

BHEL:PS-WR
TS : BHE/PW/PUR PARAS-2 ENB/505
PRICE BID-PART-II- VOL-II

SL. NO	DESCRIPTION	QTY	UNIT	RATE in Rs.	AMOUNT IN Rs.
	NAME OF WORK: CONSTRUCTION OF ROADS, FENCING, DRAINAGE OF OPEN STORAGE AREA (100M x 100M & 100M x 250M) AT 1X 250 MW PARAS SITE -PHASE II (SECTION-A)				
1	EXCAVATION FOR DRAINS IN ALL TYPES OF SOILS, SAND, GRAVEL OR SOFT MURAM INCLUDING DRESSING SECTION TO THE REQUIRED SLOPES AND SPREADING THE EXCAVATED EARTH UNIFORMLY IN THE SPECIFIED AREA FOR SITE LEVELING & DEVELOPMENT AS DIRECTED BY THE BHEL .	2000	M3		
2	DISPOSAL OF SURPLUS SOIL BEYOND INITIAL LEAD OF 100METRES AND TO A DISTANCE NOT EXCEEDING 1KM INCLUDING LOADING TRANSPORTING UNLOADING, SPREADING ,LEVELLING IN LOW LAYING AREAS OF OPEN STORAGE YARD. OR IN LOCATION DIRECTED BY ENGINEER IN CHARGE.	500	M3		
3	PROVIDING AND LAYING SOLING 230 MM THK WITH 150 -200 MM THICK BOULDER SIZE AND FILLING THE VOIDS WITH HAND BROKEN METAL OF SIZE 40-60 MM SPREADING MURRUM AND ROLLING AND COMPACTION INCLUDING WATERING, WITH 10-12 MT CAPACITY ROAD ROLLER.	1400	M3		
4	PROVIDING 150MM THICK WATER BOUND MACADAM (WBM) IN TWO LAYERS OF EACH 75MM, WITH 40MM TO 60MM METAL (STONE AGGREGATE) INCLUDING SUPPLYING AND SPREADING GRAVEL/MURRUM OVER THE SOLING/CONSOLIDATED BASE, COMPACTING THE SAME WITH POWER ROLLER INCLUDING NECESSARY LABOUR, WATERING, MATERINGS ETC. COMPLETE, ALL AS PER RELEVANT SPECIFICATIONS AND DIRECTIONS OF BHEL ENGINEER (RATE SHALL BE INCLUSIVE OF ALL LABOUR, MATERIALS ETC., COMPLETE).	900	M3		

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5	PROVIDING AND FIXING BARBED WIRE FENCING AROUND OPEN STORAGE YARD AS PER DRAWING/AS INSTRUCTED BY BHEL ENGINEER , INCLUDING POSTS OF MS ANGLES 50x50x6MM 2.00 M HIGH ABOVE GROUND AND 450MM EMBEDDED IN THE CONCRETE BELOW G.L AS PER STANDARD PRACTICE/AS INSTRUCTED BY BHEL ENGINEER, FIXING THE POSTS WITH FOUNDATION OF SIZE 0.30x0.30x0.45 M DEEP IN PCC OF MIX 1:3:6,THE POSTS SHALL BE SPACED AT 3M CENTRES AND STRUTS AT 30M CENTRES AND AT ALL TURNINGS WITH FOUNDATIONS,SUPPLYING AND FIXING GI BARBED WIRES, 10 HORIZONTAL LINES, TWO DIAGONALS BETWEEN POSTS BY MEANS OF GI STAPLES AS PER STANDARD PRACTICE. THE BARBED WIRE SHALL CONFORM TO IS 278 AND BE MADE OF TWO STRANDS OF GALVANISED TWISTED 2.5MM DIA (12.5 GAUGE) STEEL WIRE WITH FOUR POINT BARS. RATE QUOTED SHALL BE INCLUSIVE OF EXCAVATION, DISPOSAL OF SURPLUS EARTH, CONCRETE (1:3:6), FORM WORK AND ALL MATERIALS, COST OF POSTS, BARBED WIRES, TRANSPORTING, FIXING IN POSITION ETC. INCLUDING COST OF ALL LABOUR AND TWO COATS OF ENAMEL PAINT OF APPROVED SHADE WITH A SHOP COAT OF PRIMER IN ALL STRUCTURAL MEMBERS ETC COMPLETE.	400	RM		
6	SUPPLYING & FIXING IN POSITION RCC HUME PIPE OF300 DIA NP2 WHEREVER DRAIN CROSSES THE ROADS INCLUDING ALIGNING,LEVELLING ETC. COMPLETE AS PER THE DIRECTION OF ENGINEER. INCLUDING P.C. & INCLUDING COLLAR JOINTS, ENCASEMENT WITH CONCRETE 1:4:8 , ENCASING SHALL BE PAID EXTRA UNDER RESPECTIVE ITEMS OF CONCRETE..	150	RM		
7	SUPPLY FABRICATION, AND FIXING IN POSITION OF MS GATES WITH STRUCTURAL/TUBULAR STEEL FRAMES WITH GALVANIZED CHAIN LINK MESH OF APPROVED DESIGN INCLUDING COST OF FOUNDATION & POSTS, PAINTING TWO COATS BY SYNTHETIC ENAMEL PAINT OF APPROVED COLOUR AND QUALITY OVER ONE COAT OF RED OXIDE PRIMER, COST OF ALL MATERIALS, LABOUR, TRANSPORT ETC. COMPLETE.POST SHALL AS PER ITEM NO (5) ABOVE.	4	MT		
	TOTAL OF SECTION-A IN FIGURES) Rs.				

