

## FEDERAL REPUBLIC OF SOMALIA



## **MOGADISHU PORT**

## DEVELOPMENT, REHABILITATION, MANAGEMENT, OPERATION AND MAINTENANCE CONCESSION AGREEMENT

## **PACKAGE 2:**

# SECURITY WALL and GUARD TOWERS TENDER DOCUMENTS

SECTION 1: INSTRUCTION TO TENDERERS SECTION 2: AGREEMENT SECTION 3: SPECIFICATIONS SECTION 4: BILL OF QUANTITIES SECTION 5: RESPONSIBILITY MATRIX SECTION 6: SITE PHOTOS SECTION 7: DRAWINGS SECTION 8: SCHEDULE SECTION 9: LETTER OF TENDER

AUTHORITY'S REPRESENTATIVE:



MOGADISHU PORT AUTHORITY QUALIFIED ENGINEER:



HPC HAMBURG PORT CONSULTING GMBH and SELLHORN INGENIEURGESELLSCHAFT MBH J.V. CONCESSIONAIRE:



MOGADISHU ALPORT CORP. ALBAYRAK SOMALIA

FEBRUARY 2021

# **INSTRUCTION TO TENDERERS**

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## 1. ELIGIBILITY AND QUALIFICATION REQUIREMENTS

- 1.1. Each Tenderer is eligible to submit only one (1) proposal.
- 1.2. The Employer shall evaluate Tenders only from the qualified companies. During Tender evaluation process, the Employer shall request documentation from Tenderers in order to assess the company's qualification. As a result of the qualification process, any submittal received from unqualified Tenderers shall be considered as invalid.
- 1.3. The Tenderer shall provide the list of similar projects that previously completed in Somalia and the region (East Africa and Middle East) within the last five years.
- 1.4. By submitting a Tender, Tenderer is deemed to have comply with Tender procedures applicable by the Employer.
- 1.5. Tenderer shall not deviate any requirement stated within the Tender Documents. Failure to provide requested information and documentation may result with the failure of the Tenderer.
- 1.6. In case of any Joint Venture, Consortia or any other association is considered, the Tenderer shall obtain approval from the Employer.
- 1.7. Tender Documents shall be completed by the Tenderer and provide all the requested information.
- 1.8. By submitting a Tender, the Tenderer is deemed to have considered all necessary allowances in its Tender Price in compliance with all laws, rules, regulations and procedures applicable in Federal Republic of Somalia.
- 1.9. The Tenderer is expected to study all Tender Documents and shall be deemed to be informed with respect to all conditions that may affect the cost and execution of the Works.
- 1.10. In case the Tender is awarded, there should be no legal obstacles and practices (execution, vesting, bankruptcy, etc.) caused by the Tenderer to perform the works within the scope of the Tender.
- 1.11. The Tenderer shall have no outstanding tax debt in Somalia. Tenderer shall provide Tax Clearance Certificate and Tax Registration Certificate issued by the Government of Somalia.
- 1.12. The Tenderer must use steel formwork and steel structural supports for the formwork in order to carry out the security wall construction works

### 2. KEY PERSONNEL

2.1. The Tenderer shall provide the list of Key Personnel that will work throughout the project along with other Tender Documents.

## 3. CONTENT OF THE TENDER DOCUMENTS

- 3.1. Tender Documents issued includes the followings:
  - Section 1: Instruction to Tenderers
  - Section 2: Agreement
  - Section 3: Specifications
  - Section 4: Bill of Quantities
  - Section 5: Responsibility Matrix
  - Section 6: Site Photos
  - Section 7: Drawings
  - Section 8: Schedule
  - Section 9: Letter of Tender

### 4. SITE VISIT

- 4.1. Tenderers are provided with opportunity to visit the site by prior appointment from the Employer. Site visits are only to provide the information and does not guarantee any conditions.
- 4.2. It is the bidder's responsibility to gather all the information that may be required to visit the work site and its vicinity in order to examine the site for preparing the proposal. All expenses related to visit the work site and its vicinity belong to the bidders.
- 4.3. The Tenderers, by visiting the work site and its vicinity, deemed to know about the nature of the work site, have received all necessary information regarding risks, extraordinary situations & other similar factors, climatic conditions, the amount & type of the work to be carried out, the materials to be used, the costs & time required for transportation to the work site, establishing a site office etc. and any other parameters that may affect its proposal.
- 4.4. Tenderers shall be deemed to have taken full account in forming their proposals for all implications including but not limited to all practical and technical issues arising from executing the Works at the work site by visiting the site.

