

TamilNadu Police Housing Corporation Limited
(A Government of Tamil Nadu Undertaking)
(An ISO 9001: 2015 Certified Company)

No. 132, E. V. R. Salai, Kilpauk, Chennai – 600 010

Lr. No. CE/PIg/SR/5673/2023

Dated:18.09.2023

To

The Superintendent of Prison,
Central Jail,
Cuddalore.

Sir,

Sub: TNPHC – Special repair works to the Central Prison, Capperhills in Cuddalore Districts – Estimate furnished – Approval requested – Regarding.

Ref: 1.The SP/Central Prison,Cuddalore, Lr.Rc.No.1343/P5/2023, Dt: 17.04.2023

2.The SP/Central Prison,Cuddalore, Lr.Rc.No.5688/P5/2023, Dt: 20.01.2023

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With reference to the above letters, the estimate proposals for the following works are prepared and worked out as follows.

S.No.	Name of Work	Amount
1	Providing RCC UG sump with motor arrangements to the Central Prison at Capperhills in Cuddalore District.	Rs.13,60,300/-
2	Providing 200mm dia Deep borewell arrangements near watch tower No.4 at Central Prison Campus, Capper hills in Cuddalore District.	Rs.24,40,400/-

The copy of the abstract estimates are enclosed herewith.

The estimate are prepared based on the PWD Schedule of rates for the year 2023-24 including all overhead charges. There is no specific fund to meet out the expenditure.

It is requested that necessary funds may be provided to take up the works early.

Encl: As stated.

Yours faithfully,

[Signature]
Chief Engineer

8/9
18/9/23

**Name of work : Providing RCC UG Sump with motor arrangements to the Central prison at
Capperhills in Cuddalore district.**

S.No	Qty	Description of Work	Rate	Per	Amount
1	73.60	Earth work excavation for Open Foundation in all soils and sub soils to the required depth as may be directed except in hard rock requiring blasting, inclusive of shoring, strutting and bailing out water wherever necessary (Excluding refilling the sides of foundation) and depositing the earth in places shown clearing and levelling the site with an initial lead of 10 metres and lift as specified hereunder etc., complete in all respects complying with relevant standard specifications. (Excluding Refilling)	112.05	Cum	8246.88
2	5.52	Supplying and filling in foundation and basement with filling Crushed stone sand in layers of 150 mm thickness well watered, rammed and consolidated complying with relevant Standard specification including cost of supplying filling sand.	1920.50	Cum	10601.16
3	5.52	Plain Cement Concrete 1:5:10 (One of cement, five of sand and ten of hard broken stone jelly) for foundation using 40mm gauge hard broken stone jelly inclusive of shoring, strutting and bailing out water wherever necessary ramming, curing etc., complete in all respects complying with relevant standard specifications and as directed by the departmental officers.	5213.08	Cum	28776.20
4	23.20	Standardised concrete Mix M30 Grade Concrete for all RCC works namely, namely plinth beams, tie beams, column and column footing, slabs using 20mm gauge hard broken stone jelly excluding the cost and fabrication of reinforcement grills, shuttering and centering but including vibrating, laying, curing, with relevant standard specifications in Foundation and Basement.	8817.01	Cum	204554.63
5	21.87	Filling in foundation and basement and other similar works with Excavated earth in layers of 150mm thick well watered rammed and consolidated complying with relevant standard specifications etc., all complete and as directed by the departmental officers.	38.95	Cum	851.84
6	85.44	Plastering in CM 1:3 (One of cement thee of sand) 12mm tk. mixed with water proof compound at 2% by weight of cement for sump including scaffolding curing, finishing etc., complete in all respects and complying with standard specifications	278.84	Sqm	23824.09
7	26.68	Finishing the top of flooring with cement concrete 1:3 (one of cement and three of blue granite chips of size 10mm and below) 20mm thick Ellispattern Flooring (No sand) and surface rendered smooth including 50mm wide skirting, providing proper slopes, thread lining, curing etc., complete in all floors complying with relevant specifications.	453.58	Sqm	12101.51
8	2.00	Supplying and Fixing of CI Man hole cover of size 60 X 60 cm.	1864.00	No	3728.00
9	10.00	Supplying and Fixing of C.I Steps 5 Kg each	30.00	No	300.00