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SL. NO	DESCRIPTION	QTY	UNIT	RATE in Rs.	AMOUNT IN Rs.
	EXTERNAL ILLUMINATION OF OPEN STORAGE YARD (100M x 100M & 100M x 250M) AT 1X 250 MW PARAS (SECTION-B)				
1	SUPPLYING AND INSTALLATION& COMMISSIONING OF SODIUM VAPOUR LAMP STREEET LIGHT FITTING 150 WATT SIMILAR TO SSG - 2314 IH OF CROMPTON COMPLETE WITH ONE PICE CANOPY, INTEGRAL CONTROLGEAR COMPRISING COPPER WOUND CHOKE , IGNITOR , HPF CAPACITOR AND SUITABLE FOR DIRECTLY SLIPPING OVER LIGHT MOUNTING BRACKET MADE OUT OF 40 MM OD PIPE AND SUITABLE FOR LAMPS, CONTROL GEAR BOX CABLING & TERMINATION OF ITEMS SUPPLIED .	35	NOS		
2	SUPPLY AND ERECTING STEEL TABULAR SWAGED POLES 9 MTR LONG MADE OF SHEET STEEL HAVING ULTIMATE TENSILE STRENGTH 42 KG F/SQ.MM CONFIRMING TO BIS :2713 (RPART-II) COMPLETE WITH 300X300X6 MM THICK M. S. BASE PLATE FOR WELDING AT SITE AND SIZE AS PER CONFIGURATION GIVEN IN BIS FOR 410 SP-28 (113 KG- POLE WEIGHT) WITH 1.5 MTR. DEEP EXACAVATION ,CONCRETING IN 1:4:8 RATIO SIZE 45 CMS X 45 CMS X 150 CMS AND POLE PLINTH IN 1:3:6 CEMENT CONCRETING HAVING 300 MM HEIGHT AND 300 MM DIA . THE POLE SHALL BE COMPLETE WITH MINOR FABRICATION AS BELOW	35	NOS		
	I) DRILING 20 MM DIA HOLE AT ABOUT 2.5 MTR FROM GROUND LEVEL FOR WIRE LEADS FROM JUNCTION BOX TO LIGHT FIXTURE				
	II) DRILING 15 M DIA HOLES AT ABOUT 0.7 AND AT 2.5 MTR FROOM GROUND LEVEL AND WELDING 12 MM NUTS FOR USING A 12 MM G.I BOLT FOR FASTENING EARTH CONDUCTERS				
	III) WELDING REQUIORED HOLES FOR FIXING POLE CAP OF STREET LIGHT BRACKET				
	IV) WELDING DIAMETRALLY 10 MM M.S. ROUND 30 MM BELOW POLE TOP EDGE FOR CLIPPING WIRE LEADS				
3	Engineering , Supply and installation of lattice type structural Tower of height 15M .Tower shall be fabricated in three section of equal lenght of 5 Meter each.Preparation of fabrication drawing & its approval from BHEL. Brief details are as given below	2	NOS		

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	Tower shall be adequately strong to withstand heavy wind . No stay/guy ropes shall be tied with it. At top of the tower adequate size of platform shall be provided with railing around the platform for mounting of lighting luminaires(tentatively Twelve fitting on each tower) and maintenance purpose , floor of platform shall be covered with chequered plate. A ladder along with protective cage shall be provided along the height of tower. It should be painted with one coat red oxide primer and two coats of aluminium paint after installation. Each Tower shall be provided with power distribution box out door type and should have provision of terminating one number incoming and eight out going cable .Erecting at site including all civil works like excavation, casting of foundation of required size and depth with concrete of grade 1:2:4 with base plates, grouting of lattice structure, One earth pit as per BIS standard is to be made near the tower and earthing of the tower including supply of material etc. complete.				
4	Supply, of flood light luminaires of BAJAJ make Type BGENF 22 OR equivalent in Crompton , Phillips only, Each luminaires shall be with two number 400 watt HPSV lamps and control gear box integral/ non integral type including cables for interconnection . (These fitting shall be mounted on lighting mast /tower , on each tower 8 such fitting shall be mounted)	10	NOS		
5	Supply of Cables 3 -1/2 Core x 70 sqmm Aluminium armoured PVC Insulated Cable (Three and half core) Confirming to IS 1554 (Part - I)	500	Mtrs.		
6	Installation of Cables 3 -1/2 Core x 70 sqmm Aluminium armoured PVC Insulated Cable Confirming to IS 1554 (Part -I) including laying of cable below ground, excavation of trench of 600 mm depth in all kind of soil, termination of cables cores with crimp type lugs, providing sand layer below/ above the cable, brick laying both side /above the above the cable and back filling etc complete. Cables are to be laid from 415 Volt AC Distribution Board to Feeder Pillar board , Feeder Pillar Board to Lighting Mast / Tower.	500	Mtrs.		
7	Supply of Cables 2 Core x 10 sqmm Aluminium armoured PVC Insulated Cable Confirming to IS 1554 (Part -I)	700	Mtrs.		

