

**STATEMENT OF WORK FOR: REQUEST FOR QUOTATION: NO.**  
**RFQ/HCR/KAD/SUP/2021/003**

**CONSTRUCTION WORKS IN EL-FULA FIELD OFFICE, WEST**  
**KORDOFAN, SUDAN**

**Background:**

Recently UNHCR Field Office in Elf-Fula has finished the construction of room facilities and car parking shade in a rented plot neighbor to the office building and guesthouse. Although the open yard was under backfilling with the remaining and waste of the used building materials, but it found still need to upgrade the final finishing level using mobilized selected natural soil. Backfilling up to a reasonable level over the level of the front side road with achieve an excellent surface drainage of the annual rainwater and any possible leakage of water supply lines from the neighbor domestic areas.

Because of the nature of the mobilized soil which is found very sensitive to any water or humidity, then it is recommended to protect the compacted soil with a plane concrete layer. Maneuver of the vehicles in and out the parking area and the weight of any other heavy trucks is highly considered through the identification of the thickness of the plane concrete.

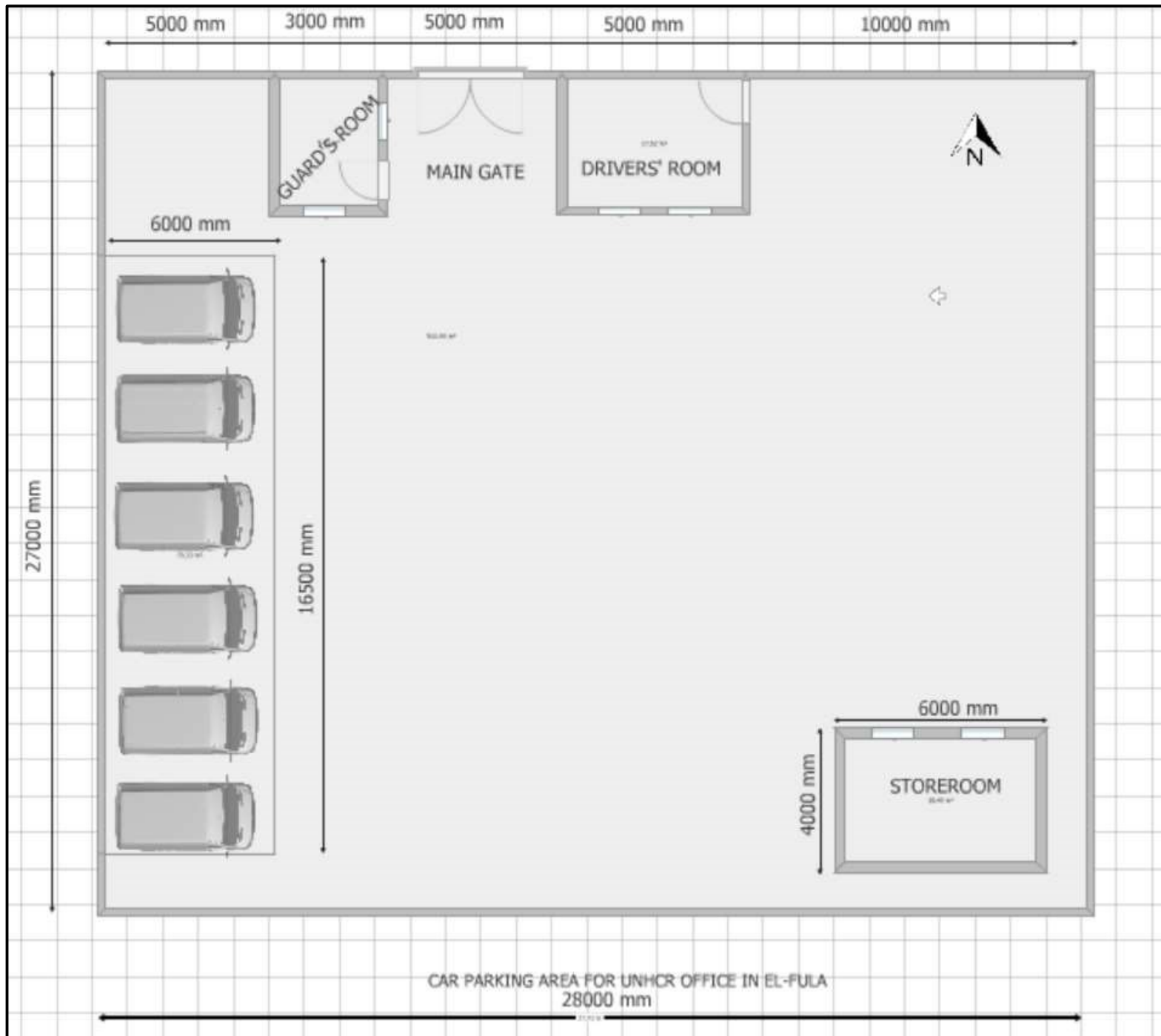
This SOW contains the following:

