

**BILL NO. 1: CANOPY AND CONTENERISED MOBILE FUEL STATION**

S/NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<b>ELEMENT NR.1</b>					
<b><u>OEM CONTENERISED MOBILE FUELING STATION</u></b>					
A	NEFTGEN 45,000 Liter Contenerised Fuel Station-Double wall CSC PLATE-BIC Certification. ISO 9001 14001 19001 Certification. EN12285-2 Tank Certification. (\$108,600 @ N1,650/Dollar) OEM Qoute attached.	1	Nr.	179,190,00.00	179,190,000.00
B	Structural Steel Members Canopy to shed Contenerised mobile fuel station VENDOR QOUTE/PROFILE Attached.	1	SUM	29,016,000.00	29,016,000.00
C	Brandina of Entire Station. Comprising: Branding of All Pump decals, branding of the Canopy, Fabrication of approved standard LED Price displav Tottem. safety signages, IN/OUT Signage. VENDOR QOUTE/PROFILE Attached.		SUM		6,000,000.00

**CANOPY & CONTENERISED STATION  
TO GENERAL SUMMARY**

**214,206,000.00**



















}







S/NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT (N)
<b><u>BILL NO. 8 EXTERNAL WORKS</u></b>					
<b><u>DRIVE WAYS AND PAVED AREAS</u></b>					
A	Clear site of all thick vegetation including cutting dawn Hedges and carting away debris	1,250	m <sup>2</sup>	150.00	187,500.00
<b><u>EXCAVATION</u></b>					
B	Excavate oversite average 150mm deep and remove to a distance 5,000 metres away from site	188	m <sup>3</sup>	250.00	47,000.00
<b><u>FILLING</u></b>					
C	Provide for laterite filling to make up level to an average depth of 200mm, including watering and compacting with a 10-ton roller in layers of 150mm thick	250	m <sup>3</sup>	3,000.00	750,000.00
D	100mm thick well-consolidated bed of hardcore filling to receive concrete bed (measured seperately)	125	m <sup>3</sup>	4,000.00	500,000.00
<b><u>Other Concrete Work</u></b>					
<b><u>Plain In-situ Concrete</u></b>					
<b><u>Concrete ( 1:3:6-18mm aggregate) in:</u></b>					
E	100mm thick base for kerbs	5	m <sup>3</sup>	75,000.00	375,000.00
F	Haunching around vertical sides of kerbs	6	m <sup>3</sup>	75,000.00	450,000.00
G	150 x 450mm high precast concrete kerbs	75	m	3,000.00	225,000.00
<b><u>Reinforced In-situ Concrete</u></b>					
<b><u>Concrete (1:2:4-20mm aggregate) developing minimum 25N/mm2 work strength at 28 days in:</u></b>					
H	100mm thick ground floor slab cast in bays of 3,000 x 3,000mm	125	m <sup>3</sup>	85,000.00	10,625,000.00
<b><u>Reinforcement</u></b>					
<b><u>BRC Mesh Fabric Reinforcement Type A393 in</u></b>					
J	Ground floor slab	1,250	m <sup>2</sup>	800.00	1,000,000.00
<b><u>Formwork</u></b>					
<b><u>Sawn Formwork to:</u></b>					
K	Edges of slab, 200mm wide	239	m	700.00	167,300.00
L	Vertical sides of kerbs base, 100mm wide	208	m	700.00	145,600.00
M	Precast Concrete (1:2:4) Bollards size 750x400x600mm highplaced opposite side of Admin/Mini Mart building	20	Nr	10,000.00	200,000.00
<b>DRIVE WAYS AND PAVED AREAS TO SUMMARY</b>					<b><u>14,672,400.00</u></b>

S/NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT (N)
<b><u>Element Nr. 6</u></b>					
<b><u>DRAINAGE</u></b>					

**Foul Drainage**

**Construct the following in accordance with Engineers detail drawings**

A	Soakway pit size 1.8 x 1.8 x 2.20m deep with a volume capacity of 2.11m3 in 225mm blockwork laid in honeycomb arrangement including reinforced concrete columns, beams and cover slab	1	Nr	225,000.00	225,000.00
B	Septic tank size 1.2 x 1.8 x 2.20mm deep with a volume capacity of 2.85m3 in 150mm thick reinforcement including reinforced concrete base and 225mm solid block wall rendered internally including 100mm thick reinforced concrete baffle wall and cover slab	1	Nr	200,000.00	200,000.00
C	Man hole 450 x 450 x 915mm deep, internally	2	Nr	25,000.00	50,000.00
D	Supply, cut, solvent, join and lay 100mm diameter upvc pipe	61	m	750.00	45,750.00