- 4.5. Necessary permissions to visit the work site for Tenderers shall be issued by the Employer.
- 4.6. In the evaluation process of the bids, it is deemed that the Tenderer has examined the work site and prepared its proposal accordingly.

### **5. PREPARATION OF TENDERS**

- 5.1. Tenderers may result in rejection in case of failure to submit properly completed Tenders.
- 5.2. Tenderers' company stamp shall be affixed on each submitted page.
- 5.3. Tender documents shall be signed on behalf of the Tenderers' company by an authorized person.
- 5.4. Each page of the Tender Documents shall be initialled by an authorized person.
- 5.5. Authorized person on behalf of the Tenderer's company shall provide Power of Attorney duly notarized.

### 6. OWNERSHIP OF THE DOCUMENTS

- 6.1. Tender Documents received by the Tenderers shall be considered to be sole property of the Employer.
- 6.2. All documents, information, model, data etc. submitted by the Tenderers shall be become the property of the Employer.

### 7. SUBMISSION OF TENDER

- 7.1. Tender Documents shall be submitted in 4 (four) copies of original hard format.
- 7.2. Tender Documents shall be submitted as electronic copy containing the submitted original hard copy.

### 8. CONFIDENTIALITY OF TENDER DOCUMENTS

8.1. All Tender Documents, information, correspondence, electronic mail, any matters or details shared etc. shall be treated as confidential by the Tenderers and not to be shared with third parties.

## AGREEMENT

### AGREEMENT

for

### SECURITY WALL AND GUARD TOWERS CONSTRUCTION

#### A. PARTICULAR CONDITIONS PART A: CONTRACT DATA

#### 1 **DEFINITIONS**

**The Authority:** Ministry of Ports and Marine Transport represented by the Mogadishu Port Authority

**The Employer:** Ministry of Ports and Marine Transport represented by the Mogadishu Port Authority and Mogadishu Alport Corp. Albayrak-Somalia

The Contractor: .....

**The Engineer:** HPC Hamburg Port Consulting GmbH and Sellhorn Ingenieurgesellschaft mbH J.V.

#### 2 INFORMATION REGARDING THE WORK

Under the Concession Agreement signed on date 07.10.2020 between The Government of the Federal Republic of Somalia represented by the Ministry of Ports and Marine Transport and Mogadishu Alport Corp. Albayrak-Somalia, the content of the Agreement is the Construction of the Security Wall and Guard Towers in Mogadishu Port as detailed in Scope of Work and as described in other parts/sections of the Contract Documents.

#### 3 SITE (WORK LOCATION)

City: Mogadishu Country: SOMALIA

#### 4 CONTRACT PRICE

This Contract is based on the Fixed Unit Prices as contained in Bill of Quantities. Total Contract Price is ...... USD + VAT including any Taxes, Fees and any other relevant expenses.

#### 5 TIME FOR COMPLETION

The Contractor shall complete the whole of the Works which is described in the Contract within 180 Calendar Days.

#### 6 SCOPE OF WORK

Scope of Work comprises the Construction of the Security Wall and Guard Towers in connection with Bill of Quantities, Drawings, Specifications and any other Contract Documents included within this Contract.

Except those that are clearly stated to be provided, the Contractor is to perform anything necessary to complete the work including the followings but not limited to:

The procurement of all kinds of materials, machinery, equipment, manufacturing, transportation, assembly, all kinds of workmanship, any relevant expense for labors, tools, hand tools, earthworks, horizontal and vertical transportation, fuel, general expenses, all kinds of taxes, insurance premiums and penalties, remedying of defects, defects and deficiencies in the work, relevant quality control, planning, organization, conducting the necessary tests and inspections, supplying samples and models, etc. services and activities, all other activities required by the job, all other expenses and profit.

#### 7 METHOD OF MEASUREMENT

Measurement shall be made of the net actual quantity of the Security Wall constructed at the site as linear meter and Guard Towers as numbers in connection with Contract Documents and no allowance shall be made for bulking, shrinkage, waste or anything related to execution of the work. The completed work shall be remeasurable as per the actual quantity completed at the site in case of any revision against the Bill of Quantities with the prior approval of the Employer.

#### 8 CURRENCIES OF PAYMENT

All payments shall be paid in US Dollars.

