

COLOMBO MUNICIPAL COUNCIL  
MUNICIPAL ENGINEERS' DEPARTMENT

**ORIGINAL**

Issued to: .....

Form fee: ..... Form fee receipt No .....

**BILL OF QUANTITIES AND SCHEDULE OF RATES**

Description of work : *Proposed Improvements for  
Campbell Park Fuel Station*

Drawing No : *St 2022/41*

**Bill NO 1 – Preliminaries**

**Note :**

The pricing of this bill is optional. But, omission to price this bill will not exempt the bidder from complying with the Conditions of Contract and the cost of executing these items shall be deemed covered by the other rates and prices in the Bill of Quantities. This will be paid pro-rata according to the work done on each of the bills tendered for.

This bill provides for the typical general items complementary to the works which are required to be provided by the Contractor in compliance with the General Conditions of Contract (General obligations).

The Contractor should price item 15 for the minimum personnel stipulated in the Bid document for providing Construction Management Services above the supervisory grade.

The Bidder in pricing the provisional item 15 shall furnish the names and qualifications of such personnel and indicate whether they are in house or on contract, and if on contract accompany a firm commitment from the individual or the firm. Payment against provisional items will be certified by the Engineer on compliance by the Contractor in the manner listed in Clause 63 of Conditions of Contract.

Item No	Description	Amount (Rs)
1	Allow Lump Sum for providing security bonds and guarantees etc. (Item)	
2	Allow Lump sum for providing a performance guarantee/ Bond. (Item)	
3	Provide Lump sum for Insurance of the Works, Plants and Materials at site.(Item)	
4	Provide Lump sum for Insurance of Equipment (Item)	
5	Provide Lump sum for Insurance of other property (Item)	
6	Provide Lump sum for Insurance against personal injury of . a) the Contractor's workmen. b) Contractor's employees other than workmen, c) Third party and employees of the Employer and other persons engaged by the Employer. (Item)	
7	Provide Lump sum for taking adequate precautions to minimize noise or other disturbances and for covering any claims against noise and disturbance. (Item)	
8	Provide Lump sum for taking adequate precautions to minimize any damage to existing services, structures etc. and for making good and restoring the damaged such services, structure etc to the satisfaction of Engineer (Item).	
9	Provide Lump sum to construct, equip and maintain temporary buildings for protection and storage of Materials and plant and workshops.(Details with layout to be supplied with the Bid) (Item)	
10	Provide Lump sum to construct , furnish and maintain Contractor's office (details with layout to be supplied with the Bid) (Item)	

Item No	Description	Amount (Rs)
11	Provide Lump sum to construct, furnish and maintain temporary sheds for Contractor's staff accommodation. (Details with Layout to be supplied with the Bid) (Item)	
12	Allow Lump sum for providing sanitary facilities for Workmen. (Item)	
13	Provide Lump sum to construct, furnish and maintain Engineer's housing and offices. (Details as stipulated in tender document) (Item)	
14	Provide Lump sum for diversion / access roads and traffic control and maintenance of same. (Item)	
15	Allow <b>Provisional sum</b> for construction Management services (Details of services to be provided by the Contractor should be in accordance with the minimum requirements specified in the Instructions to Bidders ) (Item)	
16	Allow lump sum for provision of programmes, progress charts, cash flow forecasts, schedules, shop drawings, etc. (Item)	
17	Allow <b>provisional sum</b> for stamp duty in accordance with the prevailing regulations of the Government. (Item)	
18	Allow for <b>provisional sum</b> for giving notices, obtaining permits and the payment of fees in compliance with the requirement of the Governmental, semi Governmental, Local Authority or other Public Authorities (Item)	
19	Provide Lump Sum for setting out of the works (Item)	
20	Provide Lump Sum for supplying water for use of the works (Item)	
21	Provide Lump Sum for supplying electricity for the use of the work (Item)	