**STORM WATER DRAINAGE**

E	Allow for the construction of covered storm water drainage in reinforced concrete overall size, 850mm wide x 750mm average depth with 650 x 450mm reinforce precast cover slabs	37	m	55,000.00	2,035,000.00
---	---	----	---	-----------	--------------

**Metal Grille**

A	Provide and fix fabricated metal Grille overall size 1600 x 1160mm wide made up of 100x100x10mm tick equal angle iron as main frame and 21 nr, 25mm diameter high yield bar vertically to equal angle frame welded at 75mm centres and 2 nr, 25mm diameter bar horizontally at 450mm centres (only nigerian foundries drainage covers)		Nr	45,000.00	-
---	---	--	----	-----------	---

**DRAINAGE TO SUMMARY**

**2,555,750.00**

**SUMMARY**

**EXTERNAL WORKS**

DRIVEWAYS, PARKINGS AND PAVED AREAS	14,672,400.00
-------------------------------------	---------------

DRAINAGE	2,555,750.00
----------	--------------

<b>EXTERNAL WORKS TO EXECUTIVE SUMMARY</b>	<b>17,228,150.00</b>
--	----------------------









**BILL NO. 3 FENCE****BLOCKWORK FENCE****Excavation**

A	Excavate trench for Foundation maximum depth not exceeding 1.50 meter deep starting from ground level	75	m <sup>3</sup>	700.00	52,500.00
B	Excavation Pits for column bases depth not exceeding 1.50 meters deep from ground level	1	m <sup>3</sup>	1,000.00	1,000.00
C	Remove surplus excavated material from site	35	m <sup>3</sup>	500.00	17,500.00

**Filling to Excavation**

D	Back fill selected material around foundation in layers not exceeding 150mm thick well levelled and compacted	31	m <sup>3</sup>	500.00	15,500.00
---	---	----	----------------	--------	-----------

**Plain insitu Concrete (1:3:6 -30mm aggregate) in:**

E	Foundation not exceeding 200mm thick poured against faces of excavation in trenches	19	m <sup>3</sup>	75,000.00	1,425,000.00
F	330x50mm thick concrete Capping including formwork	4	m <sup>3</sup>	75,000.00	300,000.00

**Reinforced insitu concrete.**

Vibrated reinforced insitu concrete (1:2:4 20mm aggregates) filled into formwork;well packed around reinforcement.  
(formwork and reinforcement (measured separately)

H	Ground beam	2	m <sup>3</sup>	85,000.00	170,000.00
---	-------------	---	----------------	-----------	------------

**Sawn formwork to:**

K	Vertical Sides of wall	151	M2	4,000.00	604,000.00
L	Battered surfaces of wall	123	M2	4,000.00	492,000.00

**Reinforcement**

High tensile steel bar reinforcement to BS 4449 in column bases, starters and columns ( Provisional)

M	10 - 12mm diameter bars, straight and bent;	3.50	ton	1,100,000.00	3,850,000.00
---	---	------	-----	--------------	--------------

**To Collection****6,927,500.00**

Sanderete hollow blockwork in block size  
450 x 225 x 225mm high built in cement  
mortar (1:3)

A	230mm thick walls	205	m <sup>2</sup>	8,000.00	1,640,000.00
---	-------------------	-----	----------------	----------	--------------

**Piers**

B	450x450mm thick filled solid in Piers	18	m <sup>2</sup>	20,000.00	360,000.00
---	---------------------------------------	----	----------------	-----------	------------

**Metal work**

C	Supply and fix Double leaf single swing fabricated steel metal gate size 12000x1000mm high fixed to concrete columns	2	nr	175,000.00	350,000.00
---	--	---	----	------------	------------

**Metal grille**

D	Provide and fix fabricated metal grille size 2550x750mm high made up of 25mm hollow pipe in accordance with the Architects drawing	22	nr	25,000.00	550,000.00
---	--	----	----	-----------	------------

**Finishings**

**Cement and sand**

E	12mm thick cement and sand render finish fair and smooth on surface of walls	205	m <sup>2</sup>	2,000.00	410,000.00
---	--	-----	----------------	----------	------------

F	Ditto in Piers	18	m <sup>2</sup>	2,000.00	36,000.00
---	----------------	----	----------------	----------	-----------

**Painting**

G	Prepare and apply one undercoat and two finishing coats of emulsion paint on new rendering	205	m <sup>2</sup>	1,900.00	389,500.00
---	--	-----	----------------	----------	------------

H	Ditto in Piers	18	m <sup>2</sup>	1,900.00	34,200.00
---	----------------	----	----------------	----------	-----------

