

LOT 1: CONSTRUCTION OF FOUR OBSERVATION TOWERS AT NGARANNAM HOUSING ESTATE– IS LOCATED AT NGARANNAM, MAFA LGA, BORNO STATE

LOT 2: CONSTRUCTION OF ARMORED VEHICLE SHADE AT POLICE OUTPOST NGARANNAM, MAFA L.G.A BORNO STATE

## **LOT ONE: CONSTRUCTION OF FOUR OBSERVATION TOWERS AT NGARANNAM HOUSING ESTATE– IS LOCATED AT NGARANNAM, MAFA LGA, BORNO STATE**

### **SCOPE OF WORKS AND TECHNICAL SPECIFICATION**

This document shall be read and understood in conjunction with the BoQ, and design drawings provided. The vendor shall consult the supervising Civil Engineer where clarification is required.

#### **1 GENERAL**

Together with Section 2 "Instructions to Bidders" this section directs the contractor to the relevant information necessary for pricing the Bills. It is therefore essential that the text contained therein be read in conjunction with the measured items which shall be priced accordingly.

It is assumed that the contractor's supervisory and estimating staff are fully conversant with the normal standards of good workmanship and relevant publications of trade and technical organisations.

#### **2 Project Location**

The project is the Construction of Four Observation Towers at Ngarannam Housing Estate– is located at Ngarannam, Mafa LGA, Borno State (Lat: 11.916924°; Long: 13.573721°) on the four corners of the entire Ngarannam town as shown in Figure 1.

#### **3 Scope of work**

The scope of work consists of the construction of four Observation Towers including the following:

##### **3.1 Civil Works: Construction of Foundation Bases**

The contractor shall carry out construction of the foundation bases according to the drawing details provided and allowed to cure for the required minimum 7days.

##### **3.2 Supply, Fabrication, and Installation of Stanchions Towers.**

The Contractor shall Supply and fix 0.55mm gauge Queensway aluminium long span corrugated roofing sheet or equal approved roof sheet obtained from an approved manufacturer fixed to timber purlin with galvanised drive nails and bituminous washers erect Unframed Structural mild steel stanchion; bracer beams; angle iron and universal channel fixed together with required accessories to form a component; including hoisting and fixing in position; all necessary welding; plates/gusset plates; access ladder; bolting and other jointing whether or not specifically described herein or shown on the drawing; priming and painting with one coat of red oxide paint and 2 coats of acrylic latex after erection.(see the drawings) hoisting to point not exceeding 12m height; all weighting tonnes as to be directed by the engineer.

##### **3.4 Provision of VIP Laterine .**

The Contractor shall Excavate in moderately firm soil for laterine pits and column pits 2200x2685x3000mm; starting from strip level, depth of excavation not exceeding 3.00m maximum depth and construct 2100 X 1500 X 1800mm deep Soakaway pit comprising of 225mm thick hollow sandcrete wall; excluding baffle wall but using honey-combed block wall; including 100mm diameter UPVC supply and exit pipe complete with all accesories; 100mm thick reinforced concrete slab cover reinforced both

ways with 10mm diameter high tensile reinforcement bar; 100mm diameter casted vent; 900 X 900mm concrete cover including excavation and removal of excavated materials from the site

#### 4 DELIVERY PERIOD AND CONTRACT DURATION

The delivery period for all the items mentioned in the scope of works, BOQs and drawings is Eight (12) Weeks as per the below schedule

*Table 1: Contract Duration*

Activity	Duration /Time	Responsible Unit/Reporting
Signing the contract	Within 3-days of awarding the contract	Procurement/Vendor
Handing over the site	Within 4- days after signed contract	Engineering Team/Govt. Partner
Mobilization	Within 1 - day of site handover	Contractor and engineering team
Works commencement date	End of Mobilization Period	Engineering Team/Procurement
Works duration	10 weeks from site handover date	Contractor/Supervising Engineers
Substantial Completion of the project	12 weeks from site handover	Contractor and the supervising engineer

#### 5 TECHNICAL SPECIFICATIONS

##### 5.1 Technical Specification

- All works and processes shall be carried out using equipment, tools and methods that comply with applicable construction Health, Safety and Environmental regulations, standards, and policies. The use of PPE, safety caution tapes and symbols are mandatory. Safety first!!
- Provide temporary site office and site store to accommodate construction materials safe from harsh weather conditions.
- All excavations work, removal & arranged construction materials must be clearly encircled with safety caution tapes during works.
- All excavations shall be done in accordance with the structural drawings provided,
- Filling around foundations etc. is to be of selected earth obtained from the excavation and is to be filled in 150mm layers, each layer well rammed and consolidated.
- All formation level must be compacted before concrete blinding as specified in the structural drawings.
- All blockwork at substructure level shall be filled solid with concrete mix 1:3:6 while the use of broken blocks, laterite or mortar as a substitute shall not be accepted.
- Laterite shall be approved rock laterite or other suitable materials are to be free from dust or other foreign matter and broken to pass a 75mm ring and to be retained on a 50mm ring and deposited in layers not exceeding 150mm thick, each layer being well consolidated by rolling or ramming and well-watered.
- Hardcore is to be selected broken brick, concrete, hollow sandcrete blocks or other clean hard and dry material.