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Item No	Description	Amount (Rs)
22	Provide Lump Sum for telephone and other services required for carrying out the works (Please specify other services – if any (Item)	
23	Provide Lump Sum for necessary protective fencing, boarding etc (Item)	
24	Provide Lump Sum for necessary warning notices, night lighting etc. (Item)	
25	Provide Lump sum for protecting and safe guarding the works, materials & plants against damage, trespass and carrying out tests etc.	
26	Allow provisional sum for supplying specimens & samples of materials & carrying out tests etc.	
27	Provide Lump Sum for erection of Notice Board (Item)	
28	Allow provisional sum for erection of Project Name Boards as per detail sketch.	
29	Provide Lump Sum for removal of all rubbish & debris and clearing up site on completion, leaving all in good order & handing over (Item)	
30	Provide Lump sum for providing facilities and services and sharing the site with other contractors, public authorities, utilities and the Employer(Item)	
31	Allow Lump sum for complying with Conditions of Contract not specified above.(Item)	
	Total carried over to Summary	

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BILL OF QUANTITIES  
COLOMBO MUNICIPAL COUNCIL  
PROPOSED IMPROVEMENTS FOR CAMPBELL PARK FUEL STATION

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<b>BILL NO. D</b> <b>EXCAVATION AND EARTH WORK</b>  Note: 1. Unless otherwise measured separately rates shall include for : <ul style="list-style-type: none"><li>· Compact bottom of excavations</li><li>· Earth work supports</li><li>· Working space</li><li>· Dewatering of ground and other water</li><li>· Dewatering of rain water and collecting water</li><li>· Stacking of excavated earth for removal</li><li>· Handling and re-handling of earth</li></ul> 2. Rate for Hard Earth Filling shall include for: <ul style="list-style-type: none"><li>· Filling in layers, (not more than 1'0") well ramming and consolidating.</li><li>· The earth shall be free of vegetation, roots, boulders easily decomposable materials, chemicals, industrial waste, plastic etc.</li></ul> ·The maximum size of particle shall not exceed 75mm. ·The earth shall be well graded and contain silt and clay (fines) not more than 30%.  3. The measurement for excavation will be only the net contact areas. 4. The measurement for earthwork shall be the net volume of earth after compacting to the approval of the Engineer.				
D.1	<b>Tank Installation</b>				
D.1.1	<b>Excavation</b> Excavation in tank pit in any type of soil except rock requiring blasting to dimension shown in drawing.	175.0	m <sup>3</sup>		
D.1.2	<b>Sand filling</b> River sand filling to a height of 3'6" above base concrete slab.	33.0	m <sup>3</sup>		

