

BILL OF QUANTITIES

The approximate Bill of Quantities is indicated below to give an idea of the work which should be executed in accordance with the approved drawings and specifications to enable the bidder to furnish the lump sum price. Bidders may, however, note that no variations in the lump sum cost is acceptable (except where extra items are ordered by the Engineer).

NAME OF PROJECT :- BISWANATH MUSTARD OIL PVT LTD, ASSAM						
CIVIL ESTIMATE OF CFC AND ADMIN						
SI No.	Item Description	Unit	Qty	Rate in INR		Amount
				In Figure	In words	
(A)	SCHEDULE -1 EARTHWORK IN EXCAVATION					
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.					
	All Kind of Soil	Cum	365			
2	Excavating, supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete.					
	PRE CONSTRUCTION ANTI - TERMITE TREATMENT					
3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor:					
	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration	Sqm	97			

(B)	SCHEDULE - 2 PLAIN CEMENT CONCRETE WORKS					
4.	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
	(1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	cum	65			
(C)	SCHEDULE - 3 REINFORCED CEMENT CONCRETE WORKS					
5.	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-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	cum	97			
6.	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :					
	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	cum	20			
	REINFORCEMENT					
7.	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level and above plinth level					
	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Qtl	119.2			
(D)	SCHEDULE - 4 PLYBOARD SHUTTERING (FORMWORK)					
8.	Centering and shuttering including, strutting, propping, and removal of work for:					

	Foundations, footings, bases for columns	Sqm	295			
9.	Centering and shuttering including strutting, propping etc. and removal of form for					
	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	396			
10.	Columns, piers, abutments, pillars, posts and struts	Sqm	28			
(E)	SCHEDULE - 5 BRICKWORK					
11.	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in:					
	(II) In superstructure above plinth level up to 1st floor level.					
6.2.1	(Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum	65			
12.	112 mm thick reinforced brick wall in prop 1:5 reinforced with two lines of M.S rod/ Tor steel as specified embedded in 38 mm thick concrete course in prop.1:2:4 with coarse agg. 12mm down at every fourth courses embedded with protruding rod in column including curing etc.complete as directed (M.S rod/Tor steel shall be measured and paid separately) in super structure above plinth up to 1st floor level.	Sqm	27			
(F)	SCHEDULE-6 CEMENT CONCRETE FLOORING					
13.	Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.					
	For Grading II Material	Sqm	64			
	(d) Extra lead beyond initial lead of 5.00km	cum/km				
14.	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete.	cum	64			
	Extra lead beyond initial lead of 5.00km	cum/km				

15.	Providing and fixing pre-moulded joint filler in expansion joints of RCC roads / CC pavements after making the joints dust free with high pressure air jet cleaners, all complete as per direction of the Engineer-in-Charge. (Pre-moulded joint fillers shall be made of bitumen hot sealing compound impregnated fibre board having impregnation more than 35%, conforming to IS:1838 for fibre board and IS: 1834 for hot sealing bitumen compound grade A.)	RMT	30			
16.	Providing and filling in position rubberized bitumen hot sealing compound for sealing of expansion joints in roads / pavements all complete as per direction of the Engineer-in-Charge.	RMT	100			
	Using grade 'A' sealing compound conforming to IS: 1834.					
(G)	SCHEDULE-7 PLASTERING AND PAINTING					
17.	12 mm thick Cement plaster of mix.					
	1:4 (1 cement: 4 fine sand)	Sqm	442			
18.	15 mm cement plaster on rough side of single or half brick wall of mix:					
	A) On rough side					
	1:4 (1 cement: 4 coarse sand)	Sqm	R.O			
	B) On fair side					
	1:4 (1 cement: 4 coarse sand)	Sqm	279			
19.	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.	Sqm	721			
20.	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. (two coats)	Sqm	721			
21.	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works	Sqm	27			

22.	Applying primary coat over new steel and other metal surface upto 100m in width or girth after preparing the surface by thoroughly cleaning oil,grease, dirt and other foreign matter and scoured with wire brushes, fine steels, wood scrapers and sand paper.					
	a). With ready mixed "red-lead/ red oxide" primer.	Rm	100			
23.	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution	Sqm	100			
24.	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	Sqm	51			
(H)	SCHEDULE-8 STEEL WORKS					
25.	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Qtl	76.61			
26.	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Qtl	114.92			