- Provide damp-proof membrane not less than 0.3mm to cover the total surface of the foundation.
- Ordinary Portland cement shall be used for all masonry and concrete works and must be lump free.
- Fine aggregates shall be sieved and free of organic matter and other impurities
- Well-graded crushed granite shall be used as coarse aggregate (20-25mm for reinforced concrete; 35-40mm for mass concrete).
- Water-Cement ratio by weight shall not exceed 0.55. The quantity of water used in the mixing of the concrete must be adequate to ensure proper hydration of the cement and to bring the mass to a proper consistency and to a workable mix.
- Concrete shall be placed gently and not tipped or dropped from a height, it shall then be thoroughly rammed into positions to fill the forms and surround the reinforcement without displacing it and without the formation of voids or cavities.
- Compaction of fresh concrete shall be done with a poker vibrator for adequate compaction.
- The use of BRC wire-mesh for ground floor slab is mandatory in new construction works and photographs are to be shared with Supervising Civil Engineer as evidence of same.
- Curing of concrete shall be in accordance with the recommendation set out in the B.S. Code of Practice and all surfaces shall be kept continually wet after concreting and protected from the sun and drying winds by covering with wet sacking, etc. for not less than one week.
- 28-day compressive strength shall be M10 (1:3:6 mix ratio) for mass concrete and M25 (1:1:2 mix ratio) for reinforced concrete.
- Concrete cover of 50mm shall be provided to reinforcement in foundation.
- Hollow sandcrete blocks (225mm X 225mm X 450mm) shall be machine-molded and not hand molded .
- Minimum crushing strength of Hollow sandcrete blockwork shall not be less than 2.5N/mm<sup>2</sup> (cement-sand ratio of 1:6 by volume; no of blocks must not exceed 25 per 50kg bag of cement during fabrication).
- Formwork shall be Stripped without damage to the concrete.
- A schedule of suggested minimum striking times is given below:  
Walls, sides of R.C beams sides of columns - 2days after concreting  
Soffits of slabs and soffits of casting to steel beams - 7days after concreting  
Soffits to R.C beam - 14days after concreting
- The mortar used shall be composed of cement and sand and approved to give a strength equal to the strength of the blocks.
- All reinforcement shall comply with BS4449 and associated codes with regards to bending, lapping, binding, and cranking.
- Reinforcement shall be kept free of oil, mud, rust prior to use.
- Concrete cover of 25mm shall be provided to reinforcement in beams and column.
- High yield steel (tensile strength of 410N/mm<sup>2</sup>) of specified size shall be used for both main reinforcements and links/stirrups.
- The sand for plastering/rendering shall comply with B.S 1199.

- The internal and external renderings shall be carried out in accordance with the specification provided in the architectural drawings.
- All concrete surfaces which are to be rendered are to be carefully and thoroughly hacked with a suitable tool to provide an adequate and suitable keyed surface. All block walling which is to be rendered shall have the joints raked out to provide an adequate and suitable keyed surface.
- Plaster work and paintings which does not thoroughly adhere to any surface shall be removed and re-executed in a proper manner. Such hollowness, cracks, blisters, and any other defects will be considered a defect under the Defects Liability Clause of the Contract.
- Carry out geotechnical survey for foundation works
- Excavate pit for steel bases not exceeding 1.50m depth starting from formation level.
- Supply, fabricate, assemble, and install structural steel out post 9000mm high from surface of concrete base (measured separately) and complete with welding; Nuts and bolts; red oxide/Aluminum paintings, and accessories
- 152mm x 152 mm x 37kg/m steel I section Universal Column with 10mm thick base plate.
- 152 x 89mm x 16kg/m steel I section Universal Beam (primary beam).
- 127 x 76mm x 13kg/m steel I section Universal Beam (secondary beam) for bracing.
- 60mm x 60mm x 4mm Angle Iron bracing and ladder complete.
- 1.5mm thick inner vertical wall plate side walls complete with bracing and accessories.
- 6mm thick external vertical wall plate 500mm high complete with bracing and accessories.
- 12mm thick steel plate to for platform complete with bracing and accessories
- Construct and weld in-place grating walkway and 3mm thick 50mm x 50mm hollow square pipe railing well braced and welded.
- All Paint materials shall be the best quality of their respective kinds and in accordance with their latest British Standards and obtained from an approved manufacturer. No dilution of painting materials will be allowed, except strictly in accordance with the manufacturer's directions, or as described in their literature.
- Gloss paint/silver coated or similarly approved colours shall be on metal works after necessary preparations.
- Clear site on either side of center line of road 10m beyond extent of work of all bush, shrub, grass and trees.
- Shape and compact formation level as specified and elsewhere as directed to 100% B. S compaction

## **5.2 Alternative materials, components and goods specified**

- Wherever materials, components, and goods, whether basic or proprietary, are specified the Contractor may, subject to approval in writing, use materials, components and goods from an alternative source providing the quality, properties and design are similar.
- All materials, components and goods shall be used and fixed in an approved manner and, where applicable, in accordance with the manufacturer's instructions.

### **5.3 MEASUREMENT AND VALUATION**

This contract will be Fixed Sum or Lump Sum Contract such that payments will be based on agreed milestones. Measurement and valuation process will involve checking and verifying that the milestone against which payment claim is made, is indeed complete and in accordance with the requirements of the specifications.

### **5.4 TESTS ON COMPLETION**

The contractor shall submit to UNDP designated engineer, not less than 7 days before the date the contractor intends to commence the Tests on Completion a detailed programme showing the intended timing and resources required for these tests.

As soon as the Works have, in the Contractor's opinion, passed the tests on Completion, the contractor shall submit a certified report of the results of these tests to the Engineer. The Engineer shall review such a report and may give a Notice to the contractor stating the extent to which the results of the tests do not comply with the contract.

In considering the results of the tests on completion, the engineer, shall make allowance for the effect of any use of the Works by the beneficiaries on the performance of other characteristics of the Works.

### **5.5 TAKING OVER**

Upon completion of the works, the contractor shall request for a joint final inspection of the completed works. The Engineer will prepare a punch list where necessary upon conduction the final inspection for the contractor to rectify. Once the punch list has been attended to and works are certified complete then the contractor will hand-over the works to the communities through the district council.

### **5.6 DEFECTS AND DEFECT NOTIFICATION PERIOD**

A defect in this context is defined as any observance of a physical problem that may cause structural weakness or failure hence less effective for the intended purpose. The defects can either be patent (obvious, easy to fix and often merely aesthetic) or latent (not easy to find and tend to be somehow problematic). Construction defects may arise from the materials used or workmanship during construction.