To Collection

N	<b>3,769,700.00</b>
---	---------------------

Collections

Page 1	6,927,500.00
--------	--------------

page 2	3,769,700.00
--------	--------------

**BLOCKWORK FENCE**

**Carried To Main Summary**

N	<b>10,697,200.00</b>
---	----------------------





























## **GENERAL SUMMARY**

**PROPOSED STANDARD FILLING STATION**  
**FOR NNPC RETAIL LIMITED**

BILL NO. 1. PRELIMINARIES		22,625,000.00
BILL NO. 2 CANOPY & CONTENERISED FUEL STATION		214,206,000.00
BILL NO. 3 EXTERNAL WORKS		17,228,150.00
BILL NO. 4 FENCE		10,697,200.00
BILL NO. 5 GENERATOR HOUSE		4,917,010.00
BILL NO. 6 EXTERNAL SERVICES		24,216,200.00
SUB - TOTAL		<hr/> 293,889,560.00
<b><u>ADD</u></b>		
I. VAT (7.5%)		22,041,717.00
II. CONTINGENCIES		
Allow the Contingency Sum of N2,000,000.00 to be expended either in part or whole as directed by the Supervisor	Sum	2,000,000.00
ESTIMATED TOTAL COST		<hr/> <b>N 317,931,277.00</b> <hr/>

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<b><u>BILL NO. 5 GENERATOR HOUSE</u></b>					
<b><u>SUBSTRUCTURE</u></b>					
<b><u>D: GROUND WORK</u></b>					
<b><u>D20: EXCAVATING AND FILLING</u></b>					
<b><u>Excavating</u></b>					
Top soil for preservation					
A	150mm average depth	9	m <sup>2</sup>	150.00	1,350.00
<b><u>Pits</u></b>					
B	1.2m maximum depth; from below reduced level	4	m <sup>3</sup>	1,200.00	4,800.00
<b><u>Trenches exceeding 300 wide</u></b>					
C	1.2m maximum depth; from 150mm below existing ground level	8	m <sup>3</sup>	1,000.00	8,000.00
D					
<b><u>Surface Treatment</u></b>					
E	Level and compact bottom of excavations	9	m <sup>2</sup>	100.00	900.00
F	Anti-termite treatment on surfaces of excavations	9	m <sup>2</sup>	200.00	1,800.00
<b><u>Disposal</u></b>					
Excavated material					
G	off site	11	m <sup>3</sup>	500.00	5,500.00
<b>Carried to Collection</b>				<b>N</b>	<b>22,350.00</b>

**Substructure Cont'd**Excavated material**Filling to excavations**

A	over 250mm average thick; arising from excavations; depositing in layers 150mm maximum thickness	6	m <sup>3</sup>	300.00	1,800.00
---	--	---	----------------	--------	----------

Selected excavated material**Filling to make up levels**

B	over 300mm average thick; obtained off site; depositing in layers 150mm maximum thickness	7	m <sup>3</sup>	4,000.00	28,000.00
---	---	---	----------------	----------	-----------

Hardcore**Filling to make up levels**

C	not exceeding 300mm thick	4	m <sup>3</sup>	5,000.00	20,000.00
---	---------------------------	---	----------------	----------	-----------

**E: IN-SITU CONCRETE/LARGE PRECAST CONCRETE**E10: IN-SITU CONCRETEPlain; Concrete (1:3:6-all in aggregate)**Blinding bed**

D	generally; poured on or against earth or unblinded hardcore	1	m <sup>3</sup>	75,000.00	75,000.00
---	---	---	----------------	-----------	-----------

Plain; Concrete   Grade 25;   developing   minimum  
30N/mm<sup>2</sup>   work   strength   in   28   days

**Foundations**

E	generally	2	m <sup>3</sup>	85,000.00	170,000.00
---	-----------	---	----------------	-----------	------------

**Ramp**

F	generally	1	m <sup>3</sup>	85,000.00	85,000.00
---	-----------	---	----------------	-----------	-----------

Reinforced;   Concrete   Grade 25;   developing   minimum  
30N/mm<sup>2</sup>   work   strength   in   28   days

**Beds**

G	not exceeding 150mm thick	4	m <sup>3</sup>	85,000.00	340,000.00
H	Generator Platform	1	m <sup>3</sup>	85,000.00	85,000.00

**Carried to Collection****N****804,800.00**

**Substructure Cont'd****Columns Base**

A	generally	1.5	m <sup>3</sup>	85,000.00	127,500.00
---	-----------	-----	----------------	-----------	------------

**Column**

B	generally	0.38	m <sup>3</sup>	85,000.00	32,300.00
---	-----------	------	----------------	-----------	-----------

**Ground beam**

	Generally	1.00	m <sup>3</sup>	85,000.00	85,000.00
--	-----------	------	----------------	-----------	-----------

**E: 20 FORMWORK FOR IN-SITU CONCRETE****Formwork; Sawn formwork****Sides and edges of beds**

C	not exceeding 250mm high	18	m	1,800.00	32,400.00
---	--------------------------	----	---	----------	-----------