S.No	Qty	Description of Work	Rate	Per	
10		Providing Form work and centering for reinforced cement concrete works including supports and strutting up to 3.30m height for plane surfaces as detailed below with all cross bracings using mild steel sheets of size 90cmx60cm and MS 10 gauge stiffened with welded mild steel angles of size 25mmx25mmx3mm for boarding laid over silver oak or country wood joists of size 10cmx6.5cm spaced at about 90cm centre to centre supported by caurina props 10cm to 13cm dia spaced at 75cm intervals and removing the same after a specified period without damaging the RCC works etc., complete complying with standard specifications and as directed by the departmental officers.			
	5.31	a) For Column footings, plinth beam, Grade beam, Raft beam, Raft slab etc.,	848.08	Sqm	4503.30
	25.61	b) Plain surfaces such as Roof slab, floorslab, Beams, lintels, lofts, sillslab, staircase waist, portico slab and other similar works	946.62	Sqm	24242.94
	107.14	d) Vertical Walls	1041.28	Sqm	111562.74
11	2.784	Supplying, fabricating and placing in position of Mild steel Grills/Ribbed Tor Steels for reinforcement for all floors including cost of binding wire, pvc bending, tying etc., all complete and as directed by the departmental officers for all sizes.	89024.30	MT	247843.65
12	2.784	Applying one coat of anticorrosive treatment on steel reinforcement rods (20 ltrs. of anticorrosive chemical for one metric tonne of steel reinforcement rods) at site including cost of required quantity of anticorrosive chemicals,	4672.50	MT	13008.24
13	20.70	Painting two coats with ready mixed PLASTIC EMULSION PAINT of first class quality paint of approved colour and shade over a priming coat on cement plastered / concrete wall surfaces or other similar works, including cost of necessary brushes, labour charges, patty etc., complying with relevant standard specification. The paint should be supplied by the contractors at his own cost. (The quality and shade of the paint should be got approved by the Executive engineer before use.)	232.98	Sqm	4822.69
14	2.00	Supply and delivery of 3 HP Open well Submersible pump set (Duty 50 lpm x 100m) conforming to IS 14220 /2002 and as amended and BEE 3 Star Rated capable of discharging the following duties due to all causes. The pump shall be with stainless steel shaft and dynamically balanced bronze mixed type impeller, CI FG 200 grade casing and brass screws and rotor shall be of copper rod as per IS 613/1984 with ISI mark. The pump suitable for installation in sump with 1.1KV grade 3 core suitable copper flat submersible cable to a length of 15m with necessary cable joints. (Duty 50 lpm x 100m)	28115.00	No	56230.00
CER.NO.92/2022-23					