The works will have a defects liability period of 24 weeks within which any defects arising will be documented and the contractor will be instructed to make good of the same unless the defect is due to a force majeure.

Failure to attend to the defects without giving any proper reason will result in forfeiture of the retention money withheld by the UNDP Nigeria.

### **5.7 CLOSURE**

Project closure will be upon completion and certification of the works by the engineer designated by UNDP Nigeria who will review and sign off on the deliverables. The completed works will be subject to defects liability period as may be determined in the contract document.

### **5.8 INSURANCE**

The contractor shall have a "Contractor's All Risks (CAR)" insurance during the execution period for the contract to cover the works, equipment, personnel, other people's lives and property.

## 5.9 LIABILITY

The Contractor shall not be liable for the defects arising from the design or specifications. However, the Contractor shall be liable for the defects arising from the materials and workmanship.

## 5.10 PROJECT SUCCESS

Success of the project as expected by the sponsor, beneficiaries and other stakeholders is dependent on completion of all contractual obligations according to the contract, SOW and BOQ. Success, therefore, requires adherence to standards, quality workmanship and use of quality materials during construction.

## 5.11 REQUIREMENTS

UNDP Supervising Engineer will require certifying any completed works in accordance with the milestones before processing any payment for the completed milestone.

## 6 CONTRACT PRICE AND PAYMENT

The Contract Price will be fixed in Nigeria Naira (NGN) and the currency of payment is Nigerian Naira. UNDP Nigeria will pay the Contractor upon completing a milestone as outlined in section 5.11. The amounts payable for each completed milestone will be determined at the time of drafting a contract. UNDP Nigeria may pay the Contractor, upon its request, an Advance Payment up to 20% of the Contract Sum upon satisfying the requirements in form of Advance Payment Guarantee.

### 6.1 CONDITIONS FOR RELEASE OF PAYMENT FOR LOT 4

Table 2: Contract Milestone Payments Schedule Lot 4

Milestone No.	Activity	Payment NGN	Completion Date
1	<p><b>20% progress payment after doing all the below activities:</b></p> <ul style="list-style-type: none"><li>• Signing and Submission of Contract.</li><li>• Submission of Performance Bond.</li><li>• Attend entrance meeting in UNDP Sub-Office via Zoom, upon presenting signed contract, proposed work plan and list of staffs submitted).</li><li>• Submit an updated project work schedule.</li><li>• Handing over of site/Taking over of site Mobilization of equipment and staff to site.</li><li>• Performing a civil works in the site not less than 20% of contract amount as per the approved time schedule.</li><li>• Submit progress report including a summary of activity progress with photographs showing works completed.</li><li>• Submission of Invoice to UNDP Engineer for payment processing (20%) of the total contract amount.</li></ul> <p>Whereas the contractor wishes to receive the advance payment, the contractor shall submit an Advance Payment Bank Guarantee equivalent (20% contract sum) and submit his request to procurement</p>	20%	1-4 weeks of commencement date

Milestone No.	Activity	Payment NGN	Completion Date
2	<p><b>40% progress payment of the total contract amount:</b></p> <ul style="list-style-type: none"> <li>This payment will be certified upon completion of not less than 40% of the contract scope of works to include activities, like substructure works, foundation works, Fabrication, and Installation of Stanchions Towers which is to be valued and certified by UNDP Engineer to qualify for payment.</li> <li>Submit progress report (milestone 3 report) including a summary of activity progress with photographs showing works completed.</li> <li>Submit list of workers (not less than 20 with 10% being women) who MUST have worked minimum of 7days on the project</li> <li>Submission of Invoice to UNDP Engineer for payment processing (40%) of the total contract amount.</li> </ul>	40%	5-7 weeks of commencement date
3	<p><b>35% payment of the total contract amount:</b></p> <ul style="list-style-type: none"> <li>Complete 100% of all outstanding items of work in the SoW as detailed in the BoQ/SoW as checklist.</li> <li>General finishes, and clearing of site</li> <li>Submit list of workers (not less than 20 with 10% being women) who MUST have worked minimum of 7days on the project.</li> <li>Submit completion report including a summary of activity progress with photographs showing works completed.</li> <li>Submission of Invoice to UNDP Engineer for payment processing (35%) of the total contract amount.</li> </ul>	35%	Week 8 of contract duration.
4	Final payment which is the retention of 5% shall be paid after post-completion inspection and certification report by the authorized UNDP nominated engineer that defects which occurred within 6 months of practical completion have been satisfactorily repaired.	5%	24 weeks after the substantial completion date.

**Note:** The Contractor is required to submit a detailed measurement sheet of the actual work done along with each invoice for each milestone. Payment will only be made upon submission of detailed measurement sheet certified by UNDP Engineer.

## 7 CONTRACTOR KEY PERSONNEL

The following personnel shall be provided for LOT 4 ONLY without duplication of personnel in other Lots

- a. **One (1) Project Manager (Full time available in the site):** A minimum of 7 years work experience in the construction works & must have handled at least 3 projects of similar nature and complexity equivalent to this assignment. Minimum a B.Sc/B.Eng in Civil/Mechanical Engineering with a master's degree in Project/Construction Management and COREN Registered not later than 2017. Furthermore, project manager MUST be readily available on site when required within the shortest notice. CV and certificates should be provided in the attached UNDP format attached in the ITB document.
- b. **One (1) Resident Civil Engineer (Full time available in the site):** A minimum of 5 years work experience in the construction works & must have handled at least 3 projects of similar nature

and complexity equivalent to this assignment. Minimum a B.Sc/B.Eng in Civil Engineering and COREN Registered not later than 2017. Furthermore, project manager MUST be readily available on site when required within the shortest notice. CV and certificates should be provided in the attached UNDP format attached in the ITB document.