#### 9 BANK ACCOUNTS

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#### B. PARTICULAR CONDITIONS PART B: SPECIAL PROVISIONS

#### 1 LANGUAGE

The ruling language of this Contract shall be English. In case any part of the Contract (including all Contract Documents) is written in more than one language, the version which is in English language shall prevail. The language that will be used for all types of communications shall be in English.

#### 2 LAW

This Contract shall be governed in accordance with the law of The Government of the Federal Republic of Somalia.

#### 3 PERMITS

In relation to the execution of the Works, the Employer shall provide all permits, permissions, licenses and/or approvals etc. as required/applicable by the Laws/the Authority and shall borne all related taxes, duties and fees. The Contractor shall be responsible to comply with the conditions of obtained permits, permissions, licenses and/or approvals.

#### 4 CUSTOMS

Importing or exporting of any material, plant, machinery, equipment or any other delivery of the goods related to the Work shall be in the responsibility of the Contractor including clearance through customs. Any custom duties, custom fees or custom taxes that may arise due to importing and exporting activities shall be borne by the Contractor.

#### 5 PERFORMANCE SECURITY

The Contractor shall not deliver any Performance Security.

#### 6 ADVANCE PAYMENT

The Employer shall not pay any Advance Payment.

#### 7 SUBCONTRACTING

The Contractor shall subcontract any part of the work or whole of the works described in the Contract by obtaining the Engineer's prior consent.

### 8 DELAY DAMAGES (DELAY PENALTY)

In case the Contractor is not able to complete the Work described in the Contract within the stated Time of Completion, the Employer shall be entitled to payment of Delay Damages by the Contractor in the amount of 0.1% of the Contract Price for each day of delay. Total amount of delay damage shall not exceed 5% of the Accepted Contract Price.

#### 9 ADJUSTMENTS FOR CHANGES IN COST

Unit prices in Bill of Quantities and the amounts payable to the Contractor shall not be adjusted for rises or falls in the cost of labor, Goods, machinery, equipment, other inputs and any other expense/cost relevant to the Works. No adjustment shall be applied to the Work, the Accepted Contract Amount is deemed to have included amounts to cover the contingency of other rises and falls in costs valued on the basis of Cost or current prices.

#### 10 PAYMENT

The Contractor shall submit Monthly Progress Payments at the end of each month to the Employer and the Employer shall make Payments to the Contractor against the certified Monthly Progress Payments. The Employer shall review and return the Monthly Progress Payments to the Contractor within 15 days. In case the Monthly Progress Payment is approved, the Employer shall pay the certified amount within 30 days following the date of approval. The Payments shall be transferred to the Contractor's Bank Account specified in the Contract.

#### 11 RETENTION

The Employer shall retain the amount equal to 5% (five percent) of each Monthly Progress Payments. The amount shall be deducted from the certified amount of Monthly Progress Payments.

#### 12 DEFECTS NOTIFICATION PERIOD

Defects Notification Period is 1 (one) year upon issuance of the Taking Over Certificate.

#### 13 PAYMENT FOR MATERIAL DELIVERED ON SITE

The Employer shall make no separate/advance payment against the material delivered at the site.

#### C. GENERAL CONDITIONS

General Conditions of this Contract is "Conditions of Contract for Construction (Red Book, Second Ed. 2017), For Building and Engineering Works designed by the Employer" as published by FIDIC.

Any condition or data mentioned within *Particular Conditions Part A: Contract Data* and *Particular Conditions Part B: Special Provisions* in this Contract prevails the General Conditions.

#### List of Contract Documents:

• Section 2: Agreement

which contains:

- a. Particular Conditions Part A: Contract Data
- b. Particular Conditions Part B: Special Provisions
- c. General Conditions
- Section 3: Specifications
- Section 4: Bill of Quantities
- Section 5: Responsibility Matrix
- Section 6: Site Photos
- Section 7: Drawings
- Section 8: Schedule
- Section 9: Letter of Tender

The Contractor

The Employer

Address:

Address:

The Contractor's Representative:

The Employer's Representative:

