

REQUEST FOR QUOTATION (RFQ) FOR CIVIL WORKS FOR THE CONSTRUCTION OF UNDERGROUND OPTICAL FIBRE LINKS (3) IN RUSTENBURG AND ROYAL BAFOKENG AREA.

Date of Issue	2021/04/08
Closing Date & Time	2021/04/16 1700HRS
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1. INTRODUCTION

Huawei intends to construct an underground optical fibre links in the Rustenburg and Royal Bafokeng area on behalf of MTN. The civil works partner for Huawei is Eastlight Investments which will be referred to as the "Main Contractor" throughout this document.

2. INVITATION FOR QUOTATION

Quotations are hereby invited from prospective general contractors with a proven track record for civil works for the construction of optical fibre network links for MTN through of Huawei-SA. The services are required immediately from date of appointment.

3. SCOPE OF WORK (IM DEPTH FTTS WORK)

The scope of work involves but is not limited to following:

- 3.1 Notification
- 3.2 Mobilization of equipment and resources
- 3.3 Mobilization of Materials Main Contractor will bring the materials to site
- 3.4 Pilot Holes
- 3.5 Trenching, Laying, Backfilling and Compaction

3.6 Horizontal Directional Drilling (HDD) - To be done by Main Contractor

- 3.7 Installation of Manholes and Handholes
- 3.8 Duct Hauling
- 3.9 Dynamic Cone Penetrometer (DCP) Tests
- 3.10 Duct Integrity Tests (DITs) and Floating To be done by Main Contractor
- 3.11 Splicing, Termination and Testing To be done by Main Contractor
- 3.12 Reinstatements and Cleaning
- 3.13 Site walks and inspections
- 3.14 Wayleave sign-off

4. PRICING

- 4.1 The price which will be paid to contractors for 1M DEPTH FTTS WORK is R150/M (One hundred and fifty South African Rands per meter) for all the work outlined on the Scope of Work except the activities clearly marked To be done by Main Contractor. (This is a flat rate)
- 4.2 Contractors who are willing to do Horizontal Direction Drilling on their own should provide proof to the Royal Bafokeng Nation Administration that they have **All Contractors Liability Insurance** of the value of 10 Million South African Rands. Please note that it is the **responsibility** of the sub-contractor to confirm their insurance with the Royal Bafokeng Nation Administration and provide proof of this confirmation to Eastlight Investments. The rate per meter for HDD Drilling is **R500 per meter**.
- 4.3 Contractors who are willing to do Splicing, Termination & Testing on their own should provide proof to Huawei Technologies that they have All Contractors Liability Insurance of the value of 10 Million South African Rands. Please note that it is the responsibility of the sub-contractor to confirm their insurance with Huawei Technologies and provide proof of this confirmation to Eastlight. The rates for this are as follows:
 Splicing R65/Splice
 Termination R65/Splice
 Testing R35/Core.

4.4. Contractors who are willing to do Duct Integrity Tests (DITs) and Floating on their own should provide proof to Huawei Technologies that they have **All Contractors Liability Insurance** of the value of 10 Million South African Rands. The rate per meter for DITs and Floating is **R3.50 per meter**.

5. OTHER TERMS AND CONDITIONS

5.1 The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any MTN, Huawei, Eastlight employee or its representatives.

5.2 Such an act shall constitute a material breach of the Agreement and Eastlight Investments shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights.

6. ELIMINATION CRITERIA

Bidders will be automatically eliminated based on the following terms:

- This project is based on a flat rate pricing model and bidders who cannot do this work at the indicated rates should not submit their bids; If submitted these bids will not be considered.
- Submit after the deadline
- Failure to submit 3 contactable references, where similar work was rendered.
- Proposals submitted at incorrect location;
- Non-attendance of the compulsory briefing session / site inspection;
- Failure to submit a letter of good standing issued by the Department of Labour (COID).
- Failure to provide certificates of specialized team members
- Failure to provide proof of equipment

7. EVALUATION CRITERIA

Bidders that are eliminated as per elimination criteria above, will not be evaluated on B-BBEE.

- 7.1 Selection of suppliers will be based on the 80/20 preference point system.
- 7.2 Submit a certified copy of a valid B-BBEE certificate or sworn affidavit with the quotation. No B-BBEE status will equal zero points.
- 8. **PROPOSALS** to be emailed to <u>planning@eastlightsa.co.za</u> and projects@eastlightsa.co.za

no later that 1700hrs on 08/04/2021.

Please Note that no services are to carried out without a purchase order.