No	Qty	Description of Work	Rate	Per	Amount
15	2.00	Supply & Fixing of Panel board for 3 H.P Submersible Pump set with two level guard auto start with ISI mark for three phase wall mounted type with ammeter, Voltmeter, indicating lamps ON/OFF push buttons with necessary controls and three phase cum dry running preventor relay suitable for the above including wire for fixing sensor and main switch with all respects and as directed by the departmental officers. (As per Pg. 114 of TWAD SR 2022-23)	15147.00	No	30294.00
16	2.00	Labour Charges for erection of 3.00 HP open well Submersible Motor with proper clamps upto the starter to the required depth and also fixing pipes to the required depth values, pressure gauges upto the exterior wall of pump room and erection of panel board and jointing of cable and twin earthing as per IE rules etc., complete and as directed by the departmental officers. (As per TWAD SR P-308/ 2022 - 23)	11056.10	No	22112.20
17		Supplying and laying of GI pipe B class with ISI mark for above ground level including cost of clamping and labour charges, fixing GI pipes etc complete, all complete and as directed by the departmental officers			
	9.00	a) 80mm dia GI pipe	896.17	Rmt	8065.53
18		Supplying and laying of GI specials like elbow, tee, reducers, plug, union, bend, coupler, nipple, GM gate valve, check and wheel valve etc As per TWAD SR Pg- 41, 44 & 45 /2022-23			
	2.00	a) 80mm dia Elbow	474.00	No	948.00
	2.00	b) 80mm dia Hex Nipple	291.00	No	582.00
	2.00	c) 80mm dia union	881.70	No	1763.40
	2.00	d) 80mm dia Non return valve	4013.00	No	8026.00
	2.00	e.) 80 mm dia GI flange set	119.00	No	238.00
	2.00	f) 80 x 40 mm dia GI reducer	366.00	No	732.00
19		Supplying, laying, fixing and jointing the following ASTM pipes as per IS 4985 suitable UPVC/ GI specials like elbow, tee, reducers, plug, union, bend, coupler, nipple, GM gate valve, check and wheel valve etc Below G.L			
	155.00	65mm dia UPCV/ASTM pipe	366.58	Rmt	56819.90
	260.00	40mm dia UPCV/ASTM pipe	226.38	Rmt	58858.80
	50.00	32mm dia UPCV/ASTM pipe	213.18	Rmt	10659.00
20		Supplying and delivery of following dia UPVC specials of best and approved quality having ISI mark including cost of specials and delivery at site of work etc., all complete and as directed by the departmental officers			
	8.00	a) 40 mm dia UPVC Ball valve Qtn	350.00	No	2800.00
	15.00	b) 32mm dia UPVC Ball valve TWAD SR Pg.54 / 2022 -23	201.00	No	3015.00
	8.00	c) 40 mm x 32 mm dia reducer (PWD SR Pg.109 / 2022 -23)	38.50	No	308.00
	4.00	d) 32 mm x 25 mm dia reducer (PWD SR Pg.109 / 2022 -23)	27.90	No	111.60

S.No	Qty	Description of Work	Rate	Per	
21	2.00	WATER TANK WATERPROOFING WORK: Clean Removal of old cement plastering and roots inside the sump. Identifying the leakage point and do the pressure grouting using water proofing materials. Identify the wall crack and attended the cracks using Polymer based cement chemical. After applying one coat using SBR with Gray cement for inner wall surface. Dry the surface for 6 to 8 hrs. Applying two coat using Fosrac brush bond chemical inner wall surface. 2 days curing and water leakage checking. After 48 hrs plastering the wall in CM 1:3, etc all complete. (Quotation)	25000.00	No	50000.00
22	10.00	Supplying and fixing of Engineering polymer Tap of 15mm dia of Best quality including cost of CP tap with required specials and labour for fixing etc, all complete and as directed by the departmental officers., (The quality and brand should be got approved from Executive Engineer before use).	252.00	No	2520.00
23	1.04	Brick work in Cement Mortar 1:6 (One of cement and six of sand) using Kiln burnt country bricks of size 8¾"x4¼"x2¼" (22x11x7) for super structure in the following floors including labour for fixing the doors, windows and ventilator frames in position, fixing of hold fasts, scaffoldings, curing etc., complete in all respect complying with relevant standard specifications and drawings In First floor	6806.25	Cum	7078.50
24	32.13	Plastering with CM 1:5 (One of cement and five of sand) 12mm thick finishd with neat cement including providing band cornice, ceiling cornice, curing scaffolding etc., complete in all repects and complying with relevant standard specifications.	254.07	Sqm	8163.27
25	50.00	Run off main with 2 wires of 2.5 Sq.mm. PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark conforming to IS: 694/1990,1.1 kv grade cable with continuous earth by means of 2.5 sq.mm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark conforming to IS: 694/1990,1.1. k.v. grade cable in fully concealed 19mm/20mm dia rigid PVC conduit pipe heavy dutywith ISI mark cost of all materials, specials etc., all complete.	233.00	Rmt	11650.00
		SUB - TOTAL - I			
		Goods & Service Tax @ 18.0%			1039943.07
		SUB - TOTAL - II			187189.75
		Labour welfare fund @ 1.0%			1227132.82
		Contigencies charges @ 2.5%			10399.43
		Supervision charges @ 7.5%			30678.32
					92034.96
		TOTAL			1360245.53
		SAY			1360245.53
					1360300.00


 Chief Engineer
 18/9/23

Name of work: Providing 200mm dia Deep borewell arrangements near Watch tower No.4 at Central prison campus, Capper hills in Cuddalore district.