27.	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin-In- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.					
	(e) 0.50 mm thick	Sqm	810			
28.	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :					
	(a) 0.5 mm thick					
	Ridges plain (500 - 600mm)	RM	110			
29.	Providing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.					
	1.00 mm thick with zinc coating not less than 275 gm/m ²	Sqm	60			
	FLOORING					
	TILES WORKS					

	CERAMIC TILES					
B)	ON WALLS					
30.	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete	Sq.m	32			
(A)	CERAMIC					
31.	Crazy ceramic tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 coarse sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6 mm , mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kg per 50 kg of cement, all complete as per direction of Engineer-in-charge.	Sq.m	4			
A)	ON FLOOR					
32.	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades,laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.					
	Size of Tile 500x500 mm	Sq.m	33			
	KOTA STONE SLAB / SAND STONE FLOORING					

33.	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :					
	25 mm thick	Sq.m	10			
(I)	SCHEDULE-9 FALSE CEILING					
	GYPHUM CEILING					
34.	Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595mm of approved texture, design and patterns as per CPWD Specification 2019, to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mmthick (galvanized @ 120 grams per sqm including both sides)comprising of main-T runners of size 24x38 mm of length 3000 mm,cross - T of size 24x32 mm of length 1200 mm and secondaryintermediate cross-T of size 24x32 mm of length 600mm to formgrid module of size 600 x 600 mm, suspended from ceiling usinggalvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 12x50 mm long dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 76x25x25x1.6 mm fixed with grid and Z cleat of size 25x37x25x1.6mm thick with precut hole on both 25mm flange to pierce into 12x50mm or even bigger size dash fastener if require, fixed with Glavanised iron perimeter wall angle or size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450mm center to center and 40 mm long dry wall S.S screws. The workshall be carried out as per specifications, drawing and as per directions of the Engineer-inCharge.					
	With 15 mm thick Tegular edged light weight calcium slicate false ceiling tiles	Sq.m	15			
(J)	SCHEDULE-10 DOORS & WINDOW					

35.	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge. (Note:- Butt hinges and necessary screws shall be paid separately)					
	Second class teak wood					
	35 mm thick shutters	Sq.m.	11			
36.	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).					
	Sal wood	Cum	0.34			
37.	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge .					
	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	Sqm	1			
38.	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge .					
	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	Sqm	44			

39.	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters. 80x1.25 mm M.S. laths with 1.25 mm thick top cover	Sq.m.	44			
ALUMINIUM FITTINGS						
40.	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :					
	250mm x 16mm	Each	10			
41.	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete					
	250mm x 10mm	Each	5			
42.	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :					
	125 mm	Each	5			
43.	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:					
	100x75x4 mm	Each	10			
(J)	SCHEDULE-11 WATERPROOFING					

44.	<p>Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer, 3 mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufactured of density at 25°C, 0.87 - 0.89 kg/litre and viscosity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/5 cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane : 3 mm thick</p>	Sqm	49			
-----	---	-----	----	--	--	--

NAME OF PROJECT :- BISWANATH MUSTARD OIL PVT LTD, ASSAM

CIVIL ESTIMATE - BOUNDARY WALL

	Item Description	Unit	Qty	Rate in INR		Amount
				In Figure	In words	
(A)	Barbed Wire Fencing					
1	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used.					
	With G.I. barbed wire	RM	2400			
(B)	Iron Angle Posts					
2	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.(75x5x5)	Kg	3200			
(C)	Excavation of works					
3.	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in-Charge					
	All Kinda of Soil	cum	64.80			
4.	Providing and laying in position cement concrete of specified grade excluding the cost of cantering and shuttering - All work up to plinth level :					
	In prop 1cement: 4 sand :8 coarse aggregate by volume	cum	18.00			