9. SITES TO BE BUILT

9.1 X3197-X2558-NIP – Ga Luka VC (Ring Closure)

The scope of work is summarised as below:

- 6994m of normal 1M DEPTH trenching and civil works
- 66m of drilling
- 45m Bridge Crossing
- Installation of 25 manholes and 2 handholes
- 7105m of installation of 110mm Sleeves and 7-Way duct hauling
- 7920m of cable floating (Kindly see the attached plans and please note this is an estimate based on surveys done)

9.2 X3197-X4495 – Ga Luka VC

The scope of work is summarised as below:

- 7092m of normal 1M DEPTH trenching and civil works
- 123m of drilling across roads
- 15m of ISP civil works
- Installation of 21 manholes and 4 Handholes.
- 7215m of installation of 110mm Sleeves and 7-Way duct hauling
- 7962m of cable floating

(Kindly see the attached plans and please note this is an estimate based on surveys done)

9.3 X20090-X3706 – Bobuampja Convenience COMMCO - Lefaragathla

The scope of work is summarised as below:

- 852m of 1M DEPTH trenching and civil works
- 10m of ISP civil works
- Installation of 4 manholes and 1 handhole
- 862m of installation of 110mm Sleeves and 7-Way duct hauling (Kindly see the attached plans and please note this is an estimate based on surveys done.

10. CONTRACTOR REQUIREMENTS

Prospective contractors are expected to fulfil the following requirements.

- 10.1 Tool List Contractors are expected to have or be able to obtain the following equipment (A physical inspection of the tools on the contractor premises will be carried out)
 - 1 tonne bakkie
 - 5 tonne bakkie
 - 10 tonne bakkie
 - 15-Seater Minibus (To carry workers to and from site)
 - Picks, shovels and rakes
 - Crowbars
 - Trench barricade and supports
 - Tractor Loader Backhoe (TLB)
 - Tar Cutter
 - Plate Compactor
 - Jumping Compactor
 - Push-Roads
 - Duct De-coilers
 - Measuring wheels
 - Handheld GPS
 - Ladders
 - Drills
 - Service Locator
 - Civil work sieves
 - Angle Grinders
 - Generator
 - Complete Set Tool-boxes
 - HDD machine
 - Optical Fibre floating machine
 - Splicing machine
 - OTDR Tester

- Power meter
- Full PPE for all workers (See EHS Section)
- 10.2 **Qualifications and Experience** Contractors are expected to have the following qualified and experienced team members:
 - Project Manager
 - Civil Engineer
 - Civil Technician
 - Optical Fibre Technician
 - Splicer
 - Proof of qualifications and registrations will be required.
- 10.3 **Targets and Milestones** Contractors are expected to complete a minimum total of 150 meters (open and close) of trench per day once the site is started. Penalties will be imposed if a contractor fails to meet this target.
- 10.4 **EHS** Contractors are expected to strictly adhere to the following EHS requirements
- i. Basic PPE-Contractors should provide their employees with the following PPE items.
 - Safety Shoes
 - Hard hats
 - Work suits with reflectors
 - Reflector Vests (To be worn on top of work suits)
 - Safety Goggles
 - Dust Masks
 - Gloves
 - Ear Mufflers (If working with noisy equipment)
- ii. Emergency plan.
 - Emergency contact details of services must be available on site.
 - All workers will be made aware of the emergency plan.
- iii. Fire extinguisher
 - All fire extinguishers will be inspected.
 - Copies of such inspections will be kept on site in the HSE File.
 - Dry Chemical Powder [DCP] fire extinguisher is required for the type of work performed.
 - All contractors and sub-contractors need to have basic firefighting training certification.
- iv. Transportation vehicles and driving long distances.
 - Vehicles will be inspected daily or as prescribed.
 - Copies of such inspections must be kept in the vehicle.
 - Vehicle driver must be competent and licensed to drive the vehicle.

Drivers should stop and rest for at least 10 minutes every 200 kilometres or after every two [2] hours of driving

- v. All employees will comply with the transportation requirements that include:
 - All persons will wear seat belts at all times whilst travelling in or operate a vehicle;
 - Never work or drive under influence [alcohol or drugs] which are illegal or in access of legal levels, always inform your supervisor when taking medicine that could have an effect on your abilities to carry out work safely;
 - Never exceeds the prescribed speed limit; and
 - Never make mobile phone calls whilst driving, pull over when it is safe to do so. And all other Huawei Absolute Rules.
- vi. First aid kit.
 - First aid kit should be issued and inspected.
 - First aid kit content will be evaluated to ensure treatment for stings, bites and heatstroke is included.
 - Records of such inspections will be kept on site.
 - As good practise, all persons on site need to be trained as first aiders.
- vii. Environment mandatory requirements.
 - Toilet must be on site for duration of construction work [Toilet must be cleaned off site].
 - Fire extinguisher must be on site for the duration of the construction work [At least 2.5 kg dry power].
 - Precautions must be taken to ensure that all waste is removed from site [No waste shall be buried on site].
 - Where the possibility exists of liquid spillage a drip tray must be on site.

viii. Hand tools

The following hand tools were assessed and considered essential for the sites, but not limited

- Picks
- Shovels
- Gwala's
- Fibreglass ladders
- All hand tools must be identified and entered on a register/checklist.
- All hand tools must be inspected.
- Records of such inspections must be kept on site.
- ix. Portable electrical tools.