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Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
D.1.3	<b>Excess Earth</b> To transport excavated excess earth away from site to a location by the contractor .	175.0	m <sup>3</sup>		
D.1.4	<b>Hard earth filling</b> Approved selected dry earth filling( above sand filling )spread in layers not exceeding 6" at anytime, watered well rammed & consolidated.	52.0	m <sup>3</sup>		
D.1.5	Soil improvement under the concrete tank. Supply and lay 9" x 6" rubble in to the excated pit and compress with a excavator untill rubble layer become stable and hard to compress (aproxxintely 1m depth layer under the tank base)	27.0	m <sup>3</sup>		
D.1.6	Temporary shoring with steel R.S.J's / 10 mm thick Steel plate combination , with steel R.S.J's (6" x 6" x 10 mm thick) vertically driven at 4'-0" c/c permissible intervals and steel sheets inserted between R.S.J's; the R.S.J's shall be driven to an appropriate depth below the final formation of the bottom of excavation to withstand as free-standing cantilevers to hold back the unsupported earth. (Shoring designed to carry soil load only) Contractor shall design the shoring method based on soil report recommendations to suit the specific site requirements and method specification to be submitted before excavation to the Divisional Engineer for approval.	95.0	m <sup>2</sup>		
<b>Total carried over to summary</b>					-
<b>BILL NO.F</b> <b>CONCRETE WORK</b> <b>F1 - INSITU CONCRETE</b> <b>Note:</b> <b>Rates shall be included for</b> <b>1. Mixing, handling, hoisting and depositing into position.</b> <b>2. Packing around reinforcement and vibrating.</b> <b>3. Curing and clearing as specified.</b>  <b>Ready mix concrete of grade 25(25 N/mm2) confirming to SLS 1144-1997 for the following items.</b>					
F1.1	In tank concrete top slab	5.5	m <sup>3</sup>		
F1.2	In tank concrete base slab Rate to include for 6" x6" concrete runners .	8.0	m <sup>3</sup>		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
F1.3	In tank concrete walls  F2 - FORM WORK Note: Quality of the form work should be approved by the engineer prior to erection.  A. Rates shall include for · All necessary boarding, supports, applications of mould oil as necessary, erecting, framing, cutting angles, cleaning, wetting and treatment before placing concrete and striking or removal etc.  · Formwork to be measured net contact surface between concrete & formwork. · Formwork to beams, columns, and casings deemed to include ends.  B. The contractor shall provide sufficient formwork and moulds to ensure the adequate progress of the work and the Engineer may direct the contractor to provide at Contractor's expense such additional formwork and moulds as they may deem necessary if in his opinion the proper progress of the work is retarded by their absence. C. Rate to be included erecting and dismantling of scaffolding and formwork. D. Formwork for footing, column, beams, lintel, walls, and slabs are of 15mm thick ply-boards.  Formwork shall be properly designed formwork as described in specification and it should be sufficiently strong, rigid and should have an even smooth surface and grout tight and should provide a basic finish.  Form work	13.0	m <sup>3</sup>		
F2.1	Form work to sides of walls ,cover slabs,edges for tank pit .  F3 - REINFORCEMENT IN INSITU CONCRETE  Note: Rates shall be included for 1. Cleaning, cutting, bending, fabricating with gauge 18 binding wire and placing in position.	161.0	m <sup>2</sup>		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>2. Holding and supporting including temporary fixing supports, hingers, binding wire spaces &amp; tor steel stools.which is required for the proper completion of the work.</p> <p>3. Providing all necessary laps.</p> <p>4. Plain rounded Mild steel of characteristic strength 250 N/mm<sup>2</sup> to BS4449</p> <p>5. High Yield steel of characteristic strength 460 N/mm<sup>2</sup> to BS4449 &amp; 4461</p> <p><u>High-yield tor steel bars diameter not exceeding 16mm for the following items.</u></p>				
F.3.1	In base slab ,walls and top slab	2700.00	Kg		
Total carried over to summary					
<p><b>BILL NO H</b> <b>WATER PROOFING</b></p> <p>Note:</p> <p>1.0 The water proofing contractor (or sub contractor) should be a registered specialist contractor at the ICTAD in the category of water proofing.</p> <p>2.0 The contractor shall submit a written warranty of at least 10 year to cover on the quality of the material, suitability of the material for the situation and the workmanship including water tightness.</p> <p>3.0 The water proofing material shall confirm to relevant British, Euro or ASTM specifications.</p> <p>4.0 All steel pipe joints ,crossing brick work /concrete in manhole should be encased by elastomeric joint sealant</p> <p>5.0)All the internal and external walls surfaces should be waterproofed by applying epoxy paint (Free Mastic G -316) or equivalent.(Agent Modern Trading (Pvt)Ltd.)</p> <p><b>DPM</b></p>					
H.1	Damp proof membrane under floor concrete, out of 700 guage polythene. Rate shall include for all laps turning 150mm at ends. At Under the ground slab	27.00	m2		