**Sides and edges of Generator Platform**

D	100 to 250mm high	16	m <sup>2</sup>	4,000.00	64,000.00
---	-------------------	----	----------------	----------	-----------

**Column bases**

E	generally	4	m <sup>2</sup>	4,000.00	16,000.00
---	-----------	---	----------------	----------	-----------

**Isolated columns**

F	rectangular	1.5	m <sup>2</sup>	4,000.00	6,000.00
---	-------------	-----	----------------	----------	----------

**Ground beam**

	Generally	2	m <sup>2</sup>	4,000.00	8,000.00
--	-----------	---	----------------	----------	----------

**E: 30 REINFORCEMENT FOR IN-SITU CONCRETE****Reinforcement; High yield reinforcement to BS 4449 grade 410****Straight and bent bars**

G	10 - 16mm diameter bar	0.66	Ton	1,100,000.00	726,000.00
---	------------------------	------	-----	--------------	------------

Reference A142T, weight 2.22kg/m<sup>2</sup> (measured net) with minimum 300mm side laps; 300mm end lps

H	1 - layer, laid generally	14	m <sup>2</sup>	1,000.00	14,000.00
---	---------------------------	----	----------------	----------	-----------

**Carried to Collection****N****1,111,200.00**

**Substructure Cont'd****F: MASONRY****F10: BRICK/BLOCK WALLING**

Blockwork; Hollow sandcrete blockwork in cement  
mortar (1:6); filled solid with concrete grade 25

Walls

A 230mm thick	23	m <sup>2</sup>	8,000.00	184,000.00
---------------	----	----------------	----------	------------

**Clear polyethene sheet damp-proof membrane.**

Polythene sheeting; 0.26mm single layer laid on unblinded

B hardcore to receive concrete	32	m <sup>2</sup>	1450.00	46,400.00
--------------------------------	----	----------------	---------	-----------

Carried to Collection Below

**N**

**230,400.00**

**Collections**

Page No. 1	22,350.00
------------	-----------

Page No. 2	804,800.00
------------	------------

Page No. 3	1,111,200.00
------------	--------------

Page No. 4	230,400.00
------------	------------

**SUBSTRUCTURE:**  
**Carried to Summary**

**N**

**2,168,750.00**

**FRAME****E: IN-SITU CONCRETE/LARGE PRECAST CONCRETE****E10: IN-SITU CONCRETE**

Reinforced: Concrete Grade 25; developing minimum  
 30N/mm<sup>2</sup> work strength in 28 days

**Columns**

A	generally	1	m <sup>3</sup>	85,000.00	85,000.00
---	-----------	---	----------------	-----------	-----------

**E20: FORMWORK FOR IN SITU CONCRETE**

Formwork; Sawn formwork

**columns**

B	rectangular	8	m <sup>2</sup>	4,000.00	32,000.00
---	-------------	---	----------------	----------	-----------

**E: 30 REINFORCEMENT FOR IN SITU CONCRETE**

Reinforcement; High yield reinforcement to BS 4449  
 grade 410

**Straight and bent bars**

C	8 - 16mm diameter bar	0.17	Ton	1,100,000.00	187,000.00
---	-----------------------	------	-----	--------------	------------

**FRAME:**  
**Carried to Summary**

**N****304,000.00**



**ROOF****E: IN-SITU CONCRETE/LARGE PRECAST CONCRETE****E10: IN-SITU CONCRETE**

**Reinforced; 30N/mm2    Concrete work    Grade 25; strength    25; developing in    28    minimum days**

**roof beams**

A	generally including gutters	2	m <sup>3</sup>	85,000.00	170,000.00
---	-----------------------------	---	----------------	-----------	------------

**Roof slab**

B	150mm thick roof slab	3	m <sup>3</sup>	85,000.00	255,000.00
---	-----------------------	---	----------------	-----------	------------

**Upstand beam**

C	Generally	1	m <sup>3</sup>	85,000.00	85,000.00
---	-----------	---	----------------	-----------	-----------

**Parapet wall**

D	Generally	1	m <sup>3</sup>	85,000.00	85,000.00
---	-----------	---	----------------	-----------	-----------

**E: 20 FORMWORK FOR IN SITU CONCRETE****Formwork; Sawn formwork**

E	Sides of roof beams	13	m <sup>2</sup>	4,000.00	52,000.00
---	---------------------	----	----------------	----------	-----------

F	Sides of Parapet walls	16	m <sup>2</sup>	4,000.00	64,000.00
---	------------------------	----	----------------	----------	-----------

