#### THE UNITED REPUBLIC OF TANZANIA

# MINISTRY OF WORKS, TRANSPORT AND COMMUNICATION



#### CONSTRUCTION OF DAR ES SALAAM BUS RAPID TRANSIT (BRT) INFRASTRUCTURE – PHASE 2, LOT 2: BUILDINGS – MBAGALA DEPOT, TERMINALS AND FEEDER STATIONS

# TENDER NO. AE/001/2017-18/HQ/W/31

#### **Clarification No. 1 to the Bidding Documents**

# Date: 29<sup>th</sup> March 2018

**Clarification No. 1** to the Bidding Documents is issued in accordance with Clause 7.1 of the Instructions to Bidders (ITB) of the Bidding Documents.

# <u>QUESTION NO. 1</u> [Refer Query No. 16 (a) of Appendix II to the Minutes of Pre-bid Meeting which is reproduced below]

According to the scope of works on page 6-2 under section VI, the construction of Dar es Salaam Bus Rapid Transit (BRT) Infrastructure Phase 2 Lot 2 – Buildings Works comprises also the demolition works of the existing structures. Further the Supplementary information provided on page 6-157 of section VI indicates that the extensive details of demolition works can be viewed or inspected in the Resettlement Action Plan (RAP) report. Can you please avail us the referred report.

#### Response to Question No. 1:

Resettlement Action Plan Report (RAP) report was inadvertently stated as a supplementary source for detailed information for demolition works. Bidders are strongly advised to visit the site to have understanding of the structures to be demolished.

# <u>QUESTION NO. 2</u> [Refer Query No. 19 of Appendix II to the Minutes of Pre-bid Meeting which is reproduced below]

With reference to the demolition works the Bills of Quantities and/or/the tender documents do not sufficiently describe the scope of demolition works and we are unable to provide an accurate price. As stipulated on page 6-157, Section VI of the Bidding Documents Volume 1-A, we request that the details of the schedule of properties to be demolished contained within the Resettlement Action Plan Report (RAP) is provided to us in order for us to price the demolition.

#### Response to Question No. 2:

Refer response to Question No. 1.

#### **QUESTION NO. 3**

- (i) It is noted on Drawing T97-BRT2L2-MB-STLP-AR-01 (copy attached), one section has been described as part of "BRT BUS Parking Lot 120 Buses Lot 1". Kindly clarify if this section belongs to the Tender No. AE/001/2017-18/HQ/W/31
- (ii) On account of the observation above, and the many items in the BOQ to be considered, we request for extension of time to ensure that tenders are well prepared.

#### **Response to Question No. 3:**

- (i) We wish to clarify that there is a typo error as "BRT BUS Parking Lot 120 Buses Lot 1" shown on the drawing referred to "BRT BUS Parking Lot for 120 Buses" which is part of the Scope of Works for this tender falling under Bill No. 12: Site Works.
- (ii) Bidders should abide to the deadline for submission of tender as stipulated in ITB 22.1 in the Bid Data Sheet.

#### **QUESTION NO. 4**

BOQ (Volume 1B2), PART 3, Kariakoo Terminal Station: The pages of Bill No. 5 and Summary of Part 3 are missing. Please advise.

#### Response to Question No. 4:

The omission has been noted. The pages were inadvertently omitted from the hardcopy, and are provided herewith as **Attachment No. 1.** The pages should be inserted sequentially in the BOQ (Volume 1B2), PART 3, immediately after the separator page titled **"Bill No. 5: External Works"**.

#### QUESTION NO. 5

Can you please elaborate on the pricing of item 61.03(a) on page 2/12/7 of Mbagala Complex?

# Response to Question No. 5:

Item 61.03(a) on page 2/12/7 of Mbagala Complex is ACCESS. In accordance to Standard Specifications for Road Works-2000 the access is means draining and keeping the site dry during excavations works. It is anticipated deep excavations on storm water manholes and buses maintenances pits.

#### **QUESTION NO. 6**

BOQ (Volume 1B1), PART 2, Mbagala Depot, Bill No. 6: Feeder Sheds: Electrical and ICT installations in feeder sheds has been measured only for one unit. Does this mean that only one out of the eight is to be installed with electrical and ICT installations?

#### Response to Question No. 6:

Bill No. 6 caters for all the Feeder Sheds. Bidders should price as per the BOQ.