# **SPECIFICATIONS**

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## 1. GENERAL

- 1.1. Specifications shall be read in conjunction with other Contract Documents.
- 1.2. The design life of the security wall and guard towers is 50 (fifty) years.
- 1.3. The Contractor shall be responsible for the machinery and equipment required to perform all works including tools, supplies, materials, electrical installations used for the operation of such, their transportation to the site and transportation after the completion of the work, installation and disassembly thereof.
- 1.4. The shop drawings shall be reviewed by the Contractor after signing the Contract and reviews shall take place during construction stages. Similarly, if any non-conformities are detected during the implementation, the Contractor shall inform the same to the Employer as soon as possible.
- 1.5. The Contractor shall be responsible for the organization of cranes at the capacity and amount required by the Work, providing all kinds of insurances, transportation and delivery to the site, on-site assembly, providing of operators and covering operators' all kinds of expenses, provision of all kinds of equipment and all maintenance costs.
- 1.6. The Contractor shall be responsible for obtaining exposed concrete, if necessary cleaning of all formwork oils on concrete surfaces, filling works of tie-rods and conical holes including materials, removal of burrs and surface defects that may form in construction joints and all types of similar works including material and workmanship.
- 1.7. After the PVC pipes or PVC conical parts used in tie rod holes are removed, the inner surface of the hole shall be roughened. The surface shall be cleaned after this process and the inside of the hole shall be filled with the mortar approved by the Employer. The Contractor is responsible for material supply and workmanship.
- 1.8. All works are to be carried out under the following listed Standard and Specifications. The Contractor shall be obliged to comply with the requirements of this Technical Specifications and the below listed specifications & standards in all works.
  - American Concrete Institute (ACI)
  - American Association of State of Highway Transportation Officials (AASHTO) Standard
- 1.9. The Contractor is liable for taking all kinds of measures within the scope of occupational health and safety. The Contractor shall take all kinds of protection measures, including materials and workmanship,

under the supervision of the Employer's occupational health and safety specialist.

1.10. The Contractor shall submit all kinds of technical data and implementation information, test certificates, warranty certificates and other quality control certificates of all kinds of materials used in the works to the approval of the Employer.

### 2. DEMOLITION WORKS

- 2.1. The Contractor shall determine the disposal site, obtain permits and all official authorizations.
- 2.2. All staff shall take the necessary protection measures at the construction site and use protective equipment (barrette, steel toe shoes, vests, belts, gloves, etc.).
- 2.3. Any additional safety measures due to changes in laws and regulations during the course of the work shall be borne by the Employer.
- 2.4. The Contractor shall ensure that all measures are taken, the work site is surrounded by a security tape and entries/exists are under control before starting the demolition.
- 2.5. Watering shall be carried out via water tanker to prevent the dust generated during demolition.
- 2.6. The Contractor is liable for remedying any damage to Infrastructure including Natural Gas Lines, Electricity Network, Water Lines, Mains etc.
- 2.7. The Contractor shall be responsible for the behavior and relations of the staff within the work environment during the demolition works.
- 2.8. The Contractor is obliged to compensate all kinds of damages and losses arising due to works included in the agreement.
- 2.9. The Contractor shall be liable for ensuring traffic safety in all kinds of works.
- 2.10. The Contractor shall maintain team and equipment required to complete the work on time at the site.
- 2.11. The Contractor shall ensure to use of construction equipment by qualified operators.
- 2.12. Supply of all kinds of equipment, materials used in the demolition and debris removal, all construction equipment and vehicles and the

related costs thereof belongs to the Contractor. The Contractor cannot request any changes in the price due to increases in fuel or other prices.

2.13. The Contractor shall be liable and responsible for all kinds of damages to properties, vehicles, various structures, roads belonging to public and private entities and persons during demolition, loading, transportation, unloading, environment cleaning, arrangement works and related claims and fines thereof.

## 3. EARTHWORKS

- 3.1. The Contractor is liable for ensuring that all excavation works are carried out by qualified teams, all machinery, equipment supply and earthworks are performed with due care and in line with the drawings, all materials are moved for all kinds of purposes with the related horizontal and vertical bearing in conformity with the drawings, related specifications and survey plans provided by the Employer.
- 3.2. All works shall be handed over to the Employer in conformity with the agreement terms, technical specifications and regulations.
- 3.3. The excavation works shall take place in all soil types and ground conditions at the construction site with all kind of required machinery and equipment according to the survey plans and excavation levels provided by the Employer.
- 3.4. The Contractor shall supply all kinds of equipment, tools, supplies required for the performance of works and cover their expenses. All materials, tools, machinery and equipment available at the construction site cannot be removed from the site without the written permission of the Employer.
- 3.5. Revisions in the drawings shall not affect the duration of the work. The unit prices offered for the earthworks shall cover all the conditions in the bidding specifications, all the desired and/or required capacities and quantities (material, workmanship, equipment, etc.) and unless otherwise stated, include all specified conditions, supervision, insurances, all taxes, profits and overhead expenses.
- 3.6. The Contractor is obliged to implement all kinds of occupational health and safety laws, directives and regulations in force as of the day it starts works on the construction site. In the event of failure to comply with the occupational health and safety rules/regulations, the Employer shall send a written notice to the Contractor once; in case of repetition, the Employer may impose the fines stipulated in the occupational health and safety laws, regulations and directives.