S.No	Qty	Description of work	Rate	Per	Amount
1		Drilling the bore well and anywhere in Cuddalore district including transportation from one place to another with in Tamil nadu in alluvial soil sedimentary strata of sand stone shale pebble boulders etc by first taking a pilot bore of 140mm/150mm/200mm dia and the enlarging to required dia by direct or reverse rotary mud circulation method, using rotary rings and labour and drilling at site including all charges as per the direction by the departmental officers. (Quotation)			
	100.00	From 0 mtr and upto 100 mtrs below GL	950.00	Rmt	95000.00
	100.00	From 101 mtrs and upto 200 mtrs below GL	1000.00	Rmt	100000.00
	100.00	From 200 mtrs and upto 300 mtrs below GL	1100.00	Rmt	110000.00
	10.00	From 301 mtrs and upto 310 mtrs below GL	1500.00	Rmt	15000.00
2		Reaming from 140/150mmm pilot bore to 300 mm dia bore as directed by the departmental officers (As per Pg. 302 of TWAD SR 2022-23, SI.No.12b)			
	60.00	Upto 60.00 mtrs depth below GL	424.60	Rmt	25476.00
	30.00	From 60 mtrs and upto 90 mtrs below GL	451.00	Rmt	13530.00
	30.00	From 90 mtrs and upto 120 mtrs below GL	480.70	Rmt	14421.00
	30.00	From 120 mtrs and upto 150 mtrs below GL	488.40	Rmt	14652.00
	30.00	From 150 mtrs and upto 180 mtrs below GL	510.40	Rmt	15312.00
	30.00	From 180 mtrs and upto 210 mtrs below GL	536.80	Rmt	16104.00
	30.00	From 210 mtrs and upto 240 mtrs below GL	561.00	Rmt	16830.00
	30.00	From 240 mtrs and upto 270 mtrs below GL	580.80	Rmt	17424.00
	30.00	From 270 mtrs and upto 300 mtrs below GL	612.70	Rmt	18381.00
	10.00	From 300 mtrs and upto 310 mtrs below GL	636.90	Rmt	6369.00
3		Reaming from 300mmm pilot bore to 400/450 mm dia bore as directed by the departmental officers (As per Pg. 303 of TWAD SR 2022-23, SI.No.12c)			
	60.00	Upto 60.00 mtrs depth below GL	476.30	Rmt	28578.00
	30.00	From 60 mtrs and upto 90 mtrs below GL	504.90	Rmt	15147.00
	30.00	From 90 mtrs and upto 120 mtrs below GL	536.80	Rmt	16104.00
	30.00	From 120 mtrs and upto 150 mtrs below GL	553.30	Rmt	16599.00
	30.00	From 150 mtrs and upto 180 mtrs below GL	572.00	Rmt	17160.00
	30.00	From 180 mtrs and upto 210 mtrs below GL	614.90	Rmt	18447.00
	30.00	From 210 mtrs and upto 240 mtrs below GL	702.90	Rmt	21087.00
	30.00	From 240 mtrs and upto 270 mtrs below GL	721.60	Rmt	21648.00
	30.00	From 270 mtrs and upto 300 mtrs below GL	738.10	Rmt	22143.00
	10.00	From 300 mtrs and upto 310 mtrs below GL	762.30	Rmt	7623.00