- c. **One (1) HSE Officer (Full time available in the site):** A minimum of 2 years' relevant work experience in the rehabilitation/Renovation/construction works. Must have handled at least two (02) similar projects in nature and complexity. Minimum a B.Sc/B.Tech Degree in Natural/Environmental Engineering or equivalent). Professional certification in Health Safety Security & Environment. CV and certificates provided in the attached UNDP format attached in the ITB document.
- d. **One (01) Foremen (Full time available in the site):** A Qualified Foremen with 3 years of experience in welding/Fabrication works. should have minimum of Diploma in Civil or Mechanical Engineering with CV and certificates provided in the attached UNDP format attached in the ITB document.

## 8 CONSTRUCTION KEY EQUIPMENT/MACHINERY PROPOSED FO1

S/N	EQUIPMENT	QUANTITY
1	Levelling Equipment/Survey tools total station and levelling instrument. The one set means total station and levelling instrument	1 set
2	Water Storage tank for each location	4
3	Welding Machine for each tower	4

## 9 General Requirements

### 9.1 Reports, Meetings and Work-Plan (Time-schedule)

The contractor is expected to submit weekly progress report, mentioning in his report the following:

- The activities which have been done during that week,
- The materials provided to the site.
- The weather conditions,
- The challenges and delay in the project.
- The number of labors for each day of the week.
- Progress of work related to the quantities.
- Photographs showing progress of works.

There will weekly meeting between UNDP engineer and the contractor.

The contractor is expected to follow submitted and approved work schedule (work-plan) and changes should be communicated and approved by Supervising Engineer before proceeding.

The contractor must submit the milestone progress report with each request for milestone payment.

The As-built drawings should be submitted with the progress report of milestone No. 5.



## 9.2 Health and Safety

The contractor is fully responsible for the safety of operations in the site.

Contractor must follow the below:

1. Provide his staff with PPE, helmet, vest and safety shoes.
2. Provide the project site and the holes with safety tape.
3. Provide first Aid kit to the site.

## 9.3 COVID 19

Complying with Covid-19 protection measures on site is mandatory and the Contractor will have to their work in such a way that workflow is not disrupted in the process of adhering to the measures. The contractor must provide his staff with face masks and keep the social distance at work.

The Contractor will observe and follow safety guidelines on the construction site as instructed by the engineer or any party designated by UNDP Nigeria.

## 10 Site Map & Other Associated Layouts

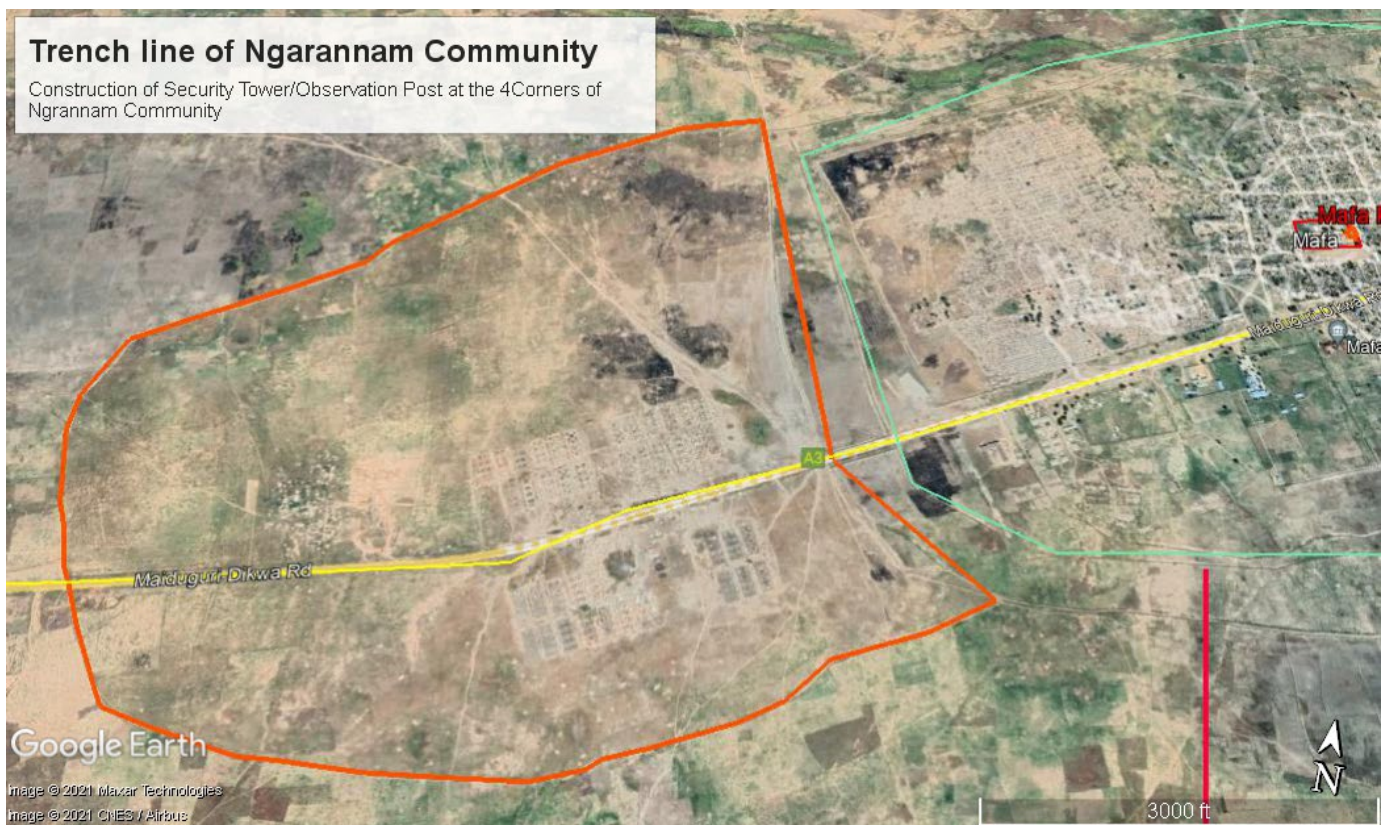


Figure 2: Coordinates showing location of the site

## **LOT TWO: CONSTRUCTION OF ARMORED VEHICLE SHADE AT POLICE OUTPOST NGARANNAM, MAFA L.G.A BORNO STATE**

### **SCOPE OF WORK AND TECHNICAL SPECIFICATIONS**

This document shall be read and understood in conjunction with the BOQ, and design drawings provided. The vendor shall consult the supervising Civil Engineer where clarification is required.

