUE!	#VALUE!
16	5.3/112	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of	0.3426475%	cum	26.00	#VALUE!	#VALUE!

17	5.9.1/114	Centering and shuttering including strutting, propping etc. and removal of form for Foundations, footings, bases of columns, etc. for mass concrete.	0.5212115%	Sqm	1,033.00	#VALUE!	#VALUE!
18	5.22.6/118	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	3.2152493%	Kg	81,460.00	#VALUE!	#VALUE!
19	6.1.2/129	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	0.6850190%	Cum	67.00	#VALUE!	#VALUE!
20	6.4.2/129	Brick work with FPS bricks of class designation 75 kg /sq cm (IInd class kanpur brick) in Super structure 1:6 (1 cement : 6 fine sand) upto floor five level .	2.7079505%	Cum	210.00	#VALUE!	#VALUE!
21	13.1.2/217	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	0.4145601%	Sqm	981.00	#VALUE!	#VALUE!
22	13.2.2/217	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1 cement: 6 fine sand)	0.4416008%	Sqm	912.00	#VALUE!	#VALUE!
23	13.80/229	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	0.3701300%	Sqm	1,824.00	#VALUE!	#VALUE!
24	13.41.1/262	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade : New work (two or more coats) over and including water hinnable priming coat with cement primer	0.2428931%	Sqm	912.00	#VALUE!	#VALUE!
25	13.47.1/262	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade: New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	0.2425943%	Sqm	912.00	#VALUE!	#VALUE!
26	15.2.1/287	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	0.1907350%	Cum	58.00	#VALUE!	#VALUE!
27	15.3/287	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in-charge.	0.1535215%	Cum	32.00	#VALUE!	#VALUE!
28	15.7.4/255	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge in cement mortar	0.0946161%	Cum	34.00	#VALUE!	#VALUE!
29	15.19/289	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	0.0157291%	Kg	3,000.00	#VALUE!	#VALUE!
30	15.28.1/289	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of: G.S. sheet	0.0401093%	Sqm	180.00	#VALUE!	#VALUE!
31	15.28.2/289	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of: Asbestos sheet	0.0020890%	Sqm	20.00	#VALUE!	#VALUE!
32	16.4/300	Laying, spreading and compacting stone aggregate of specified sizes to WBM pecifications in uniform thickness, hand picking, rolling with 3 wheeled road/vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density	0.7631911%	Cum	538.00	#VALUE!	#VALUE!
33	23.7/445	Supplying, filling, spreading & leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer-incharge.	0.4954332%	Cum	231.00	#VALUE!	#VALUE!
34	8019	GI sheet 0.8 mm thick confirming to IS 277:1992	0.3704210%	kg	2,512.00	#VALUE!	#VALUE!
35	DSR-21	Covered in DSR-2021 but not covered above	0.2979444%		1,81,845.16	#VALUE!	#VALUE!
		Total A	32.6824155%				#VALUE!
Part (B) Non -DSR items							
S. No.	ITEM DESCRIPTIONS			Unit	Total Qty	Rate per Unit (in Rs.)	Amount (in Rs.)
36	NS-1	Supply and installation of G.S. sheet (Maximum height up to 30.0 m) having maximum pitch of 205 mm c/c and minimum 28 mm crest depth in length for roofing / side cladding as per site requirement. The supplied material is to be manufactured out of 0.63 mm TCT (Total coated thickness) Galvanised steel sheet with zinc coating of not less than 120 gm/ m ² considering both sides together. The sheets are to be fixed with self drilling/self tapping screws with EPDM seal fixed to the existing MS purlins/MS runners complete as per drawing and as directed by engineer-in-charge. 0.63 mm thick with zinc coating not less than 120 gm/ m² Make of sheet must be JSW/Essar/Tata/SAIL/Equivalent.	17.8969664%	Sqm	7,458.00	#VALUE!	#VALUE!

