

**Estimate for Land Development and the Construction of  
Underground Reservoir, Security Room, Drain & Parking Area,  
Deep Tube Well and Main Gate for the Center of Perishable  
Cargo at Bagdogra Airport, Bagdogra**

**ABSTRACT OF COSTS**

Sl. No.	Item Description	Amount in Rs.
1.	Estimate for Land Development	20,81,190.00
2.	Estimate of Underground Reservoir	27,40,089.00
3.	Estimate of Security Room	1,68,753.00
4.	Estimate of Drains / Parking Area	11,05,319.00
5.	Estimate of Deep Tube well	2,55,665.00
6.	Estimate of Main Gate	1,06,368.00
<b>TOTAL =</b>		<b>64,57,384.00</b>

(Rupees Sixty Four Lac Fifty Seven Thousand Three Hundred and Eighty Four  
Only)

## ESTIMATE FOR LAND DEVELOPMENT

<b>Sl.</b>	<b>Item Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
1	Earthwork in road embankment in ordinary soil to correct profile as per designed formation level with earth obtained from land owned or arranged by the contractor depositing in layers of 250 mm. Thickness including breaking clods, dressing and compacting by power roller (not at OMC) etc. Complete as per specification drawing and direction of Engineer-in-Charge) .With carried earth arranged by the contractor with in a radius exceeding 4 Km but not exceeding 5 Km including cost of carried earth.	10380	M <sup>3</sup>	200.50	20,81,190.00
	<b>Total Rs.</b>				<b>20,81,190.00</b>

**(Rupees Twenty Lac Eighty one Thousand One Hundred Ninety Only)**

**ESTIMATE FOR CIVIL WORKS OF UNDERGROUND RESERVOIR  
(450 K.L. CAPACITY) WITH FIRE HYDRANT**

Sl. No.	Item Description	Qty	Unit	Rate	Amount
1.	Earthwork in excavation of foundation trenches or drains in all sorts of soil including removing spreading of stacking the spoils within a lead of 75 m as directed including trimming the sides of trenches, leveling dressing and ramming the bottom, bailing out water etc. as required complete. a) Depth of excavation not exceeding 1.50 m b) Depth of excavation beyond 1.50 mm and up to 3.00 m.	388.5	M <sup>3</sup>	41.87	16,266.49
		388.5	M <sup>3</sup>	77.42	30,077.67
2.	Earth work in filling in foundation trenches or plinth with good earth. In layers not exceeding 150 mm. Including watering and ramming etc. layer by layer complete. a) With earth obtained from excavation of foundation trenches.	200.0	M <sup>3</sup>	26.00	5,200.00
3.	Hire and labor charges for shoring work (including necessary close plank walling, framing, salbulla pilling, strutting etc.) complete as per direction of the Engineer-in-Charge for foundation excavation. (vertical surface area in contact with supported earth is to be measured). This item should be executed on specific direction of the Engineer-in-Charge.) a) Depth up to 1.5m. b) For additional depth beyond 1.5 m. and up to 3.00m. c) Additional Depth beyond 3.0 m	97.5	M <sup>2</sup>	75.00	7,312.50
		97.5	M <sup>2</sup>	110.00	10,725.00
		52.0	M <sup>2</sup>	145.00	7,540.00
4.	Single brick flat soling of picked, jhama bricks including ramming and dressing bed to proper level and filling joints with powdered earth or local sand.	222.0	M <sup>2</sup>	149.8	33,256.00

**NOTE:** 577 M<sup>3</sup> Excavated earth will be utilized in the land development work and the same quantity will be deducted from the volume of land development.