#### **1 GENERAL**

Together with Section 2 of the ITB/RFQ Document "Instructions to Bidders" this section directs the contractor to the relevant information necessary for pricing the Bills. It is therefore essential that the text contained therein be read in conjunction with the measured items which shall be priced accordingly. It is assumed that the contractor's supervisory and estimating staff are fully conversant with the normal standards of good workmanship and relevant publications of trade and technical organisations.

#### **2 Project Location**

The project is located at Police Outpost Ngarannam (11°54'45.73"N, 13°34'50.55"E) in Mafa LGA, Borno State as shown in Figure 1:

#### **3 SCOPE OF WORK**

The scope of work consists of construction of steel frame-members armored vehicle shade for 2 vehicles at Ngarannam, Mafa LGA, Borno State which includes the below works:

##### **3.1 Site clearance**

This generally includes clearing of area of about 20sqm measuring 8000mm x 9000mm from all forms of trees, shrubs and earth materials and carting away from site.

##### **3.2 Supply and Fabrication of Steel Members (Columns, Beams & Purlins) As per the attached drawings**

- a. Supply of 4mm thick 100mm diameter steel round pipe
- b. Supply of 50 mm x 50mm x 6mm angle iron tie beam/rafters/structs
- c. Supply of 50mm x 50mm x 2.5mm square metal purlins

##### **3.3 Civil Works**

Construction of vehicle shade measuring 7200mm x 7200mm x 150mm concrete plinth on 450mm block work and having 100mm round metal galvanized pipes as columns as shown in attached design drawings. Figure 2 (a&b). All necessary civil works for the foundation including block works, filling with boulders, ramming and concrete overlaid shall be according to the supervising engineer's instruction.

#### 4 DELIVERY PERIOD

The delivery period for all the items mentioned in the scope of works, BoQs and drawings is **Six (6) Weeks as per the below schedule.**

*Table 3: Contract Duration*

Activity	Duration /Time	Responsible Unit/Reporting
Signing the new contract or Variation Order	Within 1-week of awarding the contract	Procurement/Vendor
Handing over the site	Within 1-week after signed contract	Engineering Team/Govt. Partner
Mobilization	Within 1-week of site handover	Contractor and engineering team
Works' commencement date	End of Mobilization Period	Engineering Team/Vendor
Works' duration	3 weeks from site handover date	Contractor/Supervising Engineers
Project closure and hand over	6Weeks from contract signed Date	Engineering Team/Govt Partner/Vendor
Defect period	24 Weeks after project closure and handover	Engineering Team/Govt Partner/Vendor

#### 5 TECHNICAL SPECIFICATIONS

##### 5.1 GENERAL SPECIFICATIONS

1. All works and processes shall be carried out using equipment, tools and methods that comply with applicable construction Health, Safety and Environmental regulations, standards, and policies. The use of PPE, safety caution tapes and symbols are mandatory. Safety first!
2. All excavations, demolition works, removal & arranged construction materials must be clearly encircled with safety caution tapes during works.
3. Ordinary Portland cement shall be used for all masonry and concrete works and must be lump free.
4. Fine aggregates for filling of HESCO shall be sieved and free of organic matter and other impurities.
5. Water-Cement ratio by weight shall not exceed 0.55. The quantity of water used in the mixing of the concrete must be adequate to ensure proper hydration of the cement and to bring the mass to a proper consistency and to a workable mix.
6. Concrete shall be placed gently and not tipped or dropped from a height, it shall then be thoroughly rammed into positions to fill the forms and surround the reinforcement without displacing it and without the formation of voids or cavities.

## **5.2 Alternative materials, components and goods specified**

- High Steel standardized pipes material which must be supplied to site with contractor bearing the cost of shipment, clearing and all import duties.
- Wherever materials, components, and goods, whether basic or proprietary, are specified the Contractor may, subject to approval in writing, use materials, components and goods from an alternative source providing the quality, properties and design are similar.
- All materials, components and goods shall be used and fixed in an approved manner and, where applicable, in accordance with the manufacturer's instructions.

## **5.3 Measurement and Valuation**

This contract will be Fixed Sum or Lump Sum Contract such that payments will be based on agreed milestones. Measurement and valuation process will involve checking and verifying that the milestone against which payment claim is made, is indeed complete and in accordance with the requirements of the specifications.

## **5.4 Tests on Completion**

The contractor shall submit to UNDP designated engineer, not less than 7 days before the date the contractor intends to commence the Tests on Completion a detailed programme showing the intended timing and resources required for these tests.

As soon as the Works have, in the Contractor's opinion, passed the tests on Completion, the contractor shall submit a certified report of the results of these tests to the Engineer. The Engineer shall review such a report and may give a Notice to the contractor stating the extent to which the results of the tests do not comply with the contract.

In considering the results of the tests on completion, the engineer, shall make allowance for the effect of any use of the Works by the beneficiaries on the performance of other characteristics of the Works.

## **5.5 Taking Over**

Upon completion of the works, the contractor shall request for a joint final inspection of the completed works. The Engineer will prepare a punch list where necessary upon conduction the final inspection for the contractor to rectify. Once the punch list has been attended to and works are certified complete then the contractor will hand-over the works to the communities through the district council.

## **5.6 Defects and Defect Notification Period**

A defect in this context is defined as any observance of a physical problem that may cause structural weakness or failure hence less effective for the intended purpose. The defects can either be patent (obvious, easy to fix and often merely aesthetic) or latent (not easy to find and tend to be somehow problematic). Construction defects may arise from the materials used or workmanship during construction.