- Scope of work
- Designs/drawings (Layout of El-Fula New Parking Area and /Drawings-Drop Arm Barrier)
- Bill of Quantities (BOQ)

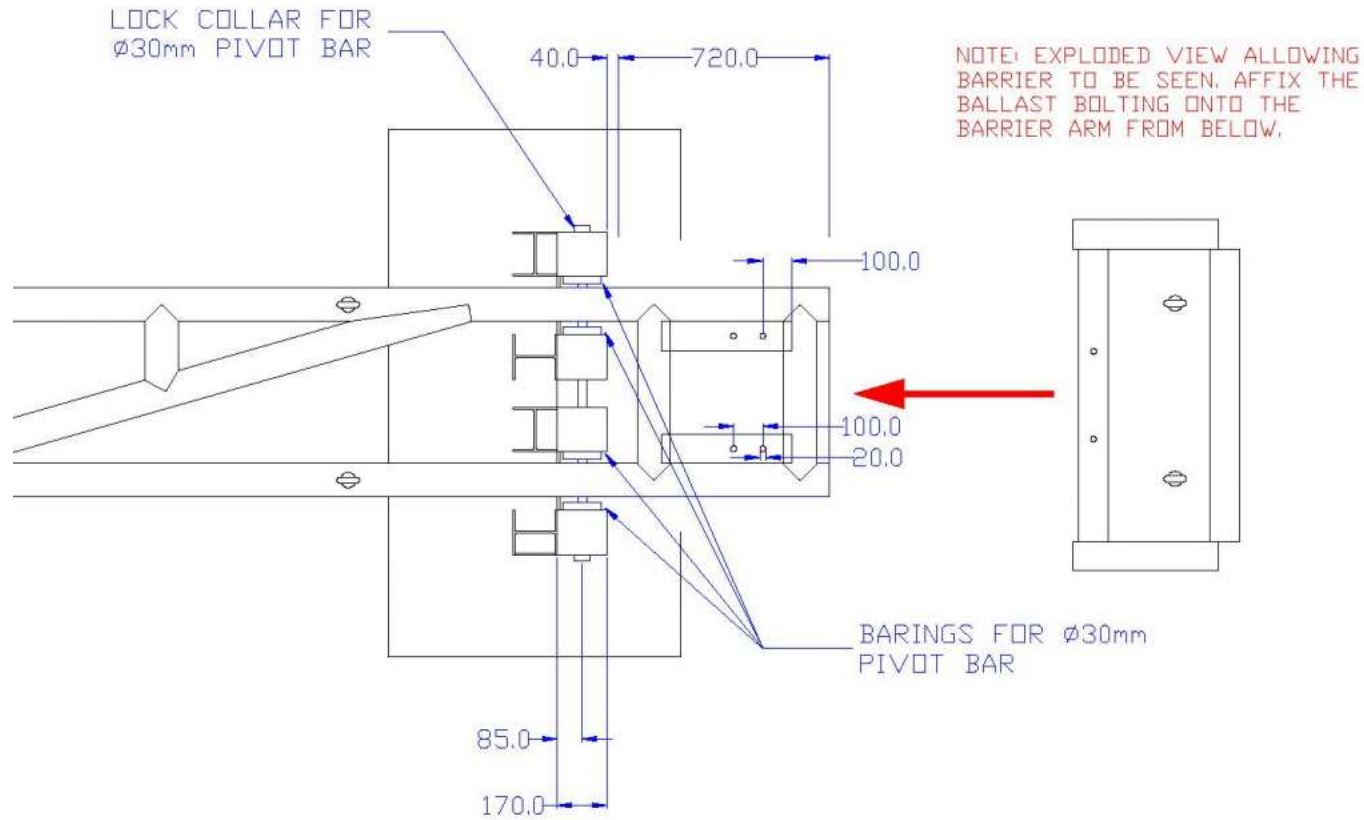
**Scope of Work:**

1. Site must be clean from the beginning free of any organic matters, remaining construction materials, dumped garbage, loose soil and any matters may affect the lifecycle of the work in the future.
2. Leveling of parking before the supply and mobilization of the backfilling soil. Placement of the mobilized soil into layers of a thickness does not exceed 25 cm in all cases. Work shall be taken with regards to keep a reasonable slope towards the side road (Northern elevation). Including cut and backfilling with the selective materials.
3. Moisture the backfilling layer with pure drinking water and must be kept for at least three hours to enable the saturation of water go deepest.

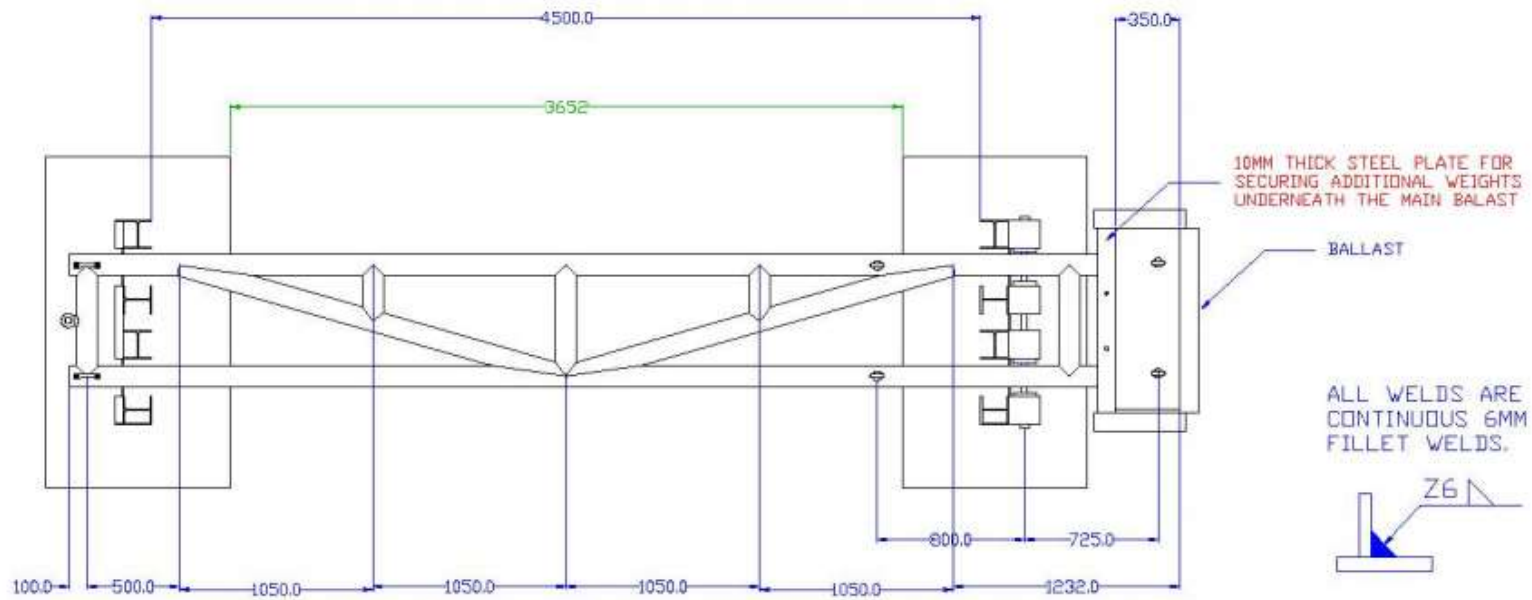
4. Compact mechanically the layers with at least 1.5 tons compactor. Work must be monitored and controlled by professional individual from the contractor side and as per instructions of the UNHCR engineer.
5. The final finishing surface must be kept free under the direct sunlight for at least one to two days for proper dryness and review.
6. Cast of plane cornet to provide solid and strong platform that can resist the movement of the vehicles. Quality control is highly required to assure that the platform is strong enough. Mix, placement, and curing shall be done in accordance to the standards.
7. Construction of two-unit toilets for ladies and gents to serve the parking area at the ground floor level made of brickwork and cement mortar, zinc sheeting roof, eastern seats, full effective sanitary network with proper connection to the existing network, water supply network, Wadoo taps with well finishing pf all works.
8. Construction of construction of two-unit toilets for ladies and gents at the upper floor level of the new office building to serve the new office rooms. Shall be made of one-brick-wall with reinforced concrete roof and with all the necessary finishing and water networks.
9. Supply, fabrication, and installation of drop arm boom barrier in front of the main gate. Barrier must be well engineered with high quality and finishing. All works shall be done in accordance to the provided drawings and instructions of the Engineer on site.
10. Supply and apply of wall painting of the existing walls (internally and externally) and the rooves of the office and guesthouse using acrylic water paint, first class quality to get proper finishing. Off-white color internally and UNHCR color externally as per instructions of UNHCR Engineer.
11. Installation, testing and commissioning of security lighting supplied by UNHCR including supply of 6 mm flexible cable 4 cords, cable pulling through electrical conduits one-inch diameter at least. Lights shall be fixed to 2-inch galvanized iron poles supplied by the contractor including installation, welding, and painting. Works shall cover all the necessary materials, accessories, testing and commissioning.