- The following portable electrical tools were assessed and considered essential for the project.
- Portable electric drill.
- Angle grinders.
- All portable electrical tools must be identified and entered on a register/checklist.
- All portable electrical equipment must be inspected.
- Records of such inspections must be kept on site.
- x. Ladders
 - All ladders must be identified for use on site and the conditions of use.
 - Where work require to be performed in close proximity of power or shared sites nonconductive fibreglass ladders shall be used.
 - All ladders must be marked with an identification number.
 - All ladders must be inspected.
 - Records of such inspections must be kept on site.
 - A safe work procedure must be compiled to ensure that work on ladders being carried out safely.
- xi. Drinking water.
 - Suitable containers must be used for drinking water and the container should be marked clearly and permanently as "potable water".
 - No container previously transporting or containing any hazardous chemical substance shall be used for the purpose of "potable water".
 - If decanting of water takes place on site into any container, that container shall be permanently marked as drinking water.
 - Sufficient quantity of water must be ensured on site by the contractors.

xii. Road drilling.

- Excavation supervisor to be appointed.
- Shoring or sloping must be done to prevent persons or equipment being trapped when hole collapsed.
- The directional drilling machine must be inspected and records of such inspection kept on site in the H&S File.
- The sub-contractor must compile Safe Work Instructions for the drilling machine.
- Sufficient water must be on site for directional drilling.
- Material safety Data Sheet [MSDS] for chemicals used when drilling [Probe 2000] should be kept on site in the HSE File.
- xiii. Wayleave documentation
 - No work should commence without the Wayleave in hand.
 - Way leave will be at all times available on site.
 - Each team shall have a copy of the way leave at the section where they carry out the work.
 - Loading and off-loading of equipment manually.

- Hardhats and safety shoes will be worn during loading and offloading of equipment.
- Depending of type of equipment to be offloaded, gloves will be part of PPE.
- xiv. Site establishment.
 - All equipment and personal belongings must be locked whilst on site.
 - The camp must set-up at a location to prevent flooding.
 - Precautions must be taken to prevent fires from starting.
 - A chemical toilet will be on site for the duration.
 - Shower facilities will be provided for each gender and signage posted to indicate such gender.
 - Ensure sufficient fresh water on site and that the container is marked as potable water.
 - Sleeping and eating quarters must be established.
 - Equipment storage must be established.
 - Ensure that all personnel know who the first aider is, the location of the first aid box and the procedure to be followed in the event of an incident.
 - Also, refer to item 8 for first aid requirements.
 - Refer to item 9 for PPE requirements.
 - Storage area must be demarcated and stacking done under the supervision of the appointed person.
- xv. Personnel movement on site.
 - Reflector vests shall be worn at all times on the construction by all personnel and visitors.
 - As far as reasonably practical, all personnel will remain in the parameters of the demarcated areas.
- xvi. Bush clearing and tree cutting.
 - Safe Work Instructions to be compiled for the prevention and treatment of snakebites.
 - Hand tools and equipment for bush clearing and tree cutting must be assessed, issued, and inspected.
 - PPE must be assessed, issued, worn and inspected.
 - Records of issue and inspections to be kept on site in the H&S File.
 - Records of Decision must be reviewed before bush clearing and tree cutting to prevent major environment incidents.
- xvii. Traffic signage for trenching route, rural, national roads and metro roads.
 - Contractors should be trained on the requirement of South Africa Road Agency Limited [SANRAL].
 - Place at >45 meters "Roadwork's Ahead" signage.
 - At >30 meters "Line Narrows and Ends".
 - At >15 meters "Keep Left or Keep Right" signage.
 - Where one lane is completely closed, two points man with STOP/GO signage will control the traffic when they are in line of sight.

- STOP/GO signage controllers will use two-way radios for communication where line of sight is not possible or where the distance between the controllers is too wide for normal communication.
- A flagman should be placed >45 meters in front of the points man, both sides.
- xviii. Demarcation of trenching route.
 - The material used for demarcation should be highly visible.
 - Nobody should be allowed to walk about the construction site that is not part of the trenching team.
 - All site visitors should be escorted by the site supervisor on site.
- xix. Existing underground services.
 - Locator should be used to identify underground services.
 - If underground services maps are available, they should be studied to ensure location of these services.
 - Pilot holes must be dug to ensure no underground services when no maps exist.
- xx. Clearing and levelling of trench.
 - Water must be used when clearing and levelling trench to minimize dust.
- xxi. Bedding below duct piping.
 - Bedding should be of specified thickness with river sand at the base of the trench covering the whole with of the trench.
 - When substitute materials, which could include crusher run dust, non-river sand from a sandpit or other places, the same as above will apply, but the substitute material shall be sift to ensure that no stones larger 12mm in diameter are used for bedding.
 - When excavation materials are used for bedding it shall be sift to ensure no stones larger than 12mm.
 - PPE will be issued against a signature; and
 - PPE will be inspected weekly and copies of issue and inspection will be kept on site.