NAME OF PROJECT :- BISWANATH MUSTARD OIL PVT LTD, ASSAM						
CIVIL ESTIMATE - STORM WATER DRAIN						
SI No.	Item Description	Unit	Qty	Rate in INR		Amount
				In Figure	In words	
(A)	SCHEDULE -1 EARTHWORK IN EXCAVATION					
1.	Earthwork in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified. Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.					
	All Kinda of Soil	Cum	119.00	286.85		
(B)	SCHEDULE - 2 PLAIN CEMENT CONCRETE WORKS					
2.	Providing and laying in position cement concrete of specified grade excluding the cost of cantering and shuttering - All work up to plinth level :					
	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	cum	20.00	6326.05		
(D)	SCHEDULE - 4 PLYBOARD SHUTTERING (FORMWORK)					
3.	Centering and shuttering including, strutting, propping, and removal of work for:					
4.3.1	Foundations, footings, bases for columns	Sqm	48.00	307.95		
(E)	SCHEDULE - 5 BRICKWORK					

4.	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in:					
	Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum	28.00	5746.8		
(F)	SCHEDULE-7 PLASTERING AND PAINTING					
5.	15 mm cement plaster on the rough side of single or half brick wall of mix :					
	1:4 (1 cement: 4 fine sand)	Sqm	144.00	339.7		

NAME OF PROJECT :- BISWANATH MUSTARD OIL PVT LTD, ASSAM						
CIVIL ESTIMATE - INTERNAL ROAD						
SI No.	Item Description	Unit	Qty	Rate in INR		Amount
				In Figure	In words	
(A)	SCHEDULE -1 EARTHWORK IN EXCAVATION					
1.	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.					
	All Kind of Soil	Cum	25.00	286.85		
(B)	SCHEDULE - 2 PLAIN CEMENT CONCRETE WORKS					
2.	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	cum	8.00	6326.05		
(C)	SCHEDULE-3 PAVEMENT					

3.	Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.					
	(b)Using Grading II material	cum	15.00	1467.5		
4.	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	cum	24.00	2161.2		
5.	Interlocking concrete Block pavement with edge block (i) Providing and laying interlocking concrete pavement block (M40) having thickness 80 mm as per technical specification clause 1504 (including edge) Block/Edge restraints) all works complete	Sq.m	600	1027.5		

NAME OF PROJECT :- BISWANATH MUSTARD OIL PVT LTD, ASSAM						
Name of Work : Plumbing services estimate						
SI No.	Description	Unit	Qty	Rate in INR		Amount
				In Figure	In words	
1	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :					
	All kinds of soil : Pipes, cables etc. exceeding 80 mm dia. But not exceeding 300 mm dia	Metre	30			

2	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :					
	150 mm dia. R.C.C. pipe	Metre	30			
3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.					
	External work					
	15 mm nominal dia Pipes	Metre	30			
	20 mm nominal dia Pipes	Metre	30			
	25mm nominal dia Pipes	Metre	15			
	32mm nominal dia Pipes	Metre	10			
4	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.					
	Concealed work including cutting chases and making good the walls etc.					
	15 mm nominal dia Pipes	Metre	15			
	20mm nominal bore	Metre	10			
	25mm nominal bore	Metre	7			
	32mm nominal bore	Metre	5			

5	<p>Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :</p>					
	<p>With common burnt clay F.P.S.(non modular) bricks of class designation 7.5</p>	each	2			
6	<p>Constructing brick masonry manhole in cement mortar 1:4 (1cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :</p>					
	<p>Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :</p>					

	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	2			
7	Extra for depth for manholes :					
	Size 90x80 cm					
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	2			
8	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by Municipal Board complete with bolts, nuts, rubber insertions etc. (The tail pieces if required will be paid separately)					
	80 mm dia nominal bore	Each	2			
	SANITARY INSTALLATIONS					
9	Providing and fixing water closet squatting pan (Indian type W.C.pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:					
	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	2			
10	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :					
	W.C. pan with ISI marked white solid plastic seat and lid	each	1			
11	URINAL					

	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :					
	One urinal basin with 5 litre white P.V.C. automatic flushing cistern	each	1			
	Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern	Each	1			
12	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete, including painting of fittings and cutting and making good the walls and floors etc. wherever required :					
	Single squatting plate with 5 litre P.V.C. automatic flushing cistern	Each	2			
	WASH BASIN					
13	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:					
	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	Each	2			
14	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings. each	Each	2			