#### QUESTION NO. 7 (a)

- Location: Kariakoo; Sub-location: Administration and Control Building: <u>Electrical Works</u>: BOQ shows incomer RCC, whereas drawing shows MCCB. Which is which?
- Location: Kariakoo; Sub-location: Terminal Building: <u>Electrical Works</u>: BOQ shows 8 ways waterproof DB, whereas drawing shows 4-way Board. Which is which?

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#### Response to Question No. 7(a):

- (i) The incomer has an RCCB and not RCC; and MCB outgoing feeder breakers and not MCCBs.
- (ii) The distribution board to be provided shall be as indicated in the BOQ, i.e. 8-ways DB. The DB is weather proof (which includes water and dust proof) not waterproof

# QUESTION NO. 7 (b)

- (i) Location: Mbagala: Drawings for the DBs are not matching with the DBs for the sites specified in the BOQ;
- (ii) Location: Mbagala: External Works DB: Specifications for IP66 160A and 200A main circuit breaker and motorized c/o switch are missing.
- (iii) Location: Mbagala: Sub-location: Fuel Filling Shed: The BOQ does not show the specifications for explosion proof 8 ways TPN DB.
- (iv) Location: Mbagala: Electrical drawings for the stations are missing.

#### Response to Question No. 7 (b):

- (i) The DBs to be used shall be those with higher capacity rating in terms of current rating and number of ways for corresponding DBs on the drawings and BOQ.
- (ii) The IP66 rating is for the enclosure of the DB; the 160A and 200A are the ratings of the main circuit breaker and motorized change over switch.
- (iii) The 8-ways TPN DB is not exposed to dangerous or hazardous conditions, it is adequate to provide for a normal 8-ways TPN DB.
- (iv) All electrical drawings (plans and schematics) for Mbagala stations have been issued. Please refer Bidding Documents - Volume 2C.

# **QUESTION NO. 8**

There are contradictions in the ICT, in particular the specified Fibre Optics as per following observation: OM2 Fibre Optics means Multimode Fibre  $60/125\mu$  whereas  $62.5/125\mu$  is Singlemode Fibre Optics. All fibre optics patch cords requested are  $62.5/125\mu$  – which means Singlemode, However, in the specifications, it is written OM2  $62.5/125\mu$ . Please clarify.

#### Response to Question No. 8:

- The statement in the question that "All fibre optics patch cords requested are 62.5/125µ – which means Single mode" is incorrect. The request is for 62.5/125µ multimode optical fiber patch cords.
- Single mode optical fiber patch cords would be 9/125µ type and are for long distances application.
- For indoor LAN where horizontal subsystem (links) are short but exceed the 100m range a bit, multimode optical fiber will be deployed hence the corresponding multimode patch cords.
- Single mode fiber cables might be used to interconnect long distances links e.g. WAN for BRT or connections between buildings.

ATTACHMENT NO. 1

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ELEMENT No. 1: FENCE AND GATESIExcavation and earthworkIAExcavate foundation trench commencing at formation level not exceeding 1.50 metres deepCMBExcavate pit for column base commencing at formation level not exceeding 1.50 metres deepCMCExtra over any kind of excavation for breaking up rocks and the likeCMDEarth backfilling, well rammed and consolidated around foundationsCMELoad up surplus excavated material and remove remove from siteCMDisposal of waterITEMFAllow for keeping excavations free from water (except spring or running water) by pumping, baing on other means necessaryITEMPlanking and struttingITEMGAllow for the provision and subsequent removal of planking and strutting to uphold and maintain all faces of excavationsSMPlain concrete grade "10"ITEMHS0mm BlindingSM129Reinforced concrete grade "15"I68Reinforced concrete grade "25" including, vibrating around foundationCM68JColumn basesCM29KColumnsCM18LGround beamsCM5	AMOUNT (TZS)
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KColumnsCM18LGround beamsCM27	
L Ground beams CM 27	
M Gate base CM 5	
To Collection	