## Drop Arm Boom Barrier – Technical Drawings



UNHCR Field Office in El-Fula	Drawing Issued on: 05/08/08		<b>TOLERANCES</b> Unless otherwise stated 2 Dec Places ±0.1mm 1 Dec Place ±0.5mm 0 Dec Places ±1.0mm 3 Dec Places ±0.05mm 4 Dec Places ±0.02mm	Angles: A2 Drawn: ANTHONY BURTON Checked: Approved:	Material: SEE BILL OF MATERIALS Finish: PAINTED	3 2 1	Title: TOP ELEVATION (ZOOM) Project: MANUAL DROP ARM BARRIER	Drawing No: Boom Barrier - Parking Area
	Remove all burrs and sharp edges			Issue Date: 07/08/08	Issue Date: 07/08/08			

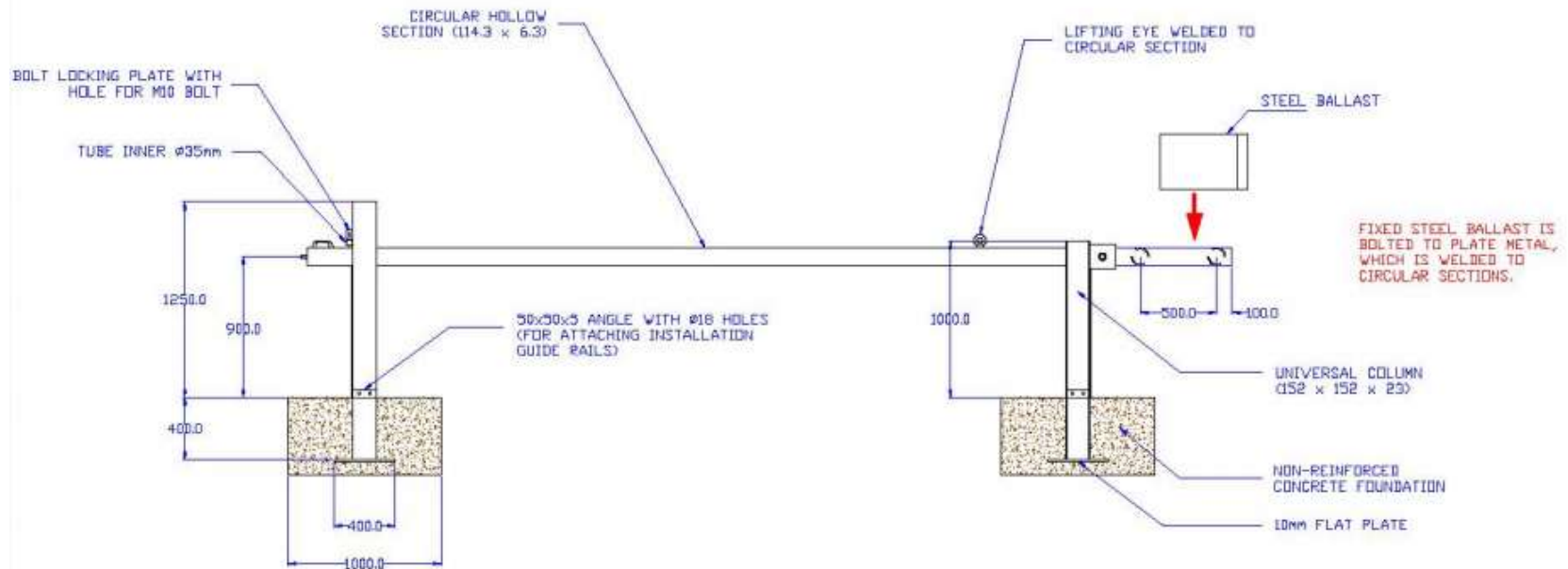


  
 IMPACT DIRECTION

NOTE: THE ORIENTATION OF THE UNIVERSAL COLUMNS MUST BE IN THE CONFIGURATION DRAWN RELATIVE TO THE IMPACT DIRECTION.

ALL SECTIONS ARE OF BS STANDARD GRADE STRUCTURAL STEEL, SUBJECT TO AVAILABILITY.

JNHCR Field Office - El-Fula	2009		<b>TOLERANCES</b> UNLESS OTHERWISE SPECIFIED 2 Dec Places 4th mm 1 Dec Place 4th Dec 0 - 3mm ± 0.2 mm 300 - 400 ± 0.3 mm Over 400 ± 0.5 mm	Original AD Drawn ANTHONY BURTON Checked Approved	Material SEE BILL OF MATERIALS Finish PAINTED	3 2 1 Date 07/04/08	Title TOP ELEVATION Project MANUAL DROP ARM BARRIER	Drawing No. Drop Arm Boom Barrier
	Drawing based on BS 5394 Dimensions in millimetres Remove all burrs and sharp edges			Approved	Date Date Name	Project MANUAL DROP ARM BARRIER	Drawing No. Drop Arm Boom Barrier	



UNHCR Field Office - El-Fula	2009	Third angle projection	<b>TOLERANCES</b> UNLESS OTHERWISE SPECIFIED 2 Dec Places 40.0mm 1 Dec Place 40.0mm 0 - 300 ± 0.1mm 300 - 1000 ± 0.1mm Over 1000 ± 0.2mm	Scale	A2	Material SEE BILL OF MATERIALS Finish PAINTED	3		Title FRONT ELEVATION Project MANUAL DROP ARM BARRIER	Drawing No. <b>Drop Arm Barrier</b>
	Drawing based on 001/018 Dimensions in millimetres Remove all burrs and sharp edges			Drawn	ANTHONY BURTON		2			
	Checked				1		07/01/09			
		Approved		Issue	Date	Rev/No.				