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Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
H.1	Provide approved water proofing system (Baralastic or similar) by a specialized water proofing contractor to fuel tank base,walls(inner and outer) in under ground fuel tank. (Payment will be given after handing over of 5 years warranty.) (Contractor should seal all cracks in concrete with chemical rasin before application of waterproofing). Rate should include for 15mm thick cement sand protective layer )	161.00	m <sup>2</sup>		
<b>Total carried over to summary</b>					-
<b>BILL NO X</b>					
<b>EXTERNAL WORKS</b>					
X.1	Supply & Delivery of 5000 IG tank with the fabrication to done as per the CPC standards and specifications detailed in the CPC drawing No Ceypet/Eng/0102. Rate shall include for transportation to CMC fuel station at Borella.	1.00	No		
<b>Under Ground Fuel Tank Manhole</b>					
<b>Note-:</b>					
<b>Water proofing should be done according to the following Bill no H.</b>					
X.2	Supply, fabricating and installing of (approximatly) 2'6"x2'6"X 3'0" deep (internally)under ground fuel tank manhole complete, with 12mm MS plate square manhole cover(Size 2'9"x2'9") and frame with a total thicknes of walls 225mm by R.C.C 1: 1 1 /2 :3(3/4") and masonry brick side walls including form work and reinforcement,3/8" tor steel bars @ 8" centres bothways and tank top concrete to be reinforced with Y 3/8" tor steel bars and 2/8" MS roads.All concrete and brick surfaces to be applied with epoxy paint(Free Mastic G -316 or equivalent ) to side walls.5/8" G.I. lifting hooks tied to yard concrete reinforcement and external sides of the brick wall finished smooth with neat cement plaster as per drawing No - CEYPET /ENG/0287	1.00	nr		
X.3	Scrap wire brush , clean and apply two coats of hot tar to all external surfaces of tank prior to installation.	1.00	Item		
X.5	Installation of tank with necessary traps and bolts as shown in drawing.	1.00	nr		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<b>Tank Removal</b>				
X.6	Excavation and carefully removing the existing tank and handed over to CMC. Rate to include refilling the pit with approved selected dry earth filling spread in layers not exceeding 6" at anytime, watered well rammed & consolidated, surface finish with 150mm thk ABC layer and 100mm thk premix layer.	Item			
X.7	Supply and laying 40mm (1 1/2") dia GI heavy duty pipe from underground tank to dispensing pump. Rate to include all bends and accessories/fittings as required based on the shop drawing prepared by the contractor and approved by the Engineer, 300mm wide 450 mm deep trench excavation and backfilling with river sand and compacted to approval level.	10	m		
X.8	Ditto-vent pipe. Rate to include applying two coats of Zn phosphate paint	10	m		
X.9	Ditto-75mm dia GI heavy duty pipe for unloading. (if Necessary)	10	m		
X.10	Supply and fixing of tank top valves as approved by Engineer.	1	nr		
X.11	Fixing and connting to existing fuel pums	Item			
X.12	<b>TEMPORARY REINSTATEMENT</b> Note : Item shall deemed to include disposal of the material arising.				
X.12.1	Removing of Existing premixed area in fuel tank and pipe laying area	40.0	m <sup>3</sup>		
X.12.2	Demolishing cement concrete in fuel tank and pipe laying area (Provisional qty)	3.0	m <sup>3</sup>		
X.12.3	Temporary reinstate of Tank and pipe laying area dealing with all existing utility services.	40.0	m <sup>2</sup>		
X.13	<b>PERMANENT REINSTATEMENT</b>				
X.13.1	Permanent reinstatement of damage bitumen surface in pre- mixed area.			Provisional sum	216,800.00
<b>Total carried over to summary</b>					

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BILL OF QUANTITIES

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COLOMBO MUNICIPAL COUNCIL

PROPOSED IMPROVEMENTS FOR CAMPBELL PARK FUEL STATION

SUMMARY

BILL NO	DESCRIPTION	AMOUNT RS.
BILL NO.01	PRELIMINARIES	
BILL NO. D	EXCAVATION AND EARTH WORK	
BILL NO. F	CONCRETE WORK	
BILL NO. H	WATERPROOFING	
BILL NO.X	EXTERNAL WORK	
	SUB TOTAL	
	ADD 10% CONTINGENCIES	
	ADD PRICE FLUCTUATION CONTINGENCIES (20%)	
	TENDER PRICE (BID PRICE)	
	ADD 12% VAT	
	FINAL COST (WITH TAXES)	

SIGNATURE OF TENDERER .....

DATE: