

DELHI TECHNOLOGICAL UNIVERSITY

(Formerly Delhi College of Engineering) Shahbad Daulatpur, Main Bawana Road, Delhi-42

File No: DTU/Engg. Cell/0031/2024-25/Civil

Dated: 24.06.2024

NOTICE INVITING QUOTATION

The Chief Project Officer, Engineering Cell, DTU invites, on behalf of Delhi Technological University, sealed percentage rate quotations from Contractors up to 03.00 PM on 28.06.2024 for the following works, which shall be opened at 03:30 PM on the same day. Schedule of work along with terms and conditions can be obtained from office of the Chief Project Officer/DTU or DTU website on all working days by submitting an application along with a copy of G.S.T. No. or PAN Card up to 02:00 PM on 28.06.2024.

S. No.	Name of Work	Estimated Cost (Rs.)	Time Allowed	Last date of Receipt of Quotation
	Repairing of existing boundary wall near APJ hostel at Delhi Technological University.	4,83,999/-	30 days	28.06.2024

TERMS & CONDITIONS: -

- The work shall be carried out as per CPWD specifications and as per direction of Engineer-in-Charge.
- The rates quoted should be inclusive of all the taxes and duties & nothing extra shall be paid.
- The work is to be complete as per the given schedule.
- No T&P shall be issued to the firm by the department.
- Necessary recoveries shall be made from the bill inclusive Water charges @1% and Electricity Charges @1% shall be deducted from the bill.
- Penalty on account of delay of the work (if any) may be imposed @500/- per day or as per the direction of Engineer-In-Charge.
- Material should use only as per approved material list as attached.
- Contractor is advisable to visit the site before submitting the quotation and all the damages
 and overheads for necessary arrangements shall be borne by the contractor. Nothing shall be
 paid extra on any account.

Enclosure: 1. Schedule of work

2- list of approved makes.

24.06.24

Chief Project Officer DTU Campus, Bawana Road

Copy to: -

Registrar, DTU

Sr. Account Officer-1, DTU

J.E. (Civil)

DTU website

Notice Board

Guard File

A.E. (Civit)-CDC, DTU

		Schedule of Quantity		t teal i	University.	
me of	fwork:	Repairing of existing Boundary Wall near APJ hostel at	Delhi Tech	nological	I	
tem	DSR	Description of Item	Quantity	Unit	Rate	Amount
No.	2021				Rs.	Rs.
1	//	(a) and display and a second in a 20 cm in				
1	2.6	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-			1	
		in charge.	10.00	Cum	205.45	3698.10
1.1	2.6.1	All kinds of soil	18.00	Cum	203.43	
2		Filling available excavated earth (excluding rock) in			1 1	
		trenches, plinth, sides of foundations etc. in layers not			253.95	3555.30
	2.25	exceeding 20cm in depth, consolidating each deposited	14.00	Cum	253.95	3333.30
		layer by ramming and watering, lead up to 50 m and lift			1	
		upto 1.5 m.				
3	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from				(226.05
		natural sources: 8 graded stone aggregate 40 mm nominal	1.00	Cum	6326.05	6326.05
		size derived from natural sources)				
4	4.2	Providing and laying cement concrete in retaining walls,			1 1	
		return walls, walls (any thickness) including attached			1 1	
		pilasters, columns, piers, abutments, pillars, posts, struts,				
		buttresses, string or lacing courses, parapets, coping, bed			1 1	
		blocks, anchor blocks, plain window sills, fillets, sunken				
		floor etc., up to floor five level, excluding the cost of			1	
		centering, shuttering and finishing:			1 1	
.2	4.2.3	1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from				
.2	7.2.3	natural sources: 4 graded stone aggregate 20 mm nominal	0.16	Cum	9375.20	1509.41
		size derived from natural sources)	0.10	Cum	9373.20	1309.41
_	5.2				-	
	5.2	Reinforced cement concrete work in walls (any thickness),			1 1	
		including attached pilasters, buttresses, plinth and string			1 1	
		courses, fillets, columns, pillars, piers, abutments, posts			1 1	
- 1		and struts etc. above plinth level up to floor five level,			1	
		excluding cost of centering, shuttering, finishing and			1 1	
	5.2.2	:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from			l	
- 1		natu ral sources : 3 graded stone aggregate 20 mm	6.00	Cum	10185.05	(1110.20
		nominal size derived from natural sources)	0.00	Cum	10185.05	61110.30
5	5.9	Centering and shuttering including strutting, propping etc.				
'I	3.9					
.		and removal of form for :				
.1	5.9.1	Foundations, footings, bases of columns, etc. for mass	9.00	Sqm	307.95	2771 55
		concrete	7.00	Sqiii	307.93	2771.55
2	5.9.5	Lintels, beams, plinth beams, girders, bressumers and	15.00	C	(00.00	
		cantilevers	15.00	Sqm	608.35	9125.25
3	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	10.00	Sqm	804.25	8042.50
,	5.22	Steel reinforcement for R.C.C. work including			501.25	3042.30
		straightening, cutting, bending, placing in position and			1	
		binding all complete upto plinth level.			1 1	
1	5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or m	350.00	V	00.55	
	5.22A	Reinforcement for RCC work including straightening,	330.00	Kg	89.65	31377.50
- 1	J	cutting hending placing in acciding straightening,				
- 1		cutting, bending, placing in position and binding all complete. Above plinth level.				
, 1	5224 (Therma Machanialta T				
1	J.ZZA.0	Thermo-Mechanically Treated bars	200.00	Kg	89.65	17930.00
	6.32	Brick work with clay flyash F.P.S. (non modular) brick of		-	32.00	17730.00
		class designation 7.5 in superstructure above plinth level				
		up to floor five level in :				
1	6.32.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	7.00	C	0100.00	
	13.5	15 mm cement plaster on rough side of single or half brick	7.00	Cum	8190.90	57336.30
		wall of mix:				
.1		1:6 (1 cement: 6 coarse sand)	0.1.5			
i		6 mm cement plaster of mix :	84.00	Sqm	339.10	28484.40
	10.10					
_		1:3 (1 cement : 3 fine sand)				