15	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	each	2			
	PTMT Soap Dish/Holder 138x102x75 mm each	each	2			
16	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	each	2			
	PTMT Liquid Soap Container of 400 ml capacity	each	2			
17	TOWEL RAIL,TOWEL RACK & TOWEL RING					
	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	each	4			
	PTMT - Towel Ring 215x200x37 mm	each	2			
	PTMT - Towel Rail (450 mm long)	each	2			
	PTMT - Towel Rail (600 mm long) each	each	2			
18	TOILET PAPER HOLDER					
	Providing and fixing toilet paper holder :					
	C.P. brass	each	2			
	C.P. brass toilet paper holder of standard size	each	2			
19	BOTTLE TRAP					
	Providing and fixing PTMT Bottle Trap for Wash basin and sink.					
	Bottle trap 31mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms	each	6			
	100 mm S.C.I. trap with 100 mm inlet and 100 mm outlet	each	4			
	MIRROR					

20	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :					
	Circular shape 450 mm dia	each	2			
21	TUBE WELL					
	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge, upto 90 metre depth below ground level.					
	All types of soil : 300 mm dia	metre	30			
	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed/plain ended casing pipes of required dia, conforming to IS: 4270, of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge.					
	200 mm nominal size dia having minimum wall thickness 5.40 mm	metre	30			
22	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for borewell of:					
	200 mm dia	each	2			
23	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.					
	15 mm nominal bore	each	4			

24	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.					
	15mm dia, nominal bore	each	2			
25	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :					
	150 mm diameter metre	Metre	30			
26	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :					
	With common burnt clay F .P .S. (non modular) bricks of class designation 7.5	Each	4			
27	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	litre	3000			
28	SOAK PIT AND INSPECTION CHAMBER					
	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design:					

	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	2			
	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.					
29	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	2			
30	Supplying, fitting and fixing PVC pipes of 6 Kg/cm ² (Supreme/Prince) or other ISI approved including joining ,fitting and fixing wiyh clamps etc.as necessary complete at all levels including below G.L as directed and specified.					
	a) In exposed surfaces or in trenches.					
	(i) 160mm dia.	each	5			
	(ii) 110mm dia.	each	5			
31	Supplying, fitting and fixing 87.5 degree PVC bend of (Supreme/Prince) or other ISI approved including joining ,fitting and fixing etc.as necessary complete at all levels including below G.L as directed and specified.					
	a) In exposed surfaces or in trenches.					
	(i) 160mm	each	2			
	(ii) 110mm dia.	each	5			
32	Supplying fitting and fixing 45degree PVC bend of (Supreme/Prince) or other ISI approved including joining , fitting and fixing etc. as necessary complete at all levels including below G.L. as directed and specified.					
	a) In exposed surfaces or in trenches.					
	(i) 160mm dia	each	2			
	(ii) 110mm dia.	each	2			
33	Supplying fitting and fixing PVC Plain single tee of (Supreme/ Prince) or other ISI approved including joining, fitting and fixing etc. as necessary complete at all levels including below G.L. as directed and specified.					
	a) In exposed surfaces or in trenches.					
	(i) 160mm dia	each	2			

	(ii) 110mm dia.	each	2			
34	Supplying fitting and fixing PVC coupler of (Supreme / Prince) or other ISI approved including joining, fitting and fixing etc. as necessary complete at all levels including below G.L. as directed and specified.					
	a) In exposed surfaces or in trenches.					
	(i) 110 mm dia	each	2			
	(iii) 75 mm dia	each	2			
35	Supplying fitting and fixing PVC reducer of (Supreme/Prince) or other ISI approved including joining, fitting and fixing etc. as necessary complete at all levels including below G.L. as directed and specified.					
	a) In exposed surfaces or in trenches.					
	(i) 160mm x 110 mm	each	2			
	(iii) 110 mm x 90 mm	each	2			

NAME OF PROJECT :- BISWANATH MUSTARD OIL PVT LTD, ASSAM						
Estimate- Internal Electrical						
Note:-All item's rates are as per E&M DSR 2022						
SI No.	Description	Unit	Quantity	Rate in INR		Amount
				In Figure	In words	
1.	WIRING IN PVC CONDUIT					
	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.					
	Group A	Point	25			
	Group B	Point	10			
	Group C	Point	10			