37	NS-2	Supply and installation of Perforated G.S. sheet (Maximum height up to 30.0 m) having maximum pitch of 205 mm c/c and minimum 28 mm crest depth in length for roofing / side cladding as per site requirement. The supplied material is to be manufactured out of 0.63 mm TCT (Total coated thickness) Galvanised steel sheet with zinc coating of not less than 120 gm/ m ² considering both sides together. The sheets are to be fixed with self drilling/self tapping screws with EPDM seal fixed to the existing MS purlins/MS runners complete as per drawing and as directed by engineer-in-charge. 0.63 mm thick with zinc coating not less than 120 gm/ m² with hole size of 1.8 - 2 mm at 20 mm c/c along the entire sheet. Make of sheet must be JSW/Essar/Tata/SAIL/Equivalent.	6.0958604%	Sqm	2,226.00	#VALUE!	#VALUE!
38	NS-3	Providing and fixing thermal insulation with Fibre glass wool conforming to IS: 8183 having density 24 kg/m ³ , 100 mm thick, fixed to wall with screw, rawel plug & washers, chicken mesh and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge. (Fabrication (if required) for fixing of Glass wool shall be paid seperately)	3.7706353%	Sqm	2,226.00	#VALUE!	#VALUE!
39	NS-4	Supply & fixing of flashings, ridges, cappings, corner pieces etc. made of 0.63 mm TCT (Total coated thickness) Galvanised steel sheet with zinc coating of not less than 120 gm/ m ² considering both sides together. The sheets are to be fixed with self drilling/self tapping screws with EPDM seal fixed to the existing MS purlins/MS runners complete as per drawing and as directed by engineer-in-charge.	1.0265072%	Metre	606.00	#VALUE!	#VALUE!
40	NS-5	Providing and fixing fire retardant and U.V. resistant profiled and solid transparent embossed polycarbonate sheet of minimum 3 mm thick with profile to match with that of adjacent galvalume sheets on roof with self drilling/self stitching fasteners with EPDM seal for transmission of light, fixing of the sheet to the existing support system underneath as per the standard practice complete and as directed by engineer-in-charge. The solid transparent polycarbonate sheet shall be free from scratches and other surface damage and it shall be UV treated and tested as per relevant ASTM or DIN or AS etc. as the case may be.	0.1919760%	Sqm	40.00	#VALUE!	#VALUE!
41	NS-6	Supply & fixing M.S Gutters with 3.0 mm thick (minimum) M.S. sheet of 900 mm width in the required shape and size as per drawing of valley gutter with necessary fastener, welding and supports on steel bracket & sealing the space as required with external cladding and painting 1 coats of red oxide primer before erection & 2 coats of synthetic enamel paint/Aluminium paint of approved brand & colour after erection complete as directed by Engineer-in -Charge.	0.6447007%	kg	2,076.00	#VALUE!	#VALUE!
42	NS-7	Fabrication and erection of structural steel works at all heights (Maximum height up to 30.0 m) consisting of, railing, clamps, purlins with channels & angles, M.S. flat, M.S. tubes, supports including all connections as per detailed drawings connected steel works etc. cleats, gusset plates all bolts, nuts, washers, base plates, anchor bolts etc., as per detailed drawings cutting welding and painting 1 coats of red oxide primer before erection & 2 coats of synthetic enamel paint/Aluminium paint of approved brand & colour after erection complete. All bolts, nuts, washers, gas, electrodes are in contractor's scope. Fabrication to be done as per I.S. codes of latest revision. (All the materials are in contractor scope except the Structural steel. Structural steel shall be provided by BHEL free of cost.) (Make of paint and primer shall be Asian, Berger, Narolac and Salimar) (Crane/Hydra used for fabrication and erection shall be under contractor's scope)					
	(a)	Only fabrication	11.9948889%	Kg	6,06,960.00	#VALUE!	#VALUE!
	(b)	Only erection	17.1355556%	Kg	6,06,960.00	#VALUE!	#VALUE!
42	NS-8	Providing & fixing geotextile 120 gsm non woven, 100% polyester of thickness 1 to 1.25 mm as per the direction of Engineer -in-Charge	0.6504600%	Sqm	4,608.00	#VALUE!	#VALUE!

43	NS-9	Dry Area Surface preparation : Removal of existing old coatings/paintings from concrete floor by using scarifying machines, sanders, scrubbing machines, wire brushes and other mechanical tools.Oil contaminated areas/oil soaked areas must be degreased with the help of universal degreaser or flame burning by mechanical, chemical or any other suitable means. Make entire area dust free and dry with the help of high capacity vacuum cleaner and hot air blowers. Then it should be washed thoroughly by solvent cleaning/detergent washing acid cleaning. This process must be repeated upto satisfaction of Engineer-in- charge to ensure permissible limit of moisture & oil content. (The area under execution shall be barricaded and covered to protect outer area from dust)	0.0510148%	sqm	1,807.00	#VALUE!	#VALUE!
44	NS-10	Repairing of cracks, erosion, crumbled joints, small size damages, pot holes, etc., in the concrete floor with fast setting epoxy resin based putty / mortar including cutting in regular shape etc. complete. Undulations ,if any, found in the existing floor has to be removed followed by filling with epoxy screed to the required thickness to bring the level within tolerance limits.	0.6352148%	cum	3.00	#VALUE!	#VALUE!
45	NS-11	Providing and laying 5mm thick high density/highly abrasion resistant epoxy resin floor based screed flooring (compressive strength not less than 50N/sqmm at 7 days flexural strength not less than 25N/sqmm at 7 days inclusive of average 1.5mm thick topping of self levelling epoxy flooring of approved colour (compressive strength not less than 50N/sqmm at 7 days and flexural strength not less than 20N/sqmm at 7 days) after application of one or more coats of compatible and appropriate epoxy primer on the prepared surface.	6.3768512%	sqm	1,807.00	#VALUE!	#VALUE!
46	NS-12	Installation of Lifeline on the roof of UHV Lab (48 x 32 m). The maximum height of Bays is around 26 m. The intermediate anchor support for the lifeline is to be provided at an average distance of 10 m approx. Lifeline should be made of SS 316 (or higher grade) stainless steel. All the material, members shall be bought by the contractor. The contractor shall deploy experience labour to install the lifeline. The contractor has to provide a complete and holistic arrangement of lifeline over UHV Lab so that the same can be used to provide safety to the workmen at the time of sheet repair work over UHV Lab. Note: Contractor has to perform Pull Off Test at minimum load of 500 Kg on installed lifeline every year during the defect liability period as per instruction of Engineer-in-charge at their own cost.	0.8469531%	Job	1.00	#VALUE!	#VALUE!
Sub Total " B "			67.31758449%				#VALUE!
Grand Total " C= (A+B) "			100.0000%				XXXXX
In words			#NAME?				

Note -GST extra as applicable

1. Bidder has to quote in above unlocked cell (J-61) only. Item rate shall be calculated automatically. Calculated item rates upto four decimal points may be adjusted w.r.t. gross total amount and it shall be the itemwise final rate for execution of contract and all other purposes.

2. Quoted gross total amount should be considered only if quoted in this excel sheet and print out of this should only be considered for evaluation. If Price is quoted in any other format other than the Excel Sheet enclosed to the NIT , the offer of the bidder will be rejected.

(Signature and Seal of Contractor)