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SL. NO	DESCRIPTION	QTY	UNIT	RATE in Rs.	AMOUNT IN Rs.
8	Installation of Cables 2 Core x 10 sqmm Aluminium armoured PVC Insulated Cable Confirming to IS 1554 (Part -I) including laying of cable below ground , excavation of trench of 600 mm depth in all kind of soil, termination of cables cores with crimp type luggs, providing sand layer below/ above the cable, brick laying both side /above the above the cable and back filling etc complete. Cables are to be laid from 415 Volt AC Power Feeder Pillar Board Board to Lighting poles & Pole to Pole	600	Mtrs.		
9	Supply of Cables 3 -1/2 Corex 185 sqmm Aluminium armoured PVC Insulated Cable (Three and half core) Confirming to IS 1554 (Part -I)	600	Mtrs.		
10	Installation of Cables 3 -1/2 Corex 185 sqmm Aluminium armoured PVC Insulated Cable Confirming to IS 1554 (Part -I) including laying of cable below ground , excavation of trench of 600 mm depth in all kind of soil, termination of cables cores with crimp type luggs, providing sand layer below/ above the cable, brick laying both side /above the above the cable and back filling etc. Cables are to be laid from Transformer Sub station to 415 Volt AC Distribution Board	600	Mtrs.		
11	Supply of 415 volt AC , 3 phase /four wire Power Distribution Board , Board shall be comprises of one number switch Fuse Unit (ICTPN) 400 Amps tating, 3 Nos FSU (ICTPN) 100 Amps Rating, Energy Meter for power measurement , Phase Indication Lamp, Power Terminals stud type for incoming & outgoing cables termination, provision for earthing the panel enclosure, Panel enclosure shall be made of sheet metal thichnness not less than 1.6 mm and suitable for out door installation, hinged door with locking arrangement ,base frame , should have slopped canopy,Duly painted with first coat with primer then two coats of synthetic enamel paint (interior with white paint and exterior with smoke gray as per IS) internal power distribution to devices shall be with AL bus bar OR copper flexible single core PVC cable of 1.1 KV grade, control wiring with 1.5 sqmm, Suitable stool made out of MS structure of 1.2 meter high for mounting of panel with anchoring arragement at foundation .	2	Mtrs.		
12	Providing suitable foundation for mounting AC Distribution Board as specified in sl. No.11 , Installation & commissioning of panel	2	Mtrs.		

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SL. NO	DESCRIPTION	QTY	UNIT	RATE in Rs.	AMOUNT IN Rs.
13	Supply of 415 volt AC , 3 phase /four wire Power feeder Pillar Board , Board shall be comprises of Three number and one number Aluminium Bus Bar for phase & neutral respectively. bus bar rating shall be 200 Amps and shall be mounted on epoxy insulator of 1.1 KV grade, Each bus bar shall have drilled hole for connecting incoming / out going cables, provision for earthing the panel enclosure. Panel enclosure shall be made of sheet metal thichnness not less than 1.6 mm and suitable for out door installation, hinged door with locking arragement , base frame , should have slopped canopy, Duly painted with first coat with primer and two coats of synthetic enamel paint (interior with white paint and exterior with smoke grey as per IS), Suitable stool made out of MS structure of 1.2 meter high for mounting of panel with anchoring arragement at foundation .	4	Mtrs.		
14	Providing suitable foundation for mounting 415 volt AC Power Feeder Pillar Board as specified in sl. No.13 , Installation & commissioning of of panel	4	Mtrs.		
	TOTAL OF SECTION-B IN FIGURES) Rs.				
	TOTAL OF SECTION A & SECTION-B IN RS				
	REBATE ON TOTAL COST IF ANY IN %				
	NET QUOTED COST ie (TOTAL COST-% REBATE)				
	(NET QUOTED COST IN WORDS RS.....)				