2	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	Point	10			
3	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Meter	180			
4	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Meter	180			
5	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.					
	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Meter	200			
	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Meter	200			
	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Meter	150			
	2 X 10 sq. mm +1 X6 Sq. mm earth	Meter	150			
6	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. 20 mm					
	25 mm	Meter	100			
7	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					
	5/6 A switch	Each	40			
	2 way 5/6 A switch	Each	40			
	15/16 A switch	Each	35			
	3 pin 5/6 A socket outlet	Each	10			

	6 pin 15/16 A socket outlet	Each	5			
	Telephone socket outlet	Each	2			
8	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	4			
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	6			
10	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc. as required.					
	1 or 2 Module (75mmX75mm)	Each	4			
	3 Module (100mmX75mm)	Each	4			
	4 Module (125mmX75mm)	Each	4			
	6 Module (200mmX75mm)	Each	4			
	8 Module (125mmX125mm)	Each	4			
	12 Module (200mmX150mm)	Each	4			
	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.					
	1 or 2 Module	Each	10			
	3 Module	Each	10			
	4 Module	Each	2			
	6 Module	Each	2			
	8 Module	Each	2			
	12 Module	Each	2			
11	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	Each	6			
12	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Each	6			

INSTALLATION OF FIXTURES & FANS						
13	Installation ,Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing up to two GLS/CFL/LED lamps per fitting, complete with all accessories including connections etc. as required.	Each	60			
14	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	Each	30			
15	Providing and fixing plain 16/0.20mm (0.50sqmm) twin flat flexible, FRLS PVC insulated, copper conductor cable, in PVC sleeve of suitable size on the floor/ wall, or side of the table/ door etc. as required.	Meter	300			
16	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (up to 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	Each	6			
17	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.					
	20mm dia	Meter	500.00			
	25mm dia	Meter	400.00			
	32mm dia	Meter	200.00			
MODULAR BOXES & SWITCH/SOCKETS						
18	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	Each	10			
CHAPTER-2-MCCB, MCB & DB'S						

19	Providing and fixing following rating and breaking capacity and pole MCCB with THERMOMAGNETIC RELEASE AND TERMINAL spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.					
	125 A,36KA,FPMCCB	Each	2			
20	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required but without MCB/RCCB/Isolator)					
	4 way (4 + 12), Double door	Each	2			
	8 way (4 + 24), Double door	Each	2			
21	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)					
	4 way (4 + 12), Double door	Each	2			
	8 way (4 + 24), Double door	Each	2			
	12 way (4 + 36), Double door	Each	2			
22	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
	Single pole	Each	150			
	Double pole	Each	10			
	Triple pole	Each	10			

23	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	50			
24	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 Ma in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
	40 A	Each	20			
	63 A	Each	10			
25	Supplying and fixing Cable End Box (Loose Wire Box) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 Volts, on surface/ recess, complete with testing and commissioning etc.as required.					
	For 4 way, Double door TPN MCBDB	Each	2			
	For 6 way, Double door TPN MCBDB	Each	2			
	For 12 way, Double door TPN MCBDB	Each	2			
26	Supplying and fixing Cable End Box (Loose Wire Box) suitable for triple pole and neutral, sheet steel, Vertical MCB distribution board, 415 Volts, on surface/ recess, complete with testing and commissioning etc. as required.	Each	2			
27	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	Each	4			
28	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Each	4			
29	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	Metre	150			

30	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	Metre	150			
31	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Metre	150			
32	Providing and fixing 4mm dia. copper wire on surface or in recess for loop earthing as required.	Metre	150			
NON-SCHEDULE ITEM						
1	30 Watts - Panel Light Supply and fixing of 30 W LED Square Type Recessed Fitting with LED Fitting complete with electronic deiver with PVC Unsheathed copper leads from terminals to the fitting and as directed by Engineer incharge	Each	40			
2	Supply and fixing of 12 W LED round Type Recessed Fitting with LED Fitting complete with electronic deiver with PVC Unsheathed copper leads from terminals to the fitting and as directed by Engineer incharge	Each	10			
3	Supply and fixing of LED Tube Light with batten suitable for up to 1 X 22 watt LED tube light fitting including tube on Surface complete in all respect.cat-AA	Each	10			
4	supply and erection of AC 1400mm Sweep 230/250 Volts, 50 Hz ceilling fan with regulator standar down rod, blades including conection etc. complete as required.	Each	10			
5	Exhaust Fan Supply of AC 230/250 volts 50 HZ exhaust fans including providing bolts, mounting frame and cther accessories etc. complete as per the engineer incharge.	Each	2			
6	MAIN PANEL					