The works will have a defects liability period of 24 weeks within which any defects arising will be documented and the contractor will be instructed to make good of the same unless the defect is due to a force majeure.

Failure to attend to the defects without giving any proper reason will result in forfeiture of the retention money withheld by the UNDP Nigeria.

### 5.7 closure

Project closure will be upon completion and certification of the works by the engineer designated by UNDP Nigeria who will review and sign off on the deliverables. The completed works will be subject to defects liability period as may be determined in the contract document.

### 5.8 Insurance

The contractor shall have a “Contractor’s All Risks (CAR)” insurance during the execution period for the contract to cover the works, equipment, personnel, other people’s lives, and property.

### 5.9 Liability

The Contractor shall not be liable for the defects arising from the design or specifications. However, the Contractor shall be liable for the defects arising from the materials and workmanship.

### 5.10 Project Success

Success of the project as expected by the sponsor, beneficiaries and other stakeholders is dependent on completion of all contractual obligations according to the contract, SOW and BOQ. Success, therefore, requires adherence to standards, quality workmanship and use of quality materials during construction.

### 5.11 Requirements

UNDP Nigeria through their representative will require certifying any completed works in accordance with the milestones before processing any payment for the completed milestone

## 6 CONTRACT PRICE AND PAYMENT

The Contract Price will be fixed in Nigeria Naira (NGN) and the currency of payment is Nigerian Naira. UNDP Nigeria will pay the Contractor upon completing a milestone as outlined in section 5A (SOW attached) to the ITB. The amounts payable for each completed milestone will be determined at the time of drafting a contract.

### 6.1 Conditions for Release of Payment

*Table 4: Contract Milestone Payments Schedule*

Milestone No.	Milestone’s Description and Required Activities & Documentations	Payment Amount (NGN)	Completion Date
Milestone No. 1	<p>95% payment upon practical completion of all items of works in the BoQ/SoW. This includes:</p> <ul style="list-style-type: none"> <li>• Signing the contract</li> <li>• Handing over of site/Taking over of sites</li> <li>• Supply, fabricate and complete all civil works including foundations works, block works, and concrete works.</li> </ul>	95%	(1-5 weeks from the commencement of contract)

Milestone No.	Milestone's Description and Required Activities & Documentations	Payment Amount (NGN)	Completion Date
	<ul style="list-style-type: none"> <li>• Completion, Inspection, testing and commissioning of Armored Vehicle Shade</li> <li>• UNDP Engineer inspect and certify work done with valuation prepared</li> <li>• Submit 95% hard copy invoice and project progress report includes pictures to UNDP Engineer.</li> </ul>		
Milestone No. 2	Final payment which is the retention of 5% shall be paid after post-completion inspection and certification report by the authorized UNDP nominated engineer that defects which occurred within 6 months of practical completion have been satisfactorily repaired.	5%	24 weeks after the substantial completion date.

**Note:** The Contractor is required to submit a detailed measurement sheet of the actual work done along with each invoice for each milestone approved by the UNDP Engineer. Payment will only be made upon submission of detailed measurement sheet certified by UNDP Engineer.

## 7 CONTRACTOR KEY PERSONNEL

The following personnel shall be provided for this works only without duplication of personnel in other projects.

- e. **One (01) Resident Qualified Civil/Site Engineer (Full Time available in the site):** A minimum of 5 years work experience in the rehabilitation/construction works & must have handled at least 1 project of similar nature and complexity equivalent to this assignment. Minimum of a bachelor's degree in Civil Engineering and MUST be ready to reside in Project Location. COREN Registered with CV and certificates provided in the attached UNDP format attached in the ITB document.
- f. **One (01 Foremen (Full time available in the site):** A Qualified Foremen with 5 years of experience in civil works (construction/rehabilitation), should have minimum of Diploma in Civil Engineering/Building/Architecture with CV and certificates provided in the attached UNDP format attached in the ITB document.

## 8 General Requirements

### 8.1 Reports, Meetings and Work-Plan (Time-schedule)

The contractor is expected to submit weekly progress report, mentioning in his report the following:

- The activities which have been done during that week,
- The materials provided to the site.
- The weather conditions,
- The challenges and delay in the project.
- The number of labours for each day of the week.
- Progress of work related to the quantities.
- Photographs showing progress of works.

There will be weekly meetings between UNDP engineer and the contractor.

The contractor is expected to follow submitted and approved work schedule (work-plan) and changes should be communicated and approved by Supervising Engineer before proceeding.

The contractor must submit the milestone progress report with each request for milestone payment. The As-built drawings should be submitted with the progress report of milestone No. 3.

## **8.2 Health and Safety**

The contractor is fully responsible for the safety of operations in the site.

Contractor must follow the below:

4. Provide his staff with PPEs, helmet, vest and safety shoes.
5. Provide the project site and the holes with safety tape.
6. Provide first Aid kit to the site.

## **8.3 COVID 19**

Complying with Covid-19 protection measures on site is mandatory and the Contractor will have to their work in such a way that workflow is not disrupted in the process of adhering to the measures. The contractor must provide his staff with face masks and keep the social distance at work.

The Contractor will observe and follow safety guidelines on the construction site as instructed by the engineer or any party designated by UNDP Nigeria.