**E: 30 REINFORCEMENT FOR IN-SITU CONCRETE**

**Reinforcement; High yield reinforcement to BS 4449 grade 410**

**Straight and bent bars**

G	10 - 16mm diameter bar	0.50	Ton	1,100,000.00	550,000.00
---	------------------------	------	-----	--------------	------------

**J41: Built up felt roof Covering**

**4mm thick single layer 'Paralon' NT4 water proof membrane on:**

H	On cement sand bed falling towards drain points	21	m <sup>2</sup>	1,450.00	30,450.00
---	---	----	----------------	----------	-----------

D	Parapet wall	19	m <sup>2</sup>	4,000.00	76,000.00
---	--------------	----	----------------	----------	-----------

**Waterproof cement and sand (1:3) bed**

K	25mm thick bed	21	m <sup>2</sup>	2,000.00	42,000.00
---	----------------	----	----------------	----------	-----------

L	15mm thick vertical sides of Parapet walls internally	19	m <sup>2</sup>	1,850.00	35,150.00
---	---	----	----------------	----------	-----------

**ROOF:****Carried to Summary****N****1,444,600.00**

**EXTERNAL AND INTERNAL WALLS****F: MASONRY****F10: BRICK/BLOCK WALLING****Blockwork; Perforated block work to Architect specification**

Walls

A	230mm thick	28	m <sup>2</sup>	8,000.00	224,000.00
---	-------------	----	----------------	----------	------------

**Screen walls**

B	230mm thick Screen walls	12	m <sup>2</sup>	8,000.00	96,000.00
---	--------------------------	----	----------------	----------	-----------

**EXTERNAL AND INTERNAL WALLS:****Carried to Summary****N****320,000.00**

## **WINDOWS AND DOORS**

### **L: WINDOWS/DOORS/STAIRS**

#### **L11:METAL WINDOWS/ROOFLIGHTS/SCREENS/LOUVRES**

#### **L21: METAL DOORS/SHUTTERS/HATCHES**

Purpose Made Steel Heavy duty Steel Grille door to Architect's detail  
'fixed in accordance with manufacturers instructions; complete with  
ironmongery; factory applied finish

#### **Steel Grille Door**

B	Metal Grille door size 1390x2400mm high	1	nr	200,000.00	200,000.00
---	---	---	----	------------	------------

## **WINDOWS AND DOORS:**

### **Carried to Summary**

N

200,000.00

**WALL FINISHES****H: CLADDING****M20: PLASTERED/RENDERED/ROUGHCAST COATINGS****Render; Cement and sand (1:3); external walls**

A	over 300mm wide; to concrete or blockwork	44	m <sup>2</sup>	2000.00	88,000.00
B	not exceeding 300mm wide; to concrete or blockwork	16	m	800.00	12,800.00

**M20: PLASTERED/RENDERED/ROUGHCAST COATINGS****Render; Cement and sand (1:3); Internal walls**

C	over 300mm wide; to concrete or blockwork	35	m <sup>2</sup>	2000.00	70,000.00
D	not exceeding 300mm wide; to concrete or blockwork	8	m	800.00	6,400.00

**M60: PAINTING/CLEAR FINISHING****Painting render; Prepare, prime and apply two coats of approved Emulsion paint: Externally**

General surfaces;

E	over 300mm wide	44	m <sup>2</sup>	1850.00	81,400.00
F	not exceeding 300mm wide; to concrete or blockwork	8	m	800.00	6,400.00

**Painting render; Prepare, prime and apply two coats of approved Emulsion paint: Internally**

General surfaces

G	over 300mm wide	35	m <sup>2</sup>	1,850.00	64,750.00
H	not exceeding 300mm wide; to concrete or blockwork	16	m	800.00	12,800.00

**WALL FINISHES:**  
**Carried to Summary****N****342,550.00**

**FLOOR FINISHES****J: WATERPROOFING****J10: SPECIALIST WATERPROOF RENDERING****Internal Works**Cement and sand (1:3) screeded paving**Floor**

A	50mm thick - to falls and crossfalls and to slopes not exceeding 15 degrees from the horizontal; to concrete	22	m <sup>2</sup>	2,000.00	44,000.00
---	--	----	----------------	----------	-----------

**External Works**Cement and sand (1:3) screeded paving**Floor**

B	50mm thick - to falls and crossfalls and to slopes not exceeding 15 degrees from the horizontal; to concrete	16	m <sup>2</sup>	2,000.00	32,000.00
---	--	----	----------------	----------	-----------

**FLOOR FINISHES:**  
**Carried to Summary****N****76,000.00**

**ELECTRICAL INSTALLATION****CABLES (All Provisional)**

Supply and Install NOCACCO or approved equivalent in concealed

A	1.5mm2 single PVC copper cable	18	m	110.00	1,980.00
B	2.5mm2 single PVC copper cable	22	m	160.00	3,520.00
C	4.0mm2 single PVC copper cable	15	m	270.00	4,050.00
D	6.0mm2 single PVC copper cable	10	m	256.00	2,560.00