MR	Design, manufacture, supply, installation, testing and commissioning of Main Panel (outdoor type) fabricated out of 14 SWG CRCA sheet steel, IP52, wall / floor mounting type. The sheet steel shall undergo minimum 9 tank treatment followed by finishing powder coating of min 60 micron thickness. the board includes 415 V electrolytic Aluminium Bus Bar, removable gland plates, cable glands, including connection with outgoing feeders complete in all respect.					
	12 Nos. outgoing feeders shall be provided with energy analyser / electronic dual reading KWHR meter with RS 485 communication port, CT's with accuracy class 1.					
	The incoming MCCB shall be microprocessor based with inbuilt O/L & S/C release with E/F protection and all Outgoings MCCB's shall be thermal-magnetic based with inbuilt O/L & S/C release.					
	The MCCB's shall be Ics = 100% Icu, with rotary handle & pad locking arrangement, with adjustable O/L & adjustable S/C trip setting as per load requirement. TP MCCB shall be with solid isolable neutral link. The breaking capacity specified is Ics value.					
	The above board shall be complete with 3 nos. phase indicating lights, flush mounted Ammeter, Voltmeter, CT's, PT's, selector switches, protective fuses etc. at Incomer with all inter connections by min. 2.5 sq.mm. Copper wires.					
	INCOMER : 250 AMP FP MCCB (25 KA)					
	BUS BAR : 250 AMP, 500 Volts, 3 phase 50 HZ TPN high conductivity electrolytic Aluminium bus bar of suitable length, insulated by heat shrinkable sleeves. The current density of bus bar shall be minimum 1.00 sq mm / amp.					

	The Maximum allowable temperature for the Bus bar to be restricted to 85 deg C. The temperature rise should be restricted to 35 deg C above ambient temperature.					
	OUT GOINGS :					
	12 Nos. 40, FP MCB, 10kA with ON/OFF indicating lamps.					
	4 Nos. 16A, DP MCB, 10kA with ON/OFF indicating lamps.	SET	1			

NAME OF PROJECT :- BISWANATH MUSTARD OIL PVT LTD, ASSAM

BOQ FOR EXTERNAL LIGHTING

NON SCHEDULE ITEMS

SI No.	DESCRIPTION OF ITEMS	UNIT	QTY.	Rate in INR		Amount
				In Figure	In words	
1	SUB LT PANEL					
	Supplying, installation, testing & commissioning of cubical type LT panel suitable for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system having fabricated in compartmentalized design from CRCA sheet steel of 2 mm thick for frame work and covers, 3 mm thick for gland, plates i/c cleaning & finishing complete with 7 tank process for powder coating in approved shade, having suitable Amp capacity extensible type TPN aluminium alloy bus bars of light conductivity, DMC / SMC bus bars of high conductivity, DMC/ SMC bus bar supports, with short circuit withstand capacity of 31 MVA for 1 Sec., bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick, fabrication shall be done in transportable sections, entire panel shall have a common Aluminium/GI earth bar of size 25 mm x 5 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring with sq. mm. PVC insulated copper conductor S/C cable, cable alleys, cable gland plates in two half, i/c providing following switch gears :-					
A).	INCOMING SUPPLY :					
	1 No. 63 A, 4P (100% Neutral) MCCB (36 kA) with Microprocessor based O/L, S/C and E/F releases.					
B)	METERING & INDICATING LIGHTS					
	1 Nos MFM Meters					
	1 Set of 100/5A, CL-1, 15VA CTs for measuring.					
	Sets of phase indicating ,ON/OFF,TRIP Indicating lamps with 2A control MCBs.					
C)	BUSBAR:					
	Electrolytic high conductivity TPN (100% Neutral) Aluminium busbars rated at 200 amps (25 kA) with heat shrinkable PVC sleeves.					