ARevil

AST ALSON

D

12	13.46	Finishing walls with Acrylic Smooth exterior paint of				
12.1	13.46.1	required shade: New work (Two or more coat applied @ 1.67 ltr/10 sqm		Cam	166.85	30033.00
		over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	180.00	Sqm	100.00	
13	13.61	Painting with synthetic enamel paint of approved brand				
	12 (1)	and manufacture to give an even shade:		G	131.45	5258.00
14		Two or more coats on new work	40.00	Sqm	131.43	
14	13.80	and applying winte cement based party of				
		average thickness 1 mm, of approved brand and	180.00	Sqm	123.85	22293.00
		manufacturer, over the plastered wall surface to prepare				~
		the surface even and smooth complete.				
	14.1	Repairs to plaster of thickness 12 mm to 20 mm in			1	
		patches of area 2.5 sq.meters and under, including cutting				
		the patch in proper shape, raking out joints and preparing				
		and plastering the surface of the walls complete, including			1	
		disposal of rubbish to the dumping ground, all complete		l		
1.7	1111	as per direction of Engineer-in-Charge.			165.33	22115.00
15	14.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	50.00	Sqm	462.30	23115.00
16	14.72	type) on the exterior side, up to seven story height made				
		with 40 mm dia M.S. tube 1.5 m centre to centre,			1 1	
		horizontal & vertical tubes joining with cup & lock system			1 1	
		with M.S. tubes, M.S. tube challies, M.S. clamps and				
		M.S. staircase system in the scaffolding for working			1	
		platform etc. and maintaining it in a serviceable condition			1 1	
		for the required duration as approved and removing it				/
	1	there after .The scaffolding system shall be stiffened with	50.00	C	205.00	14250.00
		bracings, runners, connection with the building etc	50.00	Sqm	285.00	14250.00
		wherever required for inspection of work at required	i			/
		locations with essential safety features for the workmen	ł			
		etc. complete as per directions and approval of	ļ			
		Engineer in-charge The elevational area of the				1
		scaffolding shall be measured for payment purpose. The				
		payment will be made once irrespective of duration of				İ
		scaffolding.	l			
17	15.2	Demolishing cement concrete manually/ by mechanical				
		means including disposal of material within 50 metres				
		lead as per direction of Engineer - in charge			ĺ	
17.1	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent	2.00	Cum	2007.10	
		(30 equivalent	2.00	Cum	2007 10	4014.20 G

Herry

Alexi

15.18 Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead. 15.36 Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.			10.10						
unscrivaceable material whim 50 metres lead as per direction of Engineer-in-charge 5.00 Cum 1698.45 8492.25 1 15.74 In cement mortar 5.00 Cum 1698.45 8492.25 1 15.90 Emblshing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material and disposal of unserviceable material and disposal of unserviceable places, bulls, nuts, cutting rivers, welding etc. including all signs thick, bulls, nuts, cutting rivers, welding etc. including all signs thick, bulls, nuts, cutting rivers, welding etc. including dismembering and stacking within 50 metres lead stacking with 50 metres lead with 50 metres lead with 50 metres lead stacking with 50 metres lead with 50 metres lead with 50 metres lead with 5	3 1 1	5.7	bemolishing brick work manually/ by mechanical means			1			
Us.7.4 Incement mortar South Cum 1698.45 8492.23		11	icluding stacking of serviceable material and disposal of		1	1			X
1 15.74 in cement mortar 1 15.97 in comment mortar manually by mechanical means including stacking of serviceable material and disposed of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. 1 1 5.99 2 in Cement mortar 1 1 5.99 2 in Cement mortar 2 20 00 Cum 2027.10 40542.00 in Cum 15.18 Dismanting steel work in built up sections in angles, tees, including stacking with 50 metres lead with 50 metres lead stacking with 50 metres lead with 50 metres		ľ	nserviceable material within 50 metres lead as per			1		0.100	225
15.9 Demolshing stone rubble masonry manually by mechanical means including stacking of serviceable material and dispesa of unserviceable americal and dispesa of unserviceable americal and dispesa of unserviceable americal and dispesa of unserviceable material and dispesa of unserviceable material and dispesa of unserviceable state and cannot shoulding all gross of places. Post place of the complete of the				5.00	1	'um	1698.45	8492	2.23
mechanical means including stacking of serviceable material and disposal of unserviceable material and disposal of unserviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge: 1 15.19.2 In coment metrat 2 20.00 Cum 2027.10 40542.00 15.18 Dismanting steel work in built up sections in angles, tees, lost, cutting rivers, welding etc including dismembering and stacking with 50 metres lead. Stacking within 50 metres lead. In concluding making robusts and stacking within 50 metres lead. In concluding making robusts and stacking within 50 metres lead. In concluding making robust and stacking within 50 metres lead. In concluding making robust and stacking within 50 metres lead. In concluding making robust and stacking within 50 metres lead. In concluding making robust and stacking within 50 metres lead. In concluding making robust and stacking with 50 metres lead. In concluding making robust and stacking with 50 metres lead. In concluding making robust and stacking with 50 metres lead. In concluding making robust and stacking with 50 metres lead. In concluding blooding, transporting, unloading to approved municipal dumpning ground or as approved by Engineer-in-charge, beyond 50 m initial lead. (for all leads including all lifts involved. In all the stacking with 50 metres lead. In concluding blooding to proved by Engineer-in-charge, with horizontal lines and two diagonals interwoven with horizontal lines				5.00		- Lin			,
material and disposal of unserviceable material within 50 metrics lead as per direction of Engineer-in-charge; 10 15.18 19.2 In cement mertar 11 15.90.2 In cement mertar 12 15.36 Simmathing states work in built up sections in angles, tees, flats and channels including all gasset plates, bolts, nuts, cutting rivets, welding ets methoding dismembering and stacking within 50 metres lead stacking within 50 metres lead stacking within 50 metres lead including making rolls and stacking within 50 metres lead including making rolls and stacking within 50 metres lead including making rolls and stacking within 50 metres lead. 15.00 Kg 30.35 4552.50 15.00 Kg 30.35 4552.50 15.00 Kg 30.35 4552.50 15.00 Cum 219.35 5483.75 16.18 10 Minimum the stack of the state of th)					1		1	
metres lead as per direction of Engineer-in-charge: 1					1	1			1
1.1 1 5.9 2. In coment mortar 0 15.18 Dismantling steel work in built up sections in angles, tees, lats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead, including making rolls and stacking within 50 metres lead. It is all the stacking within 50 metres lead and stacking within 50 metres lead. It is all the stacking within 50 metres lead. It					- 1	- 1			12.00
15.18 15.92 In cement mortar 15.18 15.92 In cement mortar 15.18 15.92 In sement mortar 15.18 15.18 In sement mortar 15.18 15.18 In sement mortar 15.18			metres lead as per direction of Engineer-in-charge:	20.0	10	Cum	2027.10	405	42.00
cutting rivets, wedding etc. including dissumethering and stacking within 50 metres lead. 21		15.9.2			10	Cuin			Xa
cutting rivets, wedding etc. including dismembering and stacking within 50 metres lead. 15.36 Dismantling batch we or flexible wire rope in fencing including making rolls and stacking within 50 metres lead. 22 15.60 Disposal of building rubbish / milha / simular unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved. 23 16.18 Pencing with angle iron post placed at required distance methodic in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sades and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal lines, 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, strus, earth, work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used. 23.1 16.18. I With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron Y shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire; stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of highinestic strength of 16.5 kg/s ymm with tape (0.52 mm thick) wire of high tensiles terrength of 16.5 kg/s ymm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C.	20	15.18	Dismantling steel work in built up sections in angles, tees	5,			1.65	23	12.50
stacking within 50 metres lead. 15.60 Disparanting barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead. 15.60 Disposal of building rubblsh / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all litist involved. 23 16.18 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 used only and provided with horizontal wires, of barbed wire used only and provided with horizontal wires, of barbed wire used only and provided with horizontal wires, of barbed wire used in length of barbed wire used. 23.1 16.18 With G.I barbed wire 16.19 Supplying at site Angle iron post & strut of required size including bottom to be spit and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete. 24. 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil folo mm dia 10 metre openable length (total length op m), having 50 nos rounds per 6 metre length, upb 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal. B.T. reinforced barbed vire tiet of angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape (concerting of 165 kbg symm with tape (0.52 mm thick) wire of high tensile strength of 165 kbg symm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add cost index @ 7% as per CPWD order 1.990.8 3.1 4930.90.00 cm. Total 488998.90.00 cm. Total 488998.90.00 cm. Total 488998.90.00 cm. Total 488998.90.00			flats and channels including all gusset plates, bolts, nuts,	50.0	00	Kg	4.63	1	
15.36 Dismantling bathed wire or flexible wire rope in fencing methoding making rolls and stacking within 50 metres lead.					- 1		1		
15 36 Dismanting pathed with on the color of the path and			stacking within 50 metres lead.		_		20.26	45	552.50
Disposal of building rubbish / malba / similar unserviceable, dismanted or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved. 23 16.18 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 lines and two diagonals and diagonals and fines and diagonals and diagonals and diagonals and fines and diagonals and diagonals and diagonals and diagonals and diagonals and diagon	21	15.36	Dismantling barbed wire or flexible wire rope in fencing	150	.00	Kg	30.33		X
unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineeri-n-charge, beyond \$0 m initial lead, for all leads medium gall lifts involved. 23 16.18 Reneine with angle iron post placed at required distance embedded mement 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. 23.1 16.18 With G.I. barbed wire 16.9 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 em length and drilling holes upto 10 mm dia. etc. complete. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clipts to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) 25 NSR Credit for old dismantled steel meluding taking away from site as per direction of Engineer-in-Charge. (Dismantled 200.00 K.G. -25.00 -5000.00 -5000.00 -5000.00 -5000.00 -5000.00 -5000.			including making rolls and stacking within 50 metres lea	10.					
mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads meduding all lifts involved. 23 16.18 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 internweven 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. 23.1 16.18.1 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq. mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR Add cost index @ 7% as per CPWD order of M.S. as per direction of Engineer-in-Charg	22	15.60	Disposal of building rubbish / malba / simi		1		1	- 1	X
unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all liftis involved. 23 16.18 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 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. 23.1 16.18.1 With G.I. barbed wire 16.19 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 em length and drilling holes upto 10 mm dia. etc. complete. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre (length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq. mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) 25 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled 200.00 K.G25.00 -5000.00 materials shall be the property of contractor) - Total 483998.90	1		unserviceable, dismantled or waste materials	by	- 1				183 75 IV
unloading to approved municipal dumping ground or as approved by Enginecri-in-charge, beyond 50 m initial lead, for all leads including all lifts involved. 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. 23.1 16.18.1 With G.I. barbed wire 16.19 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. Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron Y's shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5 mm thick) wire of high tensile strength of 165 kg/s q.m mith tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31. Add cost index @ 7% as per CPWD order 31990.58 Total 483998.90 SAY TOTAL 483998.90 SAY TOTAL 483998.90			mechanical means, including loading, transporti	ng, 25	.00	Cum	219.3	35	Y Y