**LIGHTING FITTINGS AND FAN**

Supply, install the following (Thorn,Bennet/Clipsal) lighting fittings:

E	1x11W LED lighting fitting Model EPS-R06D	8	Nr	3,500.00	28,000.00
F	Semi-circular wall luminair with Die cast	6	nr	2,800.00	16,800.00

**SWITCHES & SOCKET OUTLETS**

Supply and Install MK or approved equivalent elegant range the

G	6A 1- way, 1- gang switch at 1500mm above finished floor level	1	Nr	500.00	500.00
H	6A 2- way, 1- gang switch at 1500mm above finished floor level	1	Nr	500.00	500.00
J	2 x 13A switched socket outlet at 300mm above finished floor level	2	Nr	1,600.00	3,200.00

**ELECTRICAL INSTALLATION****TO SUMMARY****SUMMARY****61,110.00****SUBSTRUCTURE**

FRAME	304,000.00
ROOFING	1,444,600.00
EXTERNAL AND INTERNAL WALLS	320,000.00
WINDOWS AND DOORS	200,000.00
WALL FINISHES	342,550.00
FLOOR FINISHES	76,000.00
ELECTRICAL INSTALLATION	61,110.00

**GENERATOR HOUSE**

**Carried to General Summary**

N 4,917,010.00

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
<b>BILL NO. 9 EXTERNAL SERVICES</b>					
<b><u>EXTERNAL SERVICES (MECHANICAL INSTALLATIONS)</u></b>					
<b><u>S. 10 COLD WATER</u></b>					
<b><u>BOREHOLE</u></b>					
A	Conduct Geophysical Survey to locate suitable bore hole site, Mobilize, drill, develop and test borehole including installation of cast screen, approximate depth 120M deep, complete with adequately rated Lowara or other equal and approved submersible pump with 15kw motor	1	Nr		1,500,000.00
<b>SURFACE STORAGE TANKS</b>					
<b>Construct the following for pressed steel water storage tanks to structural engineer's details.(Braithwaite or approved equal)</b>					
<b>(Ground water tank)</b>					
B	Sectionalised pressed steel water tank vol: 18,000 ltrs bottom :6mm thickness side:5mm thickness top:4mm thickness Finished with anti-corrossive paint. 2Nos 32Ø foot valves for water booster pumps 2nos float switches for pumps 2no 50Ø vent pipe 2No 50Ø inlet point 1No 63Ø waste drain valve including all necessary Plinth	0	Nr		
<b>Overhead Tank</b>					
<b>Supply, and erect sectional pressed steel tank complete with all accessories, on and including 9 meters Structural steel Tower and reinforced concrete footina to structural enginer's details</b>					
C	Sectionalised pressed steel water tank dimmension;(L)3.0mtrs x(B)2.0mtrs x (H)2.0mtrs vol: 12m3 bottom :6mm thickness side:5mm thickness top:4mm thickness Finished with anti-corrossive paint. 2Nos 4Ø foot valves for water booster pumps 2nos float switches for pumps 2no 50Ø vent pipe 2No 50Ø inlet point 1No 63Ø waste drain valve	1	Nr		1,500,000.00
<b>Carried to Collection</b>				<b>N</b>	<b>3,000,000.00</b>



A	Cold Water Transfer pump, Electric/Electric (Bristol, or approved equal) Pump rating :2KW, 2850Rpm, 50Hz with pressure tank, pressure gauge, stainless steel impeller & pump body with flow rate :2.77Ltrs/sec. (1 duty & 1 standby basis)	2	Nr	120,000.00	240,000.00
---	--	---	----	------------	------------

**FIRE FIGHTING WATER PIPES AND PUMPS****Underground water Tank for Fire fighting**

Sectionalised pressed steel water tank

vol: 10,000 ltrs

bottom :6mm thickness

side:5mm thickness

top:4mm thickness and all necessary accessories

Finished with anti-corrosive paint.