D)	OUTGOING FEEDER:					
li	2Nos.32 A TPN MCB with Timer for LANDSCAPING & EXT. POLE LIGHTS .					
lii	2Nos.32 A TPN MCB with Timer for LANDSCAPING & EXT. POLE LIGHTS .					
lv		Set	1			
2	CABLING WORK (SUPPLY)					
i).	Supply of following size of XLPE / PVC insulated,PVC Sheathed, Aluminium Conductor armoured power cable of 1.1kV grade etc. as required.					
d)	4C x 6sq.mm 1.1kV Al. Cable	MTR	75			
3A	LAYING OF CABLES :					
3B	Laying of one numberXLPE / PVC insulated, PVC sheathed Aluminium Conductor Armoured power cable of 1.1kV grade of following sizes in ground including excavation and backfilling and identified at regular intervals as required.					
d)	4C x 6sq.mm 1.1kV Al. Cable	MTR	75			
4	LT CABLE TERMINATION					
	End termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.					
d)	4C x 6sq.mm 1.1kV Al. Cable	Nos	5			
5	STREET LIGHT 4 CORNER					
	Supply and fixing of LED Street light Fitting having die cast aluminium body and diffuser with driver set suitable for 30Watt. to 40 Watt. Confirming to IP 65 and above protection complete in all respect. CAT-AA	nos.	4			
6	EARTHING SYSTEM					
lii	Supplying and installation of following sizes of earth strip & wires by using spacer clamp for main earth flat,suitable clamping with M.S / Cu. flats for earthwires etc.,including terminal crimping type sockets,bolts & washers, etc required for the complete job.					

D	Providing and fixing 6 SWG GI wire on surface are in recases for loop earthing long with existing conduit / cable as required	MTR	150			
---	---	-----	-----	--	--	--

NAME OF PROJECT :- BISWANATH MUSTARD OIL PVT LTD, ASSAM						
FIRE FIGHTING LAYOUT						
SI No.	Description of item	UNIT	QTY.	Rate in INR		Amount
				In Figure	In words	
1	FIRE EXTINGUISHER					
2	Supply, Installation, Fixing of ABC stored Pressure Fire Extinguisher with built – In Pressure Gauge to know the Ready ness of the Extinguisher Squeeze Grip Handle as per IS:13849 with ISI mark. (5 kg capacity) BRAND : FIRESTOP / FIREEND / FIRE SHIELD	each	5			

NAME OF PROJECT :- BISWANATH MUSTARD OIL PVT LTD, ASSAM						
WEIGH BRIDGE						
SI No.	Description of item	UNIT	QTY.	Rate in INR		Amount
				In Figure	In words	
1	Designing, supplying, installing and commissioning of weighing bridge with Pre-Fabricated Cabin as per the following details and technical specification. Detailed design calculations showing the engineering design details to prove the capability of the 60 Ton Weighing Bridge to achieve the 60 Ton intended capacity. The Job shall also include to Civil works, Zero level flooring, Ramps for both side of weighing bridge, earthing & electrical works, pre-fabricated cabin etc. The quoted rate shall also include all guarantees/warrantees for the all parts, works, training of client technicians, supplying and operation manuals etc. The rate shall include all duties, transportation charges, labour and handling charges etc. but excluding GST & installation and commissioning to be done as per the direction of Engineer-in charge.	No.	1			

Note:

1. *Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities (refer :ITB Clause 14.2 and GCC Clause 41.3)*
2. *Unit rates and prices shall be quoted by the bidder in Indian Rupees [ITB Clause 14.1 and ITB Clause 15.1]*
3. *Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern as explained in [ITB Clause 36.1]. [Note: delete this point if the e-procurement system automatically calculates the total from the unit rate and quantity]*
4. *Where there is a discrepancy between the rate in figures and words, the rates in words will govern.[ITB Clause 36.1] [Note: delete this point if the e-procurement system automatically populates the amount in words from the amount in figures]*
5. *A provisional sum (Fixed Amount) for the unknown items of resettlement of existing temporary market sheds is provided which will be operated at the instruction of Engineer-in-Charge. The Bidders shall quote the same amount as appeared in the last row of BOQ Schedule in their own BOQ Schedule submitted in Financial Bids. As the amount is fixed for all the bidders, the amount shall not be calculated in deciding the financial proposals of the bidders.*

We agree to execute the works in accordance with the approved drawings and technical specifications at a total fixed contract price quoted by us in the Letter of Bid

Signature of Contractor