5.	Supplying laying Polythene Sheet (150gm / sqm.) below flooring or in foundation etc.	222.0	M <sup>2</sup>	9.00	1,998.00
6.	Cement concrete with 30mm down graded shingles excluding shuttering in ground floor a) 6 : 3 : 1 proportion	30	M <sup>3</sup>	2454.30	73,629.00
7.	Controlled cement concrete grade M25 mix with well graded stone chips (20mm grade), excluding shuttering and reinforcement with complete design of concrete mix as per I.S.I, codes and relevant special publication, submission of job mix formula after preliminary mix design after testing of concrete cube as per direction of the Engineer-in-Charge. Consumption of cement will not be less than 6 bags/ kg of cement per cum of controlled concrete but will be determined on the basis of preliminary test & job mix formula. In ground floor & foundation. a) N.B. variety (stone metal) b) With local hard black stone variety chips (crusher broken)	217.41	M <sup>3</sup>	3750.30	8,15,352.72
8.	Hire and labor charges for shuttering with centering and necessary staging up to 4 m. using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs. Beams, columns, lintels curved or straight including fitting, fixing and striking out after completion of works (up to roof of ground floor) c) Steel shuttering or 9 to 12 mm thick approved quality ply board in any concrete work	624.22	M <sup>2</sup>	198.00	1,23,595.56
9.	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, looking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction. a) For works in foundation basement and up to roof of ground floor / up to 4 m.	27.00	M.T.	44280.00	11,95,560.00

10.	Supplying and mixing water proofing and plasticizing admixture @ 0.2% weight of cement (or at manufacture's specified rate) in R.C.C. works ( payment on volume)	180.47	M <sup>3</sup>	120.00	21,656.40
11.	Applying bonding agent with synthetic multi functional rubber emulsion having adhesive and water proofing properties by mixing with water in proportion (1 bonding agent : 4 water : 6 cement) (100 gm/m <sup>2</sup> )	1028.40	M <sup>2</sup>	48.00	49,363.20
12.	Polymer concrete made with water resistant bonding agent of synthetic rubber emulsion as per manufacturer's specification.(Payment on volume of concrete)	25.70	M <sup>3</sup>	4840.00	1,24,388.00
13.	Plaster (to wall floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and making out joints or roughening of concrete surface, including throttling, nosing and drip course where necessary with 4:1 cement mortar. b) 15 mm thick plaster	1028.40	M <sup>2</sup>	78.30	80,523.72
14.	Neat cement punning about 1.5mm. thick in wall, dado, window, silts, floor, drain etc.	1028.40	M <sup>2</sup>	20.25	20,825.10
15.	Supplying, fitting and fixing in position G.I pipes of TATA make for underground works with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbow, nipple, short piece etc. including cost of all materials, jointing materials, cutting pipes, making threads, cutting trenches upto 1.5 m below surface in all sorts of soil and refilling the same as directed with two coats of painting on G.I. pipes and specials with bituminous paint complete in all respect. (Payment will be made on the center line measurement of total pipe line including all specials no separate payment will be made for accessories specially) ii) 80mm dia medium quality.	200.00	MT	614.10	1,22,820.00
<b>Total Rs. Say Rs.</b>					<b>27,40,089.36 27,40,089.00</b>

**(Rupees Twenty Seven Lac Forty Thousand Eighty Nine Only)**

**ESTIMATE FOR CIVIL WORKS OF SECURITY ROOM**

Sl. No.	Item Description	Qty	Unit	Rate	Amount
1.	Earthwork in excavation of foundation trenches or drains in all sorts of soil including removing spreading of stacking the spoils within a lead of 75 m as directed including trimming the sides of trenches, leveling dressing and ramming the bottom, bailing out water etc. as required complete. a) Depth of excavation not exceeding 1.50 m	22.00	M <sup>3</sup>	41.87	921.00
2.	Earth work in filling in foundation trenches or plinth with good earth. In layers not exceeding 150 mm. Including watering and ramming etc. layer by layer complete. a) With earth obtained from excavation of foundation trenches.	7.00	M <sup>3</sup>	26.00	182.00
3.	Filling in foundation or plinth by silver sand in layers not exceeding 150 mm as directed and consolidating same by thorough saturation with water ramming complete.	3.00	M <sup>3</sup>	224.76	674.00
4.	Hire and labor charges for shoring work (including necessary close plank walling, framing, salbulla piling, strutting etc.) complete as per direction of the Engineer-in-Charge for foundation excavation. (vertical surface area in contact with supported earth is to be measured). This item should be executed on specific direction of the Engineer-in-Charge.) a) Depth up to 1.5m.	22.00	M <sup>2</sup>	75.00	1,650.00
5.	Single brick flat soling of picked, jhama bricks including ramming and dressing bed to proper level and filling joints with powdered earth or local sand.	20.00	M <sup>2</sup>	149.80	2,996.00
6.	Cement concrete with 30mm down graded shingles excluding shuttering in ground floor a) 6 : 3 : 1 proportion	2.00	M <sup>3</sup>	2454.30	4,909.00