23 16.18 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 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. 23.1 16.18.1 With G.I. barbed wire used. 23.1 16.18.1 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2 4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-Charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) and weight 143.748 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add osst index @ 7% as per CPWD order 31990.58 Total 483998.90 8AY TOTAL 433998.90 SAY TOTAL 483998.90			unloading to approved municipal dumping ground or	as	- 1		1	1	*
16.18 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. 23.1 16.18.1 With G.I. barbed wire 16.19 Supplying at site Angle ino 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire; stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5 mm thick) wire of high tensile strength of 165 kg/s q.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) 25 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled and trials shall be the property of contractor) - Total 483998.90 26 NSR Total 483998.90			approved by Engineer-in-charge, beyond 50 m initial le	ad,	- 1		1	1	
16.18 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 intervoven 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. 23.1 16.18.1 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2 4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-Charge, with reinforced barbed wire cost of fig. S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 483998.90 25 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled and cost index @ 7% as per CPWD order 31990.58 Total 483998.90 SAY TOTAL 483998.90	1		for all leads including all lifts involved.				+	-+	
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 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. 23.1 16.18.1 With G.I. barbed wire used. 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.0 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire teid to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) 'Spring core (2.5 mm thick) wire of high tensile strength of 165 kg's sq. mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) 25 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 488998.90 SAY TOTAL 43998.90	23	16.18	Fencing with angle iron post placed at required dista	ince	1		1	1	1
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 intervoven 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. 23.1 16.18.1 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) 'Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq. mm with tape (0.52 mm thick) and weight 43 478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 43998.90	20		embedded in cement concrete blocks, every 15th post,	last	1		1	1	1
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. 23.1 16.18.1 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensiles strength of 165 kg/sq. mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) 25 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 488998.90 SAY TOTAL 483998.90			but one end post and corner post shall be strutted on l	ooth	1		1	1	1
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. 23.1 16.18.1 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5 mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add cost index @ 7% as per CPWD order 31990.58 25 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 488998.90			sides and end post on one side only and provided	with	1		1		
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. 23.1 16.18.1 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineeri-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 43998.90			horizontal lines and two diagonals interwoven	with			- 1	1	1
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. 23.1 16.181 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add cost index @ 7% as per CPWD order TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order Total 488998.90 SAY TOTAL 483999.00			horizontal wires of barbed wire weighing 9.38 kg per	100	- 1			1	
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. 23.1 16.18.1 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) 25 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 342.00 Mtr 19.60 6703.20 14992.50 150.00 Kg 99.95 14992.50 14992.50 14992.50 14992.50 14992.50 14992.50 Mtr 303.05 17308.	1		m (minimum) between the two posts fitted and fixed	with		1	1	1	1
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. 23.1 16.18.1 With G.I. barbed wire 16.19 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq. mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add cost index @ 7% as per CPWD order 31990.58 TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 483999.90	1		G I staples turn buckles etc complete. (Cost of p	osts,				1	1
separately). Payment to be made per metre cost of total length of barbed wire used. 23.1 16.18.1 With G.I. barbed wire 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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length) 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5 mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 483999.90			struts earth work and concrete work to be paid	i for		1	1	1	
length of barbed wire used. 342.00 Mtr 19.60 6703.20			separately) Payment to be made per metre cost of	total			- 1	1	V.
16.18.1 With G.I. barbed wire 342.00 Mtr 19.60 6703.20 16.19 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. 150.00 Kg 99.95 14992.50 1			length of harbed wire used	- 1		1	1	- 1	