4	310.00	Labour charges for inserting PVC casing pipes (With slotted/plain pipes) in the drilling holes including the jointing pipes with PVC coupler with cement paste etc complete. as per the direction by the officers. (200 mm dia casing pipe) (As per Pg. 304 of TWAD SR 2022-23, SI.No.13a)	369.60	Rmt	1145
5		Supply and delivery of the following dia PVC heavy duty casing pipes and necessary special of best approved quality etc complete Quotation			
	250.00	a.) 200mm dia outer PVC Plain pipes	2500.00	Rmt	625000.00
	60.00	b.) 200 mm dia outer PVC slotted pipes	2700.00	Rmt	162000.00
	1.00	c.) 200 mm dia outer PVC bottom dummy	1050.00	Each	1050.00
6	10.00	Labour charges for developing the bore by air compressor of capacity 600 cfn. Using drill rods/holes with required size pipes for various capacity compressor including transportation, labour charges and fuel charges for air compressor as directed by the departmental officers.(As per Pg. 305 of TWAD SR 2022-23, SI.No.13b)	2490.40	Hrs	24904.00
7	1.00	Supply of 3 Phase 7.5 HP Submersible Pump set suitable for 150 mm dia borewell without Panel board. The motor and pump should be confirming to relevant IS specification with ISI mark suitable for the following requirements. The brand name of the pump and motor HP rating should be sprcified etc., complete and as directed by the departmental officers. 7.5HP Motor : Suction : Delivery : Discharge : CFR No 92/2022-23	79112.00	No	79112.00
8	1.00	Labour charges for erection of 7.5HP submersible pumpset in borewell including fixing and jointing and submersible cable with proper clamps upto the starter to the required depth and also fixing of riser pipes to the required depth valve erection clamps, pressure gauges upto the exterior wall of pumproom and errection of panelboard consisting of TPICN switches starters, Voltmeter, Ammeter, etc complete. Above 5HP to 7.5HP (As per TWAD SR P-308/ 2022 - 23, 17c)	12669.80	No	12669.80

9	1.00	Supply and delivery of Three phase panel Board with two level guard auto start with ISI mark for 3 phase wall mounted type with ammeter, Voltmeter, Indicating lamps ON/OFF push buttons with necessary controls for submersible pump set running preventor relay suitable for the above including wire for fixing sensor and main switch with all respects and as directed by the departmental officers.(As per Pg. 115 of TWAD SR 2022-23 item no.11.2)	23717.00	No	23717.00
10	270.00	Supply and delivery of 3 core 4.0 sqmm 1100v grade copper UG flat cable of best and approved quality having ISI mark etc., all complete as directed by the departmental officers.(As per Pg. 120 of TWAD SR 2022-23, item no.12.1)	194.00	Rmt	52380.00
11	250.00	Supply and delivery of 20mm dia Nylon rope of best and approved quality for tying the delivery line with submersible pumpset for safety measure etc., all complete. (PWD SR P No: 112/- 2023-24)	61.80	Rmt	15450.00
12	230.00	Supplying and delivery of the 50mm dia UPVC Column Pipes of best approved quality to suitable for suction, air pipe for the borewell including necessary threaded couplers etc., as directed by the departmental officers. (As per Pg. 24 of TWAD SR 2022-23)	283.20	Rmt	65136.00
13		Supplying and laying of following Dia GI pipe of best and approved quality having ISI mark including cost of conveyance and delivery at site of work etc., all complete and as directed by the departmental officers. (Above GL)			0.00
	3.00	a.)50mm Dia GI Pipe 'B' Class (As per Pg. 50 of PWD SR 2023-24)	209.00	Rmt	627.00
		b.)32mm Dia GI Pipe 'B' Class (As per Pg. 51 of PWD SR 2021 - 2022)		Rmt	0.00
14	35.00	Supplying, laying, fixing and jointing the following UPVC pipes as per ASTM-D-1785 of schedule 40 of wall thickness not less than the specified in IS 4985 suitable PVC/GI specials/GM specials like elbow, tee reducers, plug, union, bend, coupler, nipple GM gate valve, check and wheel valve etc.(Below Ground level) a.) 50 mm dia UPVC pipe.	276.88	Rmt	9690.80
15		Supplying and Delivery of following Dia GI , GM , CI , PVC and MS Specials of best and approved quality having ISI mark including cost of specials and delivery at site of work etc., all complete and as directed by the departmental officers.			
	0.00	a) 50 mm UPVC Ball valve (As per Quotation)	450.00	No	0.00
	0.00	b) 32 mm UPVC Ball valve (As per Pg.54 of TWAD SR 2021 - 2022)	178.00	No	0.00