7.	Ordinary cement concrete (mix 3: 1.5 : 1) M –				
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	20 with graded stone chips ( 20 mm down) excluding shuttering and reinforcement, if any, in ground floor as per IS 456 – 2000. b) River bazree	8.00	M <sup>3</sup>	3553.20	28,426.00
8.	Hire and labor charges for shuttering with centering and necessary staging up to 4 m. using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs. Beams, columns, lintels curved or straight including fitting, fixing and striking out after completion of works (up to roof of ground floor) c) Steel shuttering or 9 to 12 mm thick approved quality ply board in any concrete work	55.00	M <sup>2</sup>	217.80	11,989.00
9.	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, looking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every inter-section, complete as per drawing and direction. a) For works in foundation basement and up to roof of ground floor / up to 4 m.	1.00	M.T.	44,280.00	44,280.00
10.	Supplying, fitting and fixing 20 mm to 25 mm thick kota stone in wall, dado in cement mortar (1:3) including making suitable arrangement to hold the stone properly by brass / copper hooks including pointing in cement mortar (1:2) (1 cement : 2 stone dust) with admixture of pigments matching the stone shade. Including grinding and polishing all complete as per direction of Engineer in charge including cost of materials, labour, scaffolding, staging, curing complete.	10.00	M <sup>2</sup>	1,071.40	10,714.00
11.	Brick work with 1st class bricks in cement mortar (4:1) a) In foundation and plinth.	3.50	M <sup>3</sup>	3105.20	10,868.00
12.	125mm thick brick work with 1st class bricks in cement mortar (4:1) in ground floor.	36.00	M <sup>2</sup>	362.60	13,054.00
13.	Plaster (to wall floor, ceiling etc.) with sand				

	and cement mortar including rounding off or chamfering corners as directed and making out joints or roughening of concrete surface, including throating, nosing and drip course where necessary ii) with 4:1 cement mortar. a)20mm thick plaster b)15mm thick plaster c)10mm thick plaster	50.00 15.00 10.00	M <sup>2</sup> M <sup>2</sup> M <sup>2</sup>	97.20 78.30 72.90	4,860.00 1,174.00 729.00
14.	Priming one coat on timber, plastered or on steel or other metal surface with synthetic enamel/oil bound primer of approved quality including smoothening surface by sand papering etc.	15.00	M <sup>2</sup>	20.00	300.00
15.	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface if necessary. a) On timber or plastered surface with super gloss ( hi-gloss) ii)Two coats (white in shade). b) On steel or other metal surface (ii) Two coats ( white in shade)	6.00 9.00	M <sup>2</sup> M <sup>2</sup>	49.00 43.00	294.00 387.00
16.	Applying decorative cement base paint of approved quality after scrapping the surface thoroughly as necessary on plastered ruled or concerted surface (manufacturer's specification to be followed). B) two coats.	50.00	M <sup>2</sup>	24.00	1,200.00
17.	White washing including cleaning and smoothening surface thoroughly ( 5 parts of stone lime and 1 part of shell lime should be used in the finishing coat) c) Three coats	25.00	M <sup>2</sup>	6.90	172.00
18.	25mm thick damp proof with cement concrete (4:2:1)( with graded stone aggregate 10mm nominal size) and painting the top surface with a coat of bitumen using 1.7 kg. Per Sq m including heating the bitumen and cost and carriage of all materials complete.	3.00	M <sup>2</sup>	178.20	535.00
19.	Neat cement punning about 1.5mm. thick in wall, dado, window, silts, floor, drain etc.	4.00	M <sup>2</sup>	20.25	81.00
20.	Wood work in door and window frame fitted and fixed complete including a protective coat				