1	Nr	1,000,000.00	1,000,000.00
---	----	--------------	--------------

B	Supply, instal and commission the following for fire pump pak for Hose reel system				
C	Fire hose reel pump, Electric/Electric (Bristol or approved equal) Pump rating : 4KW, 380volts 2850Rpm, 50Hz with stainless steel impeller & pump body with flow rate : 28Ltrs/sec. (1 duty & 1 standby basis) pressure tank , switches and guages as required.	2	Nr	600,000.00	1,200,000.00
D	Fire hose reel with and including hose reel cabinet	1	Nr	20,000.00	20,000.00

**CIVIL WORKS(inspection chambers)**

E	Excavate for tank pits commencing at stripped level maximum depth not exceeding 4.00m	28	m <sup>3</sup>	750.00	21,000.00
F	Excavate ditto, for working space as before described	24	m <sup>3</sup>	1,200.00	28,800.00
G	Excavating and backfilling 400mmx 600mm deep trench with special backfilling materials for fire hose reel /cold water pipe route	180	m	600.00	108,000.00

**Disposal**

H	Remove surplus excavated material from site	48	m <sup>3</sup>	250.00	12,000.00
---	---	----	----------------	--------	-----------

**Backfilling**

C	Laterite filling around excavated working area	34	m <sup>3</sup>	300.00	10,200.00
---	--	----	----------------	--------	-----------

**To Collection****2,640,000.00****Surface Treatment**

A	Level and compact bottom of pit excavation	18	m <sup>2</sup>	200.00	3,600.00
B	"Dielrex" anti-termite solution applied to surfaces of pipes	62	m <sup>2</sup>	300.00	18,600.00

**Hardcore filling**

C	150mm thick closely packed Hardcore filling to receive concrete	42	m <sup>3</sup>	5,000.00	210,000.00
---	---	----	----------------	----------	------------

**Other Concrete Work****Plain In-situ Concrete**

D	Concrete (1:4:8) in blinding to pit trench, 50mm thick	1	m <sup>3</sup>	26,000.00	26,000.00
---	--	---	----------------	-----------	-----------

**Plain In-situ Concrete Cont'd**

E	150mm thick plain insitu concrete in Tank base	3	m <sup>3</sup>	75,000.00	225,000.00
---	--	---	----------------	-----------	------------

**Reinforced In-situ Concrete****Concrete (1:2:4 - 20mm aggregate) developing minimum 25/mm<sup>2</sup> work strength at 28 days**

F	Column and column bases	2	m <sup>3</sup>	75,000.00	150,000.00
G	Beams	1	m <sup>3</sup>	75,000.00	75,000.00

**Reinforcement****High Yield Steel Bar Reinforcement to B.S. 4449 in:**

H	Tank Seat	0.45	ton	1,100,000.00	495,000.00
---	-----------	------	-----	--------------	------------

**Fabric Reinforcement**

J	Reference A193T, weight 3.02kg/m <sup>2</sup> (measured net) with minimum 300mm side laps; 300mm end lsps	18	m <sup>2</sup>	1,000.00	18,000.00
---	---	----	----------------	----------	-----------

**To collection****1,221,200.00****Sawn Formwork to:**

A	Vertical sides of columns	21	m <sup>2</sup>	4,000.00	84,000.00
B	Sides of Beams	9	m <sup>2</sup>	4,000.00	36,000.00

**Pre-cast concrete**

C	Pre-cast reinforced concrete slabs size 2520x750x125mm thick with 12mm diameter high yield bar reinforcement at 200mm centres both ways
---	---

including all the necessary formwork	6	nr	20,000.00	120,000.00
--------------------------------------	---	----	-----------	------------

**F10: BLOCKWALLING****Sandcrete hollow blockwork bedded and jointed in cement and sand ( 1: 4) mortar****Walls; filled solid with in-situ concrete grade 25 and reinforced with 12mm diameter bars**

D	230mm thick; stretcher bond with and including 2nr 12mm diameter high yield reinforcement bars in each hole	28	m <sup>2</sup>	8,000.00	224,000.00
---	---	----	----------------	----------	------------

**P10: SUNDRY INSULATION/PROOFING WORK/ FIRE STOPS**

E	Polythene sheeting; 0.26mm single layer laid on unblinded hardcore to receive concrete	28	m <sup>2</sup>	500.00	14,000.00
---	--	----	----------------	--------	-----------

**Felt work**

F	Provide and fix Paralon NT4 Felt	38	m <sup>2</sup>	2,500.00	95,000.00
---	----------------------------------	----	----------------	----------	-----------

**Rendering**

G	15mm thick rendering with water resistant cement and sand internally	36	m <sup>2</sup>	700.00	25,200.00
---	--	----	----------------	--------	-----------

<b>To Collection</b>				<b>598,200.00</b>
----------------------	--	--	--	-------------------

**EXTERNAL SOIL & RAIN WATER PIPE**

Supply lay and commission the following UPVC @ 6bar for soil waste and rain water pipe

**PIPES**

A	65mm Ø UPVC pipes	180	m	650.00	117,000.00
B	32mm Ø UPVC pipes	25	m	400.00	10,000.00

**To Collection Below****127,000.00**Collections

Page No. 1	3,000,000.00
Page No. 2	2,640,000.00
Page No. 3	1,221,200.00
Page No. 4	598,200.00
Page No. 5	127,000.00

**EXTERNAL MECHANICAL INSTALLATION****Carried to Summary****N****7,586,400.00****EXTERNAL WORKS (ELECTRICAL INSTALLATION)****Relocation of Existing High Tension overhead supply****POWER SUPPLY****A** Allow for PHCN statutory fees to include the followings

Capital contribution

Statutory fees

Survey and inspection fee

Testing fee

Commissioning fee

Skipper meter/connection fee

Lot

400,000.00

**OVERHEAD SUPPLY****C**

Allow for Overhead Aluminium conductor network complete with reinforced concrete sectional H.T pole and its associated 11kv gang isolator ,lightning arrestor. Etc.