	2.00	a) 50mm Dia GI X Nipple (As per Pg. 53 of PWD SR 2023-24)	87.00	No	
	5.00	b) 50mm Dia GI Coupling (As per Pg.52 of PWD SR 2023-24)	69.80	No	34
	2.00	c) 50mm Dia GI Union (As per Pg.51 of PWD SR 2023-24)	266.30	No	532.60
	1.00	d) 50mm Dia GI Tee (As per Pg. 51 of PWD SR 2023-24)	139.80	No	139.80
	7.00	e) 50mm Dia GI Elbow (As per Pg.51 of PWD SR 2023-24)	128.00	No	896.00
	1.00	f) 50mm x 40mm GI reducer (As per Pg. 52 of PWD SR 2023-24)	93.20	No	93.20
	1.00	g) SS Adopter 50mm dia (Quotation)	3345.00	No	3345.00
	1.00	h) MS Bore Clamp set 200mm dia (Quotation)	1080.00	No	1080.00
16	0.71	Earth work excavation for foundation in all soils and sub soils to the required depth as may be directed except in hard rock requiring blasting but inclusive of shoring, strutting and bailing out water wherever necessary and refilling the sides of foundation with excavated earth in 150mm thick layers well watered rammed and consolidated and depositing the surplus earth in places shown clearing and levelling the site with an initial lead of 10 metres and lift as specified here under etc., complete in all respects complying with relevant standard specifications. (Including refilling)	237.08	Cum	168.33
17	0.16	Supplying and filling in foundation and basement with filling sand in layers of 150mm thickness well watered, rammed and consolidated complying with relevant standard specification including cost of supplying filling sand.	1920.50	Cum	307.28
18	0.16	Plain Cement Concrete 1:5:10 (One of cement, five of sand and ten of hard broken stone jelly) for foundation using 40mm gauge hard broken stone jelly inclusive of shoring, strutting and bailing out water wherever necessary ramming, curing etc., complete in all respects complying with relevant standard specifications and as directed by the departmental officers.	5213.08	Cum	834.09
19	0.46	Brick work in C.M 1:5 (One of cement and five of sand) using Kiln burnt country bricks of size 8¾"x4¼"x2¾" (22x11x7cm) in foundation and basement including dewatering wherever necessary proper setting, curing etc., complete with relevant standard specifications.	6641.13	Cum	3054.92

20	3.98	Plastering with C.M 1:5 (One of cement and five of sand) 12mm thick finished with neat cement including providing band cornice, ceiling cornice, curing scaffolding etc., complete in all respects and complying with relevant standard specifications.	254.07	Sqm	1011.20
21		Providing Precast concrete slab for cupboard ward robs shelves, cover slab for chambers, baffle walls side slabs of boxing around windows and other similar works in M30 Grade concrete using hard broken stone jelly of size 10mm and less for the following thickness excluding the cost and fabrication of reinforcement grills but including precasting, moulding, curing, finishing and fixing in position complying with relevant standard specifications etc., complete in the following floors (Measurement will be taken including bearing in wall also)			
	0.69	a.) In Foundation and Basement	1681.59	Sqm	1160.30
22	0.002	Supplying, fabricating and placing in position of Mild steel Grills / Ribbed Tor Steels for reinforcement for all floors including cost of binding wire, bending, tying etc., all complete and as directed by the departmental officers for all sizes.	88873.50	MT	177.75
23	35.000	Supplying and laying of 25mm Dia Conduit pipe 16 Gauge of best and approved quality having ISI mark including cost of conveyance and delivery at site of work etc., all complete and as directed by the departmental officers	87.07	Rmt	3047.45
		SUB - TOTAL - I			1865718.52
		Goods & Service Tax (GST) @ 18.0%			335829.33
		SUB - TOTAL - II			2201547.85
		Labour welfare fund @ 1.0%			18657.19
		Contingencies charges @ 2.5%			55038.70
		Supervision charges @ 7.5%			165116.09
		TOTAL			2440359.83
		SAY			2440359.83
					2440400.00


 Chief Engineer
 7/8/9/23