**Bill of Quantities (BOQ) for: RFQ/HCR/KAD/SUP/2021/003**

<b>Part 1: Earth Moving</b>			
<b>1.0</b>	<b>Description</b>	<b>Unit</b>	<b>QTY</b>
1.1	<p><b>Earth moving, backfilling and compaction:</b> For all the parking lot area: Make proper leveling with optimum slope of the existing plot area, including cut-off and backfilling where is needed, all area shall be well curing and compaction mechanically. Supply of selective natural backfilling soil to upgrade the existing level. Slope for surface drainage shall be 1.5%. Rain water outlets shall be opened each 4 meters along the Northern boundary wall. 4 inch dia. UPVC heavy duty pipes shall be fixed to access the surface streaming water outside the paring area. Final lowest level of the plot must be the Northern side. Rate shall include the supply of materials, machinery, water for moisturizing and compaction mechanically, site cleaning and workmanship. All the works shall be made in accordance to the standards as per instructions of UNCR Engineer.</p>	m <sup>2</sup>	660
1.2	<p><b>Plane Concrete:</b> supply of materials, mix mechanically and cast of plane concrete to cover all the floor area of the parking lot. Thickness of concrete shall be 15 cm with mis 1:3:6 (cement: sand: aggregate). Final finishing level shall be obtained with 1.5~2.0% slope. Expansion and construction joints of 2 cm width shall be made with plywood slides each 3 meters both ways. Final surface shall be hard texture but uniform. Contractor is responsible to continue moisture the casted concrete minimum 7 days 3 times per day.</p>	m <sup>2</sup>	660
1.3	<p><b>Concert Bases for the Sea Containers:</b> Supply of materials, mix mechanically and cast of plane concrete with steel mesh made of 10 mm steel bars two layers @ 10 cm c/c to make 50x50 cm x-section and the depth shall be determined on site but not less than 30 cm. Blocks shall be used as bases for two sea containers 12-ft standard size.</p>	PCS	12