- 3.7. The Contractor is liable for remedying any damage to Infrastructure including Natural Gas Lines, Electricity Network, Water Lines, mains etc.
- 3.8. All materials from the excavation and demolition, except for the material to be reserved for backfilling, shall be transported to the dump site.
- 3.9. The Contractor is obliged to comply with the work schedule specified by the Employer.

## 4. LEAN CONCRETE

- 4.1. After completion of demolition, excavation, leveling and compaction works; coordinates and levels of the application area shall be checked in line with the approved drawings provided by the Employer. Lean concrete shall be cast with a pump or a direct mixer as per the thickness and type indicated in the drawings.
- 4.2. The lean concrete surface must be smooth enough for insulation and free of all kinds of wood chippings, sawdust, wires, nails, plastic, cigarette butts, etc. that may damage the insulation. Auxiliary tools for cleaning works such as air compressors shall be ready on the construction site.

### 5. FORMWORK

- 5.1. Related drawings shall be provided to the Contractor in line with the Work Schedule. The Contractor has undertaken any kind of formwork installation at any height suitable for the construction within the scope of the work. All kinds of materials, equipment, supplies and workmanship (skilled and unskilled labor) required for the work shall be provided by the Contractor. All kind of labor, equipment and consumables shall be provided by the Contractor.
- 5.2. The planned set of wall and column formworks should be at such quality in order not to leave any surface defects on the concrete after dismantling. The formwork material to be used by the Contractor shall be approved by the Employer. Any material that the Employer does not concede shall be removed from the Construction Site immediately. If not, the Employer shall issue penalty against noncompliance.
- 5.3. Formworks shall be designed and installed in accordance with the thickness, shape, alignment, coordinates and elevations of the concrete levels/dimensions indicated in the drawings.

- 5.4. Formworks shall be formed in a way that prevents leakage of concrete grout. Leakages and segregation shall be prevented by sponge strips, polyurethane foam or mortar where deemed as necessary with the approval of the Employer.
- 5.5. Concrete grout leakage occurring on concrete surfaces despite all precautions shall be cleaned by a scraper immediately after the construction is completed. The segregations, if any, that can be repaired shall be carried out with the repair mortars approved by the Employer. Structural segregations that cannot be repaired and other defective places with damages shall be broken/disassembled and reconstructed without interfering with the work schedule, at the Contractor's own cost.
- 5.6. The surfaces of the formworks should be smooth; the formwork joints should not be visible on the reinforced concrete surface after the formwork is removed. There should be no traces on the concrete surface and the surface must be smooth and of good quality. Smooth and clean exposed concrete surface shall be obtained.
- 5.7. Formworks shall be cleaned from all kinds of substances and surface roughness before installation and a formwork oil paint approved by the Employer shall be applied without leaving any traces on the surface. Excess oil on the surface shall be removed.
- 5.8. After the concrete is cast, the accessories (dowel, iron, stud, anchorage, etc.) used for formwork installation on the footing or wall shall be removed before the next step.
- 5.9. Before the concrete is cast, the interior of the formwork shall be cleaned from residues such as wood pieces, sawdust, wires, nails, plastic, cigarette butts. Auxiliary tools for cleaning works such as water jets, air compressors, etc. are to be kept ready on the construction site. Casting concrete is not allowed until all formworks are approved by the Employer.
- 5.10. Possible deflections on the wall and other implementation errors shall certainly not be accepted. The Employer has the right to demand from the Contractor to demolish the deflected construction and precisely reconstruct for free of charge and to claim any damages that may arise. Finished works with defects like misalignment, surface irregularities etc. shall be demolished and corrected. The Contractor cannot claim any compensation from the Employer due to such works.
- 5.11. The plywood thickness to be used in the foundation should be min. 18 mm.