	of painting at the contract surface of the frame. (The quantum should be corrected up to three decimals) b) Sal –Siliguri.	0.05	M <sup>3</sup>	43709.60	2185.00
21.	Panel shutters of door and window as per design ( each panel consisting of single plank without point) including fitting and fixing the same in position but excluding the cost of hinge and other fittings. In ground floor. 35 mm thick shutters with 19mm thick panel C) Gamari.	2.10	M <sup>2</sup>	1545.50	3246.00
22.	Supplying, fitting and fixing high density polythene down pipe with HDPE granules as specified in IS 73 manufacture as per IS 4984-1987, and fitted with all necessary clamps nails including making holes in walls, floor, et. And cutting trenches in any soil, through masonry concrete structure etc. if necessary and mending good damages including jointing with jointing materials (Spun yarn, valmoid/ bitumen/ M seal etc.) complete. 100mm dia.	8.00	Mtr	204.70	1,638.00
23.	Supplying best Indian sheet glass panes set in putty and fitted and fixed with nails & putty complete in all floors ii) 3 mm thick	8.00	M <sup>2</sup>	391.00	3,128.00
24.	Iron but hinges of approved quality fitted and fixed with steel screws, with ISI mark. a) 100mm x 58mm x 1.90mm	6.00	Each	37.80	227.00
25.	Iron hasp bolt of approved quality fitted and fixed complete (oxidized) with 16mm dia rod with centre bolt and round fitting. (b) 250mm long	1.00	Each	112.00	112.00
26.	P-240,I-71. Anodized Aluminum Al drop (from extruded section ) conforming to ISI2681/66 and bearing ISI mark fitted and fixed complete. iv) 300 mm x 16 mm dia bolt.	1.00	Each	219.60	220.00
27.	Anodize aluminum barrel/tower/ socket bolt ( full covered) of approved quality manufactured from extended section conforming to I.S.204/74 fitted and fixed with cadmium plated screws. i) 200mm long x 10mm dia bolt	3.00	Each	66.00	198.00
28.	Supplying, fitting and fixing windows and ventilators with or without integrated grills				

conforming to I.S 1038-1975 and manufactured from rolled steel sections conforming to I.S. 7452-1974 with non-friction projecting type, box type hinges, glazing clips, lugs, locking bracket, handle plate etc. including hoisting in position, straightening if required, fixing lugs in cement concrete (4:2:1) with stone chips 19 mm down, cutting holes and mending good damages to match with existing surface complete in all respect excluding glazing.				
a) Fixed type steel windows as per I.S sizes with horizontal glazing bars. GF	1.00	M <sup>2</sup>	1552.60	1,553.00
b) Open able steel windows as per I.S size glazing bars, with or without fixed type ventilators (the extra rate admissible for the open able portion only ) GF	6.50	M <sup>2</sup>	1547.00	10,055.00
c) M.S integrated grill as per approved design integrated with steel window or ventilator, joints continuously welded with M.S flats and bars.	90.00	Kg	60.20	5,418.00
d) Two point nose steel handle including fitting and fixing.	6.00	Each	30.80	185.00
e) Steel peg stay 300mm long including fitting fixing.	6.00	Each	32.20	193.00
<b>Total Rs.</b>				<b>1,68,753.00</b>

**(Rupees One Lac Sixty Eight Thousand Seven Hundred Fifty Three Only)**

**ESTIMATE FOR CONSTRUCTION OF SURFACE AND 'V' DRAIN  
AND PARKING AREA**

Sl.No	Item Description	Quantity	Rate	Unit	Amount
1.	Earthwork in excavation of foundation trenches or drains in all sorts of soil including removing spreading of stacking the spoils within a lead of 75 m as directed including trimming the sides of trenches, leveling dressing and ramming the bottom, bailing out water etc. as required complete. a) Depth of excavation exceeding 1.5m	456.00	41.87	M3	19,092.72
2.	Earth work in filling in foundation trenches or plinth with good earth. In layers not exceeding 150mm. including watering and ramming etc. layer by layer complete a) With earth obtained from excavation of foundation trenches.	205.00	26.00	M3	5,330.00
3.	Cement concrete with graded stone ballast (40mm size) as directed excluding shuttering .if any. B) In ground floor ( with North Bengal variety stone metal) a) 1:3:6 proportion	20.00	2454.30	M3	49,086.00
4.	Hire and labour charges for shuttering with centering and necessary staging upto 4 m. using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs. Beams, columns, lintels curved or straight including fitting, fixing and striking out after completion of works ( upto roof of ground floor) a) 25mm. To 30mm. Shuttering without staging in foundation etc. b) 25mm to 30mm thick shuttering in G.F.	618.00 558.00	107.80 162.80	M2 M2	66,620.40 90,842.40
5.	Plaster (to wall floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and making out joints or roughening of concrete surface, including throating, nosing and drip course where necessary ii) with 4:1 cement mortar. b)15mm thick plaster	396.00	78.30	M2	31,006.80
6.	Neat cement punning about 1.5mm. thick in wall, dado, window, silts, floor, drain etc.	396.00	20.25	M2	8019.00
7.	Single brick flat soling of picked, jhama bricks	150.00	149.80	M2	22,470.00