16.18.1 With G.I. barbed wire 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. 150.00 Kg 99.95 14992.50					242.00	N/I+	r 1	9.60	6703.20
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. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483998.90	23.1	16.18	1 With G.I. barbed wire		742.00	- IVIL	· + ·		
opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete. Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483998.90		16.19	Supplying at site Angle iron post & strut of required	Size		1	1		14000 CO V
10 mm dia. etc. complete. 24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add cost index @ 7% as per CPWD order 31990.58 TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 43399.90			including bottom to be split and bent at right angle if	unto	150.00	K	g 9	9.95	14992.50
24 16.53 Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 Total 488998.90 SAY TOTAL 43399.00		1	opposite direction for 10 cm length and drilling holes	upto			1	1	
tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483998.90				-		+-		-+	
tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483998.90	24	16.5	Providing and fixing concertina coil fencing with pur	nched		1	l	1	1
(total length 90 m), having 50 nos rounds per 6 metre length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) 'Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 Total 483998.90 SAY TOTAL 483998.90	6		tane concertina coil 600 mm dia 10 metre openable	length		1	1		
length, upto 4.5 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) TOTAL Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 483998.90 SAY TOTAL 483998.90		1	(total length 90 m) having 50 nos rounds ner 6 me	tre		1	1	1	1
'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 483998.90 SAY TOTAL 483998.90		1	length unto 4.5 m height of wall with existing angle	iron		1	1		
horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 483998.90 SAY TOTAL 483998.90		1	IV channel placed 2 4m or 3 00 m apart and with 9			1	1		
G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483999.00		1	harizantal D.D.T. rainforced barbed wire stud tied	with		1	1		\ X
necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 483998.90 SAY TOTAL 483999.00		1			57.00	o I o	Mtr	303 65	17308 05
complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 Total 483998.90 SAY TOTAL 43998.90		1			37.00	, l ,		505.05	1 .,500.05
reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 Total 483998.90 SAY TOTAL 429801.86 Add cost index @ 7% as per CPWD order 31990.58 Total 483998.90 SAY TOTAL 429801.86 Add cost index @ 7% as per CPWD order 31990.58 Total 483998.90		1				1	1		
thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 Total 483998.90 SAY TOTAL 429801.86 Add cost index @ 7% as per CPWD order 3190.00 Total 483998.90 SAY TOTAL 429801.86 Add cost index @ 7% as per CPWD order 3190.58 Total 483998.90 SAY TOTAL 483998.90	1	1			1	1	1		1
tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) TOTAL Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 Total 483998.90 SAY TOTAL 429801.86 Add cost index @ 7% as per CPWD order 31990.58 Total 483998.90 SAY TOTAL 429801.86 Add cost index @ 7% as per CPWD order 31990.58 Total 483998.90 SAY TOTAL 483998.90		1			1	1	1		1 1
of M.S. angle, C.C. blocks shall be paid separately) TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 Total 483998.90 Total 483998.90 SAY TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 483998.90	1	-1	thick) wire of high tensile strength of 165 kg/sq.m	m with	1	1	1		1
of M.S. angle, C.C. blocks shall be paid separately) TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 Total 483998.90 Total 483998.90 SAY TOTAL 429801.86 Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 SAY TOTAL 483998.90	1	1	tape (0.52 mm thick) and weight 43.478 gm/ metr	e (cost	1	1	1		1
Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 25 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 429801.86 457008.31 200.00 K.G25.00 -5000.00 Total 483998.90	1	1			1	1	1		1 1
Add aplicable rate of GST @ 18% in place of 12%(Multiplying factor 1.0633) on DSR 457008.31 Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483999.00								TOTA	1. 429801 86
Add cost index @ 7% as per CPWD order 31990.58 Total 488998.90 NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483999.00		\top	Add aplicable rate of GST @ 18% in place of	f 12%(N	Multinly	ving fact	or 1 0633	On Dep	
NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 488998.90 SAY TOTAL 483998.90		+	The face of OST (a) 1070 in place of						
NSR Credit for old dismantled steel including taking away from site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483999.00		_		Aud Co	at mue)	1 (4) 1%	as per Cl		
site as per direction of Engineer-in-Charge. (Dismantled materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483999.00	25	N	SR Credit for old dismantled steel including table					Tot	tai 488998.90
materials shall be the property of contractor) Total 483998.90 SAY TOTAL 483999.00	1 23	1 "	site as per direction of Francisco including taking a	way Iron					
Total 483998.90 SAY TOTAL 483999.00		1		ismantle	d 200	0.00	K.G.	-25.00	-5000.00
SAY TOTAL 483999,00	<u></u>		materials shall be the property of contractor)			1			
SAY TOTAL 483999,00								To	otal 483998 90
							9	AY TOT	A1 493000 00
I I I I I I I I I I I I I I I I I I I	1	10-1	١	- 1	2	1			1037700
	1/	1419	, A.	1		. 1 21	4		1