<b>Part 2: Steel Shades</b>			
2.1	Suspended shade without columns: Supply, fabrication and installation of roof steel sheeting shade between the driver's room and the guard room. The purpose of this shade is to Supply shaded area at the main gate during the check-in check-out process. Sheeting shall be made of corrugated galvanized iron (CGI) not American type. CGI shall be fixed by using anchor bolts 10 mm each 30 to 45 cm as maximum and to be fixed to right angle 50x50 with 3 mm thickness. Overlap op the CGI shall be (0.5 ft) 15 cm minimum, 2 corrugations. Sheets must spread 20 cm out at the lowest side for rain water drainage. Each CGI sheet (plate) shall be 18 ft length as one unit without cut. All steel works shall be well painted by anti-rust paint and oil paint two coats each. Final color shall be determined by UNHCR.	M2	110.0
2.2	Suspended shade without columns between the sea containers: Supply, fabrication and installation of roof steel sheeting shade between the two sea containers 12x4 m. The purpose of this shade is to Supply shaded area between the two sea containers to be used as car parking and light car maintenance services and to allocate the fuel dispenser. The roof shall be upgraded with 50 cm over the sea containers and slope shall be two sides truss shape. Sheeting shall be made of corrugated galvanized iron (CGI) not American type. CGI shall be fixed by using anchor bolts 10 mm each 30 to 45 cm as maximum and to be fixed to right angle 50x50 with 3 mm thickness. Overlap op the CGI shall be (0.5 ft) 15 cm minimum, 2 corrugations. Sheets must spread 20 cm out at the lowest side for rain water drainage. Each CGI sheet (plate) shall be 18 ft length as one unit without cut. All steel works shall be well painted by anti-rust paint and oil paint two coats each. Final color shall be determined by UNHCR.	M2	145.0
<b>Part 3: Toilets Works (2 unis toilets)</b>			
3.1	Excavation of strip foundation 40x60cm and cart away	MLX	17.5
3.2	Supply and construction of brickwork foundation 40 cm width up to 1.0 m height of which 60 cm under the ground level and 40 cm over the ground level. Brickwork shall be made of class-1 bricks and cement sand mortar 1:6 including moisturizing and workmanship.	MLX	17.5



3.3	Supply & build 1½ (one and half) red brick wall in cement mortar 1:6, for the toilets wall up to the roof level including supply of materials, workmanship and moisturizing. Total height shall be 3.25 m	M <sup>2</sup>	53
3.4	Supply & build one red bricks wall on cement mortar 1:6 mix for the roof parapet including the top Cornish and water drainage openings. Height shall be 50 cm minimum over the roof sheeting	MLX	17.5
3.5	Supply reinforced concrete for doors lintel beam thickness 20 cm, mix 1:2:4 reinforced by round steel Y12mm @ 15cm c/c, 6 bars and Y 8mm stirrups @ 15 cm c/c.	MLX	15
3.6	Supply & apply internal and external plaster of cement mortar 1:6 with clean and fine sand to give a total thickness of 20mm for walls and parapet, as per specifications.	M <sup>2</sup>	115
3.7	Supply & apply internal and external painting, 3 coats of emulsion paint of approved brand and manufacture.	M <sup>2</sup>	115
3.8	Supply, manufacture and install in zinc sheeting for the roof including all the accessories, 4x8 MS tube purlins 50cm c/c, as per specifications.	M <sup>2</sup>	15
3.9	Supply, fabricate and install locally made door 80x210cm, made of hollow metal frame size 6x3cm, and 4xm main frame, 2 mm steel plate, heavy duty lockers and hinges as per specifications.	No	2
3.1	Supply of heavy duty exhaust fan 18 inch, with wiring and electrical connections, fixed on fabricated and installed in place high level windows (fanlight) 40X40cm, box metal frame size 6x3cm including double layer steel mosquito mesh anti-rust type and painted with anti-rust and oil paints two coats each.	No	2
3.11	Supply and install of water flush toilet seat (eastern seat ) of good quality approved. Including supply and installation of sanitary ware of connection of the toilets to main sanitary network with all necessary manholes (T-Y type, 6 inch), gally traps, 2 vent pipes, water supply network of 1 inch and 3/4 size including all accessories and fittings. Water supply shall cover the two toilets and wadoo basin 2 taps outside.	Job	1
<b>Part 4: Toilets Works/ Upper Floor (2-unit toilets)</b>			
4.1	Supply & build 1 (one) red brick wall in cement mortar	M <sup>2</sup>	39