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ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
	Reinforcement				
	High tensile hot rolled deformed steel bar reinforcemnt to BS 4449:1997				
А	16mm Bar	КG	237		
в	12mm Bar	КG	3,779		
с	10mm Bar	KG	189		
D	8mm Bar	КG	1,210		
	Marine formwork to				
Е	Vertical sides of foundations, column bases etc.	SМ	178		
F	Vertical sides of columns	SΜ	246		
G	Vertical of ground beams and the like	ѕм	222		
н	Ditto but curved irrespective of radius	SM	16		
	Precast concrete grade "25" including hoisting to position, bedding and pointing in cement mortar (1:4)				
	Coping				
	330 x 65mm Thick Rebated, weathered and throated coping finished fair all exposed sides	LM	431		
	600 x 600 x 100mm Cap, rebated, waethered and throated; finished fair to all exposed sides	NO	8		
	Walling				
	Blockwork, solid concrete block, BS 6073 type "A", compressive strength 5M/mnf in cement mortar (1:3)				
к	230mm Wali	SM	284		
L	230mm Wall curved irrespective of radius	SМ	21		
	<u>Metal work</u>				
	Mild steel post; 100 x 4mm Thick circular hollow section, 2500mm long, bottom end welded to and including 140 x 140 x 4mm thick mild stel plate and top end capped with 4mm thick mild steel plate including inserting on top of concrete column, primed and painted	NO	150		
	To Collection				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
В	Supply all materials, fabricate and install mild steel grille, size 4180 x 2055mm high overall comprising of 3 no, 50 x 50 x 3mm thick mild steel hollow section horizontal members, 19 No, 30 x 30 x 2.5mm thick mild steel hollow section vertical members with top end sharpened, welded to horizontal members and post; primed and painted Ditto, size 3225 x 2055mm high overall comprising of 3 no, 50 x 50 x 3mm thick mild steel hollow section horizontal members, 15 No, 30 x 30 x 2.5mm thick mild steel hollow section vertical members with top end sharpened, welded to horizontal members and post; primed and painted		1		
с	Ditto, size 3205 x 2055mm high overall ditto	NO	2		
D	Ditto, size 3195 x 2055mm high overall ditto	NO	-		
Е	Ditto, size 3070 x 2055mm high overall ditto	NO	1		
F	Ditto, size 3060 x 2055mm high overall ditto	NO	1		
G	Ditto, size 3045 x 2055mm high overall ditto	NO	1		
н	Ditto, size 2950 x 2055mm high overall ditto	NO	1		
I	Ditto, size 2940 x 2055mm high overall ditto	NO	1		
J	Ditto, size 2925 x 2055mm high overall ditto	NO	1		
к	Ditto, size 2920 x 2055mm high overall ditto	NO	3		
L	Ditto, size 2905 x 2055mm high overall ditto	NO	3		
м	Ditto, size 2900 x 2055mm high overall ditto	NO	99		
Ν	Ditto, size 2895 x 2055mm high overall ditto	NO	2		
0	Ditto, size 2890 x 2055mm high overall ditto	NO	1		
Р	Ditto, size 2885 x 2055mm high overall ditto	NO	1		
Q	Ditto, size 2815 x 2055mm high overall ditto	NO	1		
R	Ditto, size 2810 x 2055mm high overall ditto	NO	1		
S	Ditto, size 2805 x 2055mm high overall ditto	NO	1		
	To Collection				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
А	Ditto, size 2785 x 2055mm high overall comprising of 3 no, 50 x 50 x 3mm thick mild steel hollow section horizontal members, 12 No, 30 x 30 x 2.5mm thick mild steel hollow section vertical members with top end sharpened, welded to				
	horizontal members and post; primed and painted	NO	1		
В	Ditto, size 2780 x 2055mm high overall ditto	NO	2		
С	Ditto, size 2760 x 2055mm high overall ditto	NO	2		
D	Ditto, size 2735 x 2055mm high overall ditto	NO	1		
Е	Ditto, size 2725 x 2055mm high overall ditto	NO	1		
F	Ditto, size 2315 x 2055mm high overall comprising of 3 no, 50 x 50 x 3mm thick mild steel hollow section horizontal members, 10 No, 30 x 30 x 2.5mm thick mild steel hollow section vertical members with top end sharpened, welded to horizontal members and post; primed and painted		1		
G	Ditto, size 1410 x 2055mm high overall comprising of 3 no, 50 x 50 x 3mm thick mild steel hollow section horizontal members, 6 No, 30 x 30 x 2.5mm thick mild steel hollow section vertical members with top end sharpened, welded to horizontal members and post; primed and painted		1		
Η	Ditto, size 1050 x 2055mm high overall comprising of 3 no, 50 x 50 x 3mm thick mild steel hollow section horizontal members, 4 No, 30 x 30 x 2.5mm thick mild steel hollow section vertical members with top end sharpened, welded to horizontal members and post; primed and painted		1		
	Gate				
I	Supply all materials, fabricate and install mild steel sliding gate size 5100 x 2395 high overall complete with hangers, rollers, stoppers and all necessary ironmongery as per drg. No. T497- BRT2L2-KRK-FG=AR-02, 03 & 04; primed and painted	NO	1		
	<u>Finishes</u> <u>External cement and sand (1:4) rendering in</u> <u>two coats, steel trowelled to a smooth finish</u>				
J	15mm To walls	SM	388		
к	15mm To vertical sides of columns	SM	40		
	To Collection				

ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
	Prepare and apply one primer coat and two finishing coats of approved weather-guard paint to				
Α	Rendered walls	SМ	388		
В	Rendered vertical sides of columns	SM	40		
с	Fairfaced concrete copping and caps	ѕм	249		
	To Collection				
	00115071011				
	Page No. Part 3/5/1				
	Page No. Part 3/5/2				
	Page No. Part 3/5/3				
	Page No. Part 3/5/4				
	Page No. Part 3/5/5				
	TOTAL, FENCE AND GATE CARRIED TO				
	SUMMARY OF PART 3 - BILL No. 5 EXTERNAL WORKS				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
		<u>o</u> nun			Amoont (120)
А	ELEMENT NO.2: WATER RETICULATION Excavate pipe trench not exceeding 1.50 metres total depth average 1.00 metre deep for pipe not exceeding 150mm diameter. HDPE pipes Class 'C' to BS 4991:1974 Serie 2 and fittings to DIN 16962 Parts 5/6/7/8/9/12	LM	215		
в	32mm Pipe in trench	LM	64		
с	Bend	NO	3		
D	Reducer	NO	1		
Е	25mm Pipe in trench	LM	151		
F	Bend	NO	7		
G	Reducer 25/20	NO	4		
	Equipments				
	<u>Main water storage tanks</u>				
	Supply, install test and commisioning the Braithwaite hot pressed moulded sectional water tank with 5,100lts capacity (3m x 2m x 1m) and externally flanged including all piping conection, hoisting and fixing on 0.5 metres high concrete structure support above ground level that complies to BS 7491: Part3: 1994	NO	1		
	Supply, install test and commisioning the Elevated Braithwaite hot pressed moulded sectional water tank with 3500lts capacity $(2m \times 2m \times 1m)$ and externally flanged including all piping conection, to be fixed on a tower 6m high and complies to BS	NO	1		
	Water booster pumps				
	Supply , install test and commision Duty and Standby Water supply booster pumps Grundfos make CR 5-10 model or other approved equivalent each with capacity of 2.5m3/hr @ 4bar complete with all valves, interconnection piping and accessories, control panel and 100litre pressure tank & accessories all mounted in a common frame.	SET	1		
	To collection				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
	Anciliaries				
	Stop valves and gate valves to BS 1010				
	32mm Brass stop valve with screwed connection to HDPE pipe	NO	2		
	25mm Brass stop valve with screwed connection to HDPE pipe	NO	3		
	20mm Brass stop valve with screwed connection to HDPE pipe	NO	3		
	Allow a provisional sum for connecting to DAWASCO water supply,	PS			20,000,000.00
	Allow for Contractor's overhead and profit as a percentage of item D above	%			
	To collection				
	COLLECTION Page No. Part 3/5/6 Page No. Part 3/5/7				
	TOTAL, WATER RETICULATION CARRIED TO SUMMARY OF PART 3 - BILL No. 5: EXTERNAL WORKS				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
	ELEMENT NO. 3: FOUL WATER DRAINAGE				
	Excavation and earthworks				
А	Excavate pipe trench and the like not exceeding				
	1.50 metres total depth average 0.50 metre deep commencing at ground level for pipe not				
	exceeding 150mm diameter	LM	126		
В	Cutting through an existing road/walk way and make good	LM	36		
С	Allow for keeping excavation free from general water	ITEM	1		
	<u>Pipework</u>				
	Unplasticized PVC pipes to ISO R161-1960 DIN 8072 class "B" with fittings in running length				
D	100mm Pipe in trench	LM	126		
	The following are manholes complete with double seal, heavy duty covers and following dimmensions				
Е	600 x 600 x 1000mm deep (maximum)	NO	16		
	Allow sum for connecting to existing manholes and make good	NO	2		
	TOTAL, FOUL WATER DRAINAGE CARRIED				
	TO SUMMARY OF PART 3 - BILL No. 5: EXTERNAL WORKS				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
	ELEMENT NO. 4: ELECTRICAL AND ICT INSTA	LLATI	ON		