Junior Engineer (Civil)

A.E. (Civil) 07.0 6.24

LIST OF APPROVED MAKES OF MATERIALS [CIVIL WORK]

S.NO.	MATERIAL	MANUFACTURERS NAME
	CIVIL ITEMS	
1.	CEMENT	ACC, ULTRATECH, AMBUJA, J.K., LAFARGE
		BIRLA, CCI, JK LAKSHMI
2.	REINFORCEMENT STEEL-TMT BARS-FE- 500D GRADE	SAIL, TATA STEEL, RINL, JSW, JSPL
3.	STRUCTURAL STEEL SECTIONS	SAIL, TISCO, RINL, JSW, JINDAL STEEL & POWER, JIN DAL, TATA
4.	STRUCTURAL STEEL TUBES/PIPES	JINDAL, TATA, APL APOLLO, ELECTRO STEEL G.S.F., PRAKASHSURYA, LLOYDS
5.	LGSF VENDORS	M/S INTERARCH BUILDING PRODUCTS PVT LTD., M/S TATA BLUESCOPE STEEL LTD., M/S MGI INDIA PVT. LTD., M/S JSPL, M/S EVEREST INDUSTRIES LTD., M/S WOOTZ BUILDSYS LLP. M/S EPACK POLYMERS.
6.	READY MIXED CEMENT CONCRETE	ACC, LAFARGE, ULTRATECH, SHREE ALCHON, L&T GRASIM, NSCONCRETE, RMC READYMIX (INDIA), SHAILA ENTERPRISES RDC CONCRETE, TECHNO PRIME RMC PVT LTD, VK READY MIX CONCRETE, ASHTECH SHRI RAM READY MIX CONCRETE
7.	ANTI-TERMITE TREATMENT AGENCY	PEST CONTROL INDIA LTD, GODREJ PEST CONTROL, CAPITAL PEST CONTROL (INDIA)
8.	CHEMICAL TO BE USED FOR 20% E.C.ANTI TERMITE TREATMENT	
	SHUTTERING PLY	GREENPLY SHUTTERING PLY, ARCHID SHUTTERING PLY, EURO SHUTTERING PLY
10.	SUPERPLASTICIZERS	MC BAUCHEMIE/FOSROC/SIKA/BASF/ CHRYSO/VELOSIT/PIDILITE
11.	WHITE CEMENT	
12.	AAC BLOCK	BIRLA WHITE, J.K. WHITE SHREE, INSTABLOCK, BILTECH, MAGICRETE, SIPROX, BIRLA AEROCON, J.K., CLAVECON INDIA PVT. LTD. LK. LAKSUNG.
-10		INDIA PVT. LTD., J.K. LAKSHMI, B.G. SHIRKE/INDO BHUTANCONSTRUCTION SOLUTION, ULTRATECH XTRALITE,
13.	BLOCK JOINTING MORTAR	JK LAKSHMI, BIRLA AEROCON SMARTFIX, MYK SCHOMBURG
14.	GLAZED CERAMIC TILES	RAK CERAMICS SOMANY WAS
15.	VITRIFIED TILES	RAK CERAMICS SOMANIA
16.	WALL PUTTY	BELL, JOHNSON, ASIAN (AGL), RESTILE JK WHITE, BIRLA WHITE, ASIAN, BERGER, BI
17.	PLASTER OF PARIS	RLA. JSW
	GYPSUM PLASTER	JK LAKSHMI, SAKARNI, SHRIDANG
19.	ANCHOR PLUG SOIL/ ROCK ANCHOR	SAINT GOBAIN, SAKARNI, J.K. LAKSHMI BBR, VSL, FREYSSINET