4.2	Supply & build one red bricks wall on cement mortar 1:6 mix for the roof parapet including the top Cornish and water drainage openings. Height shall be 50 cm minimum over the roof sheeting	MLX	10
4.3	Supply reinforced concrete for doors lintel beam thickness 20 cm, mix 1:2:4 reinforced by round steel Y12mm @ 15cm c/c, 6 bars and Y 8mm stirrups @ 15 cm c/c.	MLX	12
4.4	Supply & apply internal and external plaster of cement mortar 1:6 with clean and fine sand to give a total thickness of 20mm for walls and parapet, as per specifications.	M <sup>2</sup>	54
4.5	Supply & apply internal and external painting, 3 coats of emulsion paint of approved brand and manufacture.	M <sup>2</sup>	63
4.6	Supply, and cast of reinforced concrete roof slab 1:2:4 mix, 20 cm thickness, 2 layers Y12 mm steel bars including electrical conduits and roof KHAFJA with 20% slope. Rate includes scaffolding, workmanship, water and moisturizing and all necessary items.	M <sup>2</sup>	6.75
4.7	Supply, fabricate and install locally made door 80x210cm, made of hollow metal frame size 6x3cm, and 4xm main frame, 2 mm steel plate, heavy duty lockers and hinges as per specifications.	No	2
4.8	Supply of heavy duty exhaust fan 18 inch, with wiring and electrical connections, fixed on fabricated and installed in place high level windows (fanlight) 40X40cm, box metal frame size 6x3cm including double layer steel mosquito mesh anti-rust type and painted with anti-rust and oil paints two coats each.	No	2
4.9	Supply and installation of water flush toilet seat (eastern seat ) of good quality approved. Including supply and installation of sanitary ware of connection of the toilets to main sanitary network with all necessary connection to the network, 2 vent pipes, water supply network of 1 inch and 3/4 size including all accessories and fittings. Water supply shall cover the two toilets and wadoo basin 2 taps outside. Work shall include dismantling and re-installation of the existing two water takes above the toilets with the necessary connections.	Job	1

**Part 5: Drop Arm Boom Barrier**

5.1	Supply, fabrication and installation of access gate boom barrier manual drop arm type. Barrier stangtion shall be made of standard I-Beam standard size of 16 cm, heavy duty bearing with 32 mm steel rolling rod passing through cast iron bearing chairs with lubrication access. Drop arm shall be made of 3 inch dia. Steel pipe 5 mm minimum thickness for both main arms and interior supports. All welding shall be continuous G-6 and all steel work must be well painted 2 coats antirust and two coats oil paint. 1.0 inch cotton rope shall be fixed enough at the control side for lifting and pulling down. The boom part must be steel mass and zero balanced at the horizontal level. The boom shall be made of steel plate box 2 mm thickness and filled with aggregate up to balancing level. Foundation shall be non-reinforced concrete foundation. All technical specifications shall be as per attached drawings and instructions of UNHCR Engineer.	Lot	1
<b>Part 6: Wall Painting:</b> Supply of materials and apply quick drying prime (internal walls and internal rooves only) two coats to make the surface of walls smooth and adhesive to receive new paint, rates include crack repair, sand paper work (twice) and all necessary works. External walls shall be free of primer but using of materials recommended for exterior painting and resistant to weathering and climate (ALMUHANDIS or equivalent). Rates include all workmanship, equipment, solvents, chemicals, scaffolds, protection of the office items against paint matters and final cleaning at the end.			
6.1	Ditto: But for internal office and guesthouse walls	M <sup>2</sup>	660
6.2	Ditto: But for internal office and guesthouse rooves	M <sup>2</sup>	370
6.3	Ditto: But for external office and guesthouse walls	M <sup>2</sup>	770