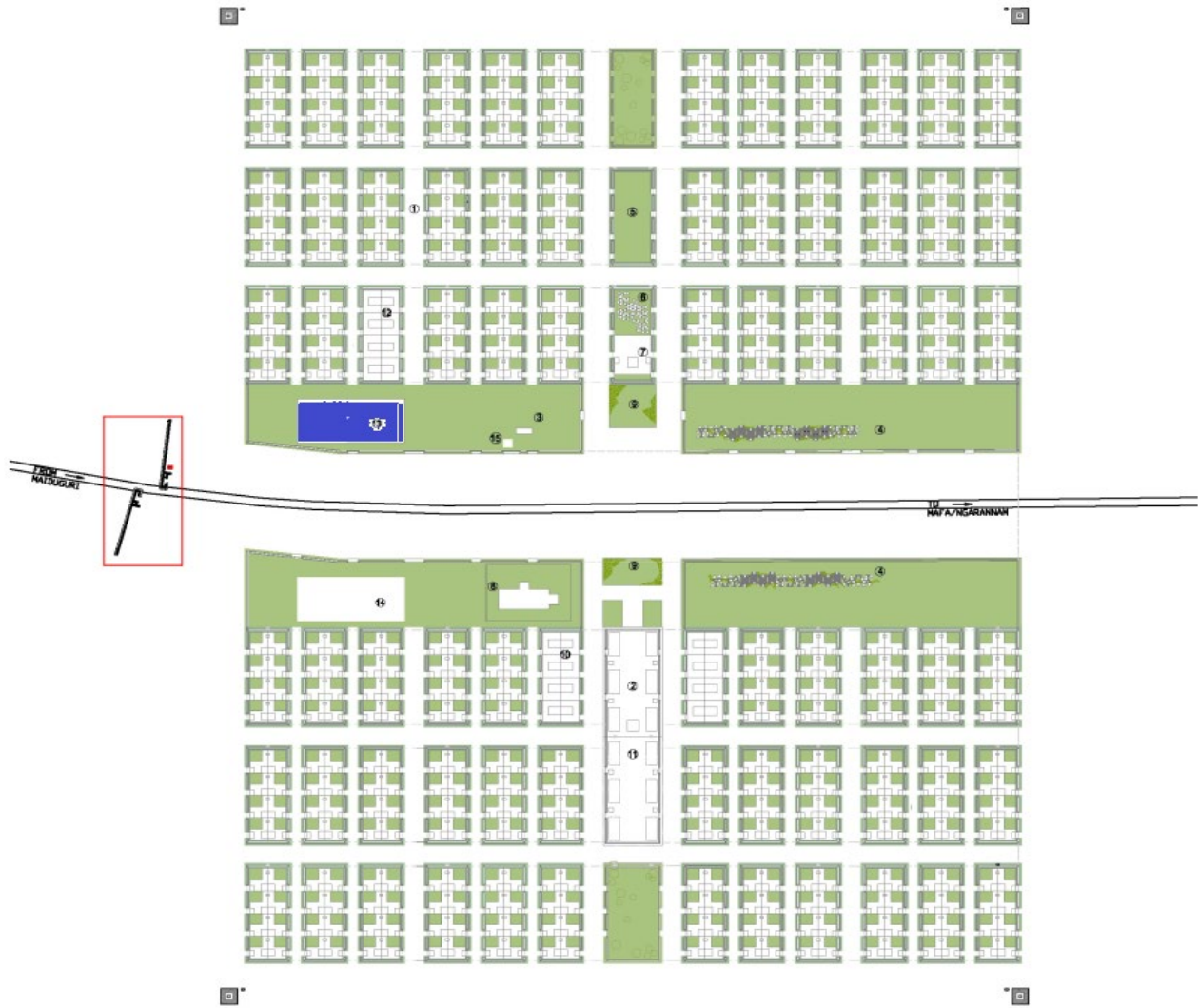
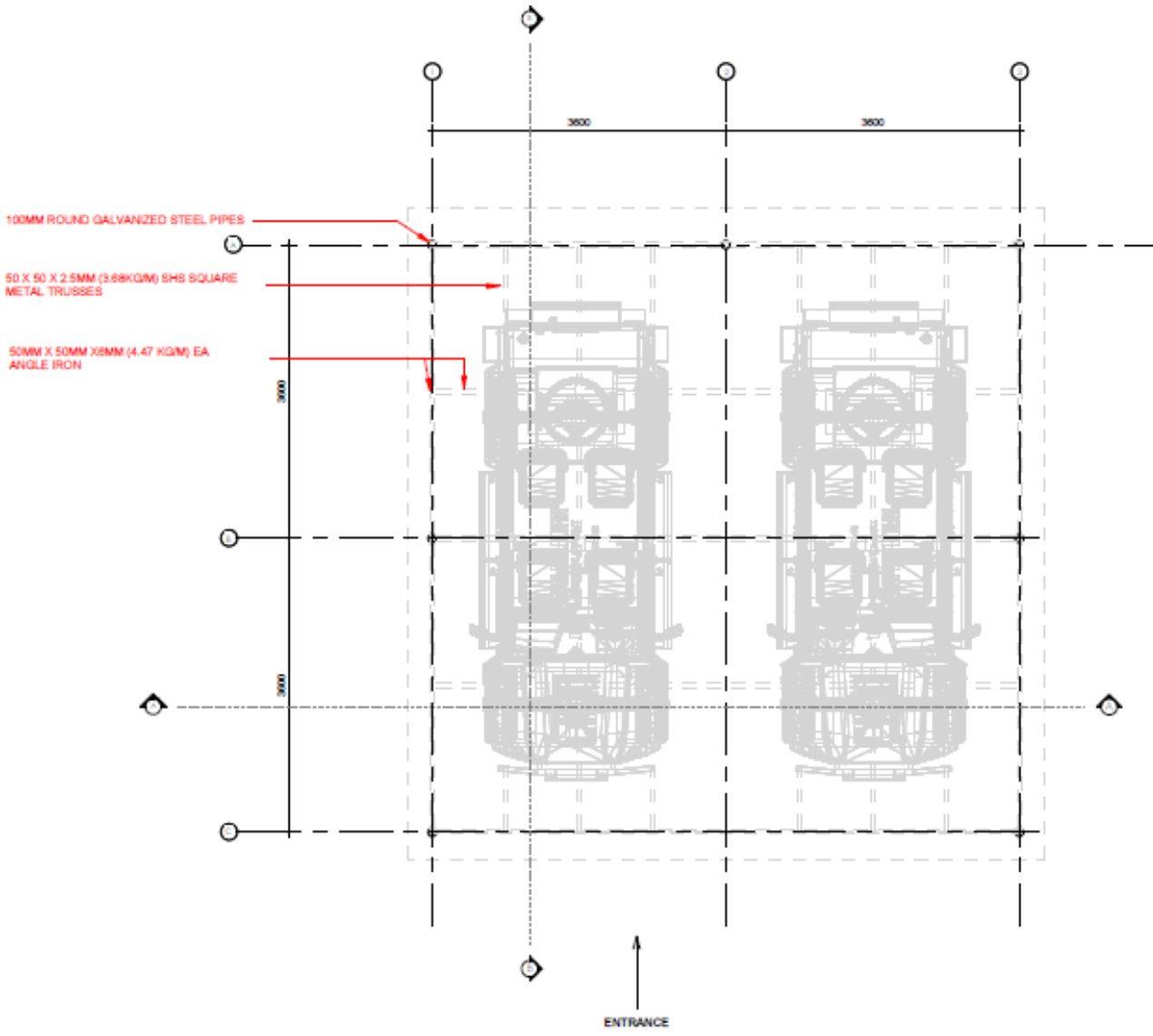
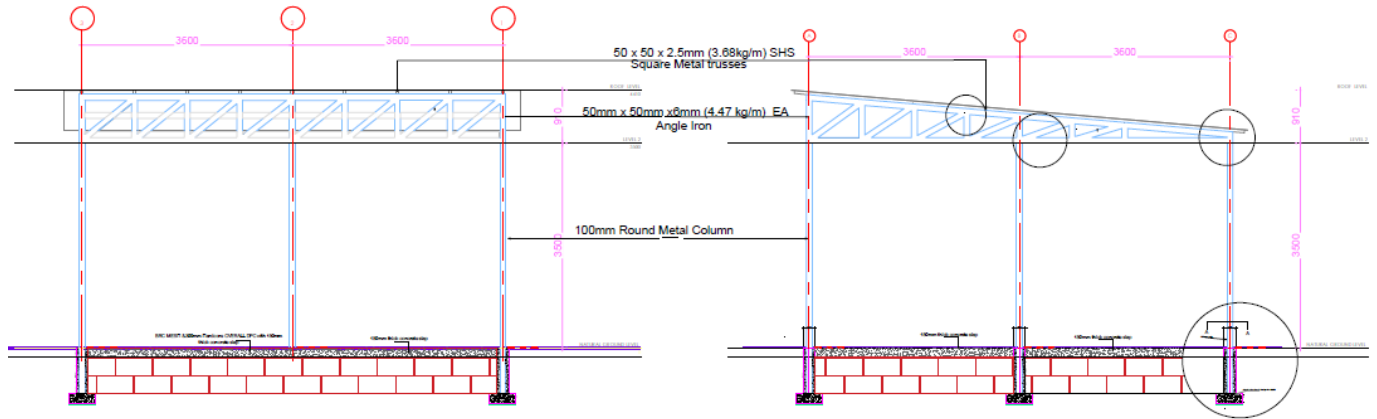