	SOLAR POWERED STREET LIGHTS Supply, erect, test and commisioning the following in conformity with the specifications and drawings				
	Pole mounted IP66 4 x 45W Iluminaire (Four luminaire) (as THE ONE LEDS.C4 cat No. 80- 2618-AT-37) solar powered with 4 ECO lateral ARM, PV module, Sealed maintenance free (SMF) lead acid batteries, interconnection cables, controller placed in suitable housing made of metal. Minimum operating hours for the luminaire at full brightness level shall be 12. Duty cycles shall be in such away that automatically switch ON at dusk, operate through out the night and automatically switch OFF at the dawn TYPE L	NO	2		
в	Ditto but for two luminares 2 x 45W TYPE J	NO	4		
	Ditto but for one luminares 1 x 45W TYPE K	NO	3		
D	8m hot dipped galvanized pole to BS729 constructed in more than one sections of diameter and module Pole complete with a mounting bracket for mounting 4 x 45W luminaires, PV module on top, and enclosure for with batteries,				
Е	controller etc Ditto but with a bracket for mounting 2 x 45W	NO	2		
	luminaires	NO	4		
	Ditto but with a bracket for mounting 1 x 45W luminaire	NO	3		
	Allow provisional sum to cover TANESCO charges for extension of service line and metering	PS			35,000,000.00
	Allow for Contractor's overhead and profit as a percentage of item G above	%			
	ICT INSTALLATION				
	Installation of Fiber Cables for LAN Connections between the buildings for the entire site.				
	Fiber Cable (OM 2) - 8 core (62.5/125 micron Graded Cable), from the server room in Administration and Control Building to Terminal Shed and Security Huts; drawn in conduits/trunking or trays including all necessary accessories.	LM	300		
	To collection				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
	BUILDER'S WORK IN CONNECTION WITH ELECTRICAL AND ICT INSTALLATION Allow for provision of foundations and concrete bases including digging ,backfilling and making good for solar lights poles to be installed as shown on drawings				
А	Solar lights	NO	8		
	Excavate trench for electrical/ict ducts, commencing at formation level and not exceding 1.2m deep; 800mm deep average; 700mm wide return fill including disposal of surplus material	LM	350		
	HDPE pipes for electrical and ICT cabling laid in trench complete with fittings and				
с	50mm	LM	250		
D	100mm	LM	100		
	Allow for construction of manholes including provision of appropriate heavy duty waterproo cover to specifications				
Е	800 x 600mm	Nr	8		
F	600 x 600mm	Nr	5		
	To collection				
	<u>COLLECTION</u> Page No. Part 3/5/9 Page No. Part 3/5/10				
	TOTAL, ELECTRICAL AND ICT INSTALLATION CARRIED TO SUMMARY OF PART 3 - BILL No. 5: EXTERNAL WORKS				

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ITEM	DESCRIPTION	UNIT	QTY	RATE (TZS)	AMOUNT (TZS)
	SUMMARY				
	PART 3 - KARIAKOO TERMINAL STATION;				
	BILL No. 5: EXTERNAL WORKS				
	Element No. 1: Fence and Gates				
	Element No. 2: Water Reticulation				
	Element No. 3: Foul Water Drainage				
	Element No. 4: Electrical and ICT Installation				
	TOTAL, BILL No. 5 - EXTERNAL WORKS				
	CARRIED TO SUMMARY OF PART 3: KARIAKOO TERMINAL STATION				
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BRT Project Phase 2 Lot 2

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# BRT PROJECT PHASE 2 LOT 2

# PART 3: KARIAKOO TERMINAL STATION

#### SUMMARY

BILL No.	DESCRIPTION	AMOUNT (TZS)
1	Control and Administration Building	
2	Terminal Building	
3	Security Huts	
4	Site Works	
5	External Works	
	TOTAL, PART 3: KARIAKOO TERMINAL STATION CARRIED TO	
	GENERAL SUMMARY	

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