	including ramming and dressing bed to proper level and filling joints with powdered earth or local sand.				
8.	Controlled cement concrete grade M25 mix with well graded stone chips (20mm grade), excluding shuttering and reinforcement with complete design of concrete mix as per I.S.I, codes and relevant special publication, submission of job mix formula after preliminary mix design after testing of concrete cube as per direction of the Engineer-in-Charge. Consumption of cement will not be less than 6 bags/ kg of cement per cum of controlled concrete but will be determined on the basis of preliminary test & job mix formula. In ground floor & foundation. a) N.B. variety (stone metal) b) With local hard black stone variety chips (crusher broken)	48.00	3750.30	M2	1,80,014.40
9.	Ordinary cement concrete Mix (4:2:1)M-15 with graded stone chips (20mm size) excluding shuttering and reinforcement( ground floor)as per 456-2000. b)River bazree	169.00	2932.2	M3	495541.00
10.	Masonry work with Precast cement concrete (1:5:8) closed cavity hollow stone blocks having compressive strength 70 kg/sq cm as per C.B.R.I. Specification in sand cement mortar (6:1) including scaffolding curing etc. complete. In Superstructure G.F. ii) 150mm thick wall	300.00	457.65	M2	137295.00
<b>Total Rs</b>					<b>11,05,318.52</b>
<b>Say Rs.</b>					<b>11,05,319.00</b>

**(Rupees Eleven Lac Five Thousand Three Hundred Nineteen Only)**

## ESTIMATION OF DEEP TUBE WELL

Sl. No.	Item Description	Unit	Rate (Rs.)	Quantity	Amount (Rs.)
1.	Using heavy duty Hydraulic power Rig and Air compressor for drilling tube well by ODEX-115 method of drilling through any kind of soil, boulder and rock up to desire depth including fuel and after drilling development the tube well up to the full satisfactory of Engineer in Charge.	M	1493.00	100	149300.00
2.	140 mm dia MS ERW pipe (6.0 m long) BANSAL OR JINDAL make.	M	885.00	100	88,500.00
3.	Casing shoe EN-19 steel.	Each	2380.00	1	2,380.00
4.	80 mm dia LCG (3.0 m long) Strainer Jhonson make.	Each	4765.00	3	14,295.00
5.	Packer assembly for joining the Strainer with casing.	Each	1190.00	1	1,190.00
<b>Total Rs.</b>					<b>2,55,665.00</b>

**(Rupees Two Lac Fifty Five Thousand Six Hundred Sixty Five Only)**

**ESTIMATE FOR MAIN GATE (2 No.)  
AND GATE AT BONDED AREA (1 N0.)**

<b>Sl.</b>	<b>Item Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
1.	M.S. Gate of jail type as per approved design made of strong M.S. frame work, intermediate stiffeners and round/square bars or angels. M.S. sheet (not less than 14 gauge) gussets, cleats etc. including necessary riveting, bolting, welding, and hanging arrangements, fitting and fixing complete as per direction of Engg-in-charge.	840.00 350.00	Kg Kg	74.9 0 74.9 0	62,916.00 26,215.00
2.	Locking arrangement for jail type doors including supplying, fitting and fixing in position complete as per approved design.	36.00	Kg	478. 80	17,236.80
<b>Total Rs.</b>					<b>1,06,367.80</b>
<b>Say Rs.</b>					<b>1,06,368.00</b>

**(Rupees One Lac Six Thousand Three Hundred Sixty Eight only)**