		- CVAN(ACI)
	PORCELAIN TILES	JOHNSON, ASIAN(AGL)
21.	CHEQUERED TILE	JOHNSON, ASIAN(AGL) NITCO, ULTRA, UNISTNOE, MODERN NITCO, BHARAT, HINDUSTAN, ULTRA, KJS CONCRETE, DURACRETE, KK MANHOLE &
22	CC DAVEDS DECAST COVERD STONE CC	NITCO, BHARAT, HINDUSTAN, ULTICA, CONCRETE, DURACRETE, KK MANHOLE & CONCRETE, DURACRETE, CONCRETE, CONCR
22.	TILES.RCC SLAB	CONCRETE, DURACRETE, KK MAINTER INDIA
	IILES,RCC SLAB	CONCRETE, DURACRETE, KIC COVERS, TERRA FIRMA, PAVER INDIA, COVERS, TERRA FIRMA, PAVER INDIA, DALAL, UNISTONE, CECO, S&S, MOON LIGHT,
		DATAI IINISIUNE, CE
		SWASTIK, ECOCRETE SWASTIK, ECOCRETE A HINDUSTAN, KK, KJS
22	CD ACC DAVED	L THE THE REAL PROPERTY OF THE PARTY OF THE
23.	GRASS PAVER	KK MANHOLE & COVERS, JAIN, PRAGATI,
24.	SFRC/PRECAST C.C. COVERS	KK MANHOLE & COVERS
		HINDUSTAN POWER BRICK, YBW PROJECT, ASHTECH
25.	FLYASH BRICKS	INDUSTRIES PVT. LTD.
		INDUSTRIES PVT. LTD. PALLADIO, CORAL, MRIDUL, BISAZZA, MMG
26.	GLASS MOSAIC TILES	PALLADIO, CORAL, MIGDO-
		TILES CAREFLEX,
27.	INSULATION FOR PIPE, RUBBER	KAIFLEX. ARMAI EEX,
27.	INSULATION	VIDEOFLEX AFLEX
28.	COPPER TUBES/ PIPES	RAJCO, MEXFLOW, DELHI METAL, ABC
20.	COFFER TODES THES	BIRLA AEROCON, ULTRATECH, RAMCO,
29.	READY MIX PLASTER	BIRLA AEROCON, ULTRATEON, TO MAN TO STATE OF THE STATE OF
		WEBER, LATICRETE UNI FLOOR, UNITILE INDIA, TATE, ZTFLOOR,
30.	RAISED / CAVITY FLOORING	UNI FLOOR, UNITILE INDIA, TATE, ETTE
		ACCESS FLOOR SYSTEMS
31.	DECK SHEET	JSW, TATA BLUESCOPE, INTERARCH, JSPL,
		ROOFCLAD
32.	SELF-DRILLING SCREWS	TW BUILDEX & BOUSTED, CORROSHIELD,
52.		ATUL FATERNERS LTD.
	PAINTS	
1.	WATER-PROOFING CEMENT PAINT	ASIAN, BERGER, DULUX
2.	ACRYLIC EXTERIOR PAINT	ASIAN (APEX ULTIMA), BERGER (WEATHER
2.		COAT LONGLIFE), DULUX (WEATHER SHIELD
		POWER FLEX)
3.	SYNTHETIC ENAMEL PAINT	ASIAN (APCOLITE), BERGER (LUXOL GLOSS),
		DULUX (DULUX GLOSS)
4.	PLASTIC/ACRYLIC EMULSION PAINT	ASIAN (ROYAL SHYAN), BERGER (SILK
		GALMOUR), DULUX (VELVET TOUCH
		DIAMOND)
-	A CRAY IC DICTEMBER	ACIAN (AOITA LOCK AODVITO), DEDOED (D.
5.	ACRYLIC DISTEMPER	ASIAN (AQUA LOCK ACRYLIC), BERGER (Bison
		SUPER), DULUX (MAGIC ACRLYIC)
6.	CEMENT PRIMER	ASIAN (DECOPRIME), BERGER (SOLVEN
		BASE), DULUX (SOLVENT BASE)
7.	WALL PUTTY	BIRLA, J.K., JSW

The Agency is required to get prior approval of Engineer-in-charge for the make of the material to be used in the work. In case of non-availability of material from these manufacturers, the Hon'ble Vice Chancellor, DTU may allow use of alternative BIS approved manufacturer makes.

AT HOLY



Chief Project Officer Delhi Technological University