Figure 1: Drawings showing location of Armored Vehicle Shade (coloured blue) on the Master Plan



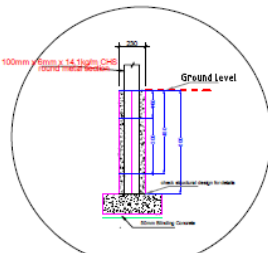
CONSTRUCTION OF FOUR OBSERVATION TOWERS AT NGARANNAM COMMUNITY, MAFA LGA, BORNO STATE



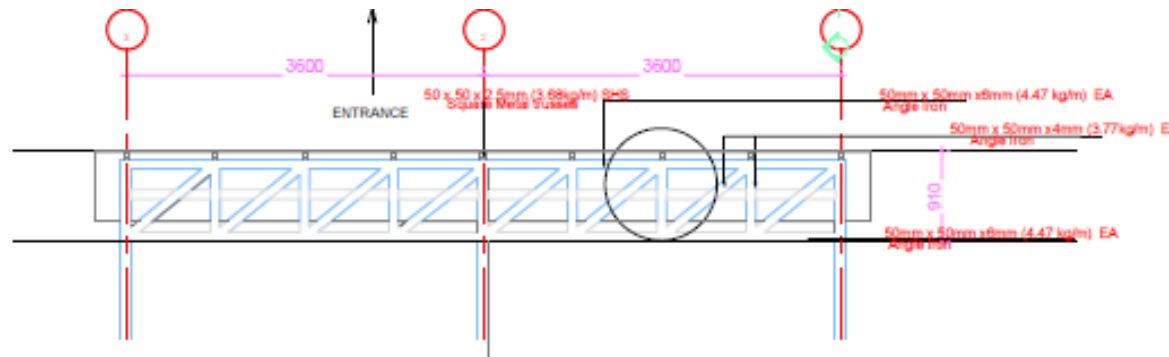


SECTION X-X

SECTION Y-Y



SECTION A-A





**11 Company Previous Experience & Financial Standing (One company will be selected to implement both lots)**

Minimum 5 years of relevant experience (Renovation /Construction/Rehabilitation works).

Evidence of Minimum 3 contracts of similar value, nature and complexity implemented over the last 5 years with one (1) of PO exceeding **NGN 15,000,000**.

Statement of Satisfactory Performance/Completion Certificate from the Top three (3) Clients in terms of Contract Value for similar assignments over the last 5 years.

Please submit Latest Audited Financial Statement (Income Statement and Balance Sheet) including Auditor's Report for the past three years **[2018 onwards]**.

Bidders having completed and certified Audited Financial Statements for 2021 can also submit to be considered for evaluation.

Minimum annual turnover of **NGN 20,000,000** in the last 3 years (2018 onwards).