Lot

500,000.00

**11/0.415KV SUBSTATION****D** Supply,install and commission the followings:

Oil immersed, three phase 100KVA,80KW, 33/0.415kV step Down distribution **transformer** suitable for

cooling system with conservator vector group Dyn  
11 and equipped with Dehydrating breather  
,thermometer, pressure relief valve and cable  
termination box 100KVA 33/0.415KV Step down

1 Nr 2,500,000.00

### STANDBY POWER SUPPLY/CABLING

#### Generators

E	Supply, install and Commissioning of 30KVA, 415/240V, 50Hz, 3PH , 1500RPM Perkins or Cummins engine or approved equal soundproof diesel generator (1 duty and 1 Standby) complete with all other necessary installation (USUALLY ITS 65KVA,cummins quote is at N5M/nr)	1	nr	6,000,000.00	6,000,000.00
---	---	---	----	--------------	--------------

#### Cables

F	4 core x95mm <sup>2</sup> pvc/swa/pvc copper cable	55	m	15,000.00	825,000.00
G	4core x25mm <sup>2</sup> pvc/swa/pvc copper cable	48	m	6,500.00	312,000.00

#### To Collection

10,537,000.00

#### Power Supply Cont'd

A	3core x4mm <sup>2</sup> pvc/swa/pvc copper cable	78	m	2,000.00	156,000.00
B	150mm dia. Upvc pipe sleeve	32	m	900.00	28,800.00
C	100mm dia. Upvc pipe sleeve	40	m	650.00	26,000.00

#### EXTERNAL LIGHTING

Supply and install and commission the following for external lighting purposes

#### Controls & Fitting

D	60A TP&N ,4-ways lighting control kiosk with45A TP as incomer and 4Nos 20A TPN as outgoings complete with photocell switch and Manual over-ride switch.(HAVELLS ABB,Mane or approved equal)	1	Nr	250,000.00	250,000.00
E	1x100w LED pole mounted external lighting fitting complete with pole mounting bracket for single lantern IS2BIS mounted on 6m high pole measured separately THORN CAT. HPS. T250WSG TBN1 250.	20	Nr	30,000.00	600,000.00

F	Pre Fabricated approved TOILET booths	2	Nr	1,500,000.00	3,000,000.00
---	---------------------------------------	---	----	--------------	--------------

<b>To Collection</b>	<b>4,060,800.00</b>
----------------------	---------------------

**Controls & Fitting Cont'd**

A	6 meters high aluminium pole complete with brackets	20	Nr	37,500.00	750,000.00
<u>Concrete work</u>					
B	450mmx600mm x 600mm reinforced concrete plinth with 50mm dia pvc sleeve to receive cable for connection to include formwork and excavation.	20	Nr	20,000.00	400,000.00
C	Dig and backfill 300mm x 450mm deep cable trench to receive external light cable	182	m	250.00	45,500.00
<u>Cables</u>					
D	6mm <sup>2</sup> 4-core pvc/swa/pvc copper cable	239	m	3,500.00	836,500.00

**To Collection Below****2,032,000.00**Collections

Page 6	10,537,000.00
Page 7	4,060,800.00
Page 8	2,032,000.00

**EXTERNAL ELECTRICAL INSTALLATION****Carried to Summary****N****16,629,800.00****SUMMARY**

EXTERNAL MECHANICAL INSTALLATIONS	7,586,400.00
-----------------------------------	--------------

EXTERNAL ELECTRICAL INSTALLATION	16,629,800.00
----------------------------------	---------------

<b><u>External Services Carried to General Summary</u></b>	<b>N</b>	<b>24,216,200.00</b>
--	----------	----------------------



## **PRELIMINARIES**

A	Allow the Sum of N2,000,000.00 ( <b>Two Million naira</b> ) only for mobilisation and demobilisation of All Plants and tools needed for the entire works.	Sum	2,000,000.00
B	Project Management & Supervision, Training of Staff on  Modus Operandi (\$12,500@ N1,650/USD) Vendor quote and Profile Attached.	SUM	20,625,000.00

**PRELIMINARIES AND GENERAL CLAUSES**  
**Carried To General Summary**

**N      22,625,000.00**