- 5.12. The Tenderer must use steel formwork and steel structural supports for the formwork in order to carry out the security wall construction works
- 5.13. The Contractor shall not start Reinforcing Steel fixing within formwork or dismantle the formworks after casting concrete without the approval of the Employer.
- 5.14. Openings required for mechanical works, electrical works, etc. during formwork installation shall be made by the Contractor in accordance with the related drawings. The Contractor shall be responsible from the procurement of the materials for such reservations. The Employer shall not pay any price for relevant material procurement.
- 5.15. Expansion joints shall be provided at the distance and size specified in the drawings.
- 5.16. Even if the work completed is carried out with the approval of the Employer, in case it is not at the required quality by the Employer, all responsibility shall belong to the Contractor.
- 5.17. The Contractor is obliged to ensure the continuity of the board marks at the locations to be specified by the Employer and/or left as exposed concrete in the drawings. Otherwise, the Employer reserves the right to have the formwork removed and re-assemble, in which case no additional fee shall be paid to the Contractor.

### 6. REINFORCEMENT

- 6.1. The steel bars shall be bundled according to their diameters with the numbers visible in the stock area and stored without any contact with the ground. The steel bars shall be protected against rain with cover.
- 6.2. The reinforcing steel shall be prepared as specified in the drawings and classified with a marking system that will prevent confusion.
- 6.3. Cutting and bending works shall be performed with cutting bending benches and shears designed for such works, and the steel bars shall not be subjected to heat treatment under any circumstances. Steel bars shall not be cut with oxygen.
- 6.4. The steel bars shall be free of foreign materials such as dirt and oil. Starter bars shall be cleaned in case any exist in the application area. The steel bars shall be protected against dirt, rust and oil, and shall be delivered to the Contractor with a delivery note. Record of delivery notes shall be submitted weekly to the Employer.
- 6.5. The Contractor, before implementing the detailed drawings, shall calculate the waste according to the drawings and notice the

residual/waste steel bars in the dimensions that can be utilized during the work.

- 6.6. There shall not be any visible exposed steel bars in vertical and horizontal concrete surfaces and the concrete cover specified in the drawings shall be achieved.
- 6.7. After formworks are dismantled, no steel bars shall be visible in the horizontal and vertical concrete surfaces at the end of the construction. Concrete cover specified in the structural drawings shall be provided. Any defective construction due to insufficient concrete cover shall be eliminated by the Contractor free of charge.
- 6.8. The Contractor shall check the steel bars before the Employer in each reinforcing steel process and prevent defective construction. The Employer shall be informed for the inspection at the end of each construction stage. There shall not be any construction activity without approval, in such cases, the Contractor shall not proceed to the next construction stage.
- 6.9. The procurement of all other materials (concrete covers, tie wire, etc.) to complete the reinforcing steel works is within the Contractor's scope. The Employer shall not pay any fees for such materials.
- 6.10. Steel cutting, bending and fixing shall be carried out in accordance with the related drawings approved by the Employer.
- 6.11. Materials not approved by the Employer shall not be used and no such construction shall be accepted.
- 6.12. The method determined by the Employer shall be followed in constructions, the procedures specified by the Employer shall be followed in the approval of the constructions, other related works also shall not be carried out without the approval of the Employer.
- 6.13. Even if the work completed is carried out with the approval of the Employer, in case it is not at the required quality by the Employer, all responsibility shall belong to the Contractor.

### 7. CONCRETE WORKS

7.1. The Contractor shall prepare a concrete casting schedule and submit it to the Employer's approval before casting the concrete. The concrete casting schedule shall include the information for planned sections, the team and team leader, the number of vibrators, the location of the concrete pump and the route that transmixers will follow. The Contractor shall carry out the concrete casting schedule in coordination with the supplier. No casting is to be performed without the prior approval of the Employer.

- 7.2. Prior to concrete casting in horizontal formworks, formworks shall be cleaned by compressed air from residual tie wires, empty/broken concrete covers, garbage etc. Particles like cigarette butts and leftover materials shall be thrown out from the formwork.
- 7.3. Construction should be on its alignment, plumb and elevation. The exposed concrete surface shall be void-free and smooth. Repair of surface defects via repair mortars shall be carried out with the approval of the Employer. If the Employer does not accept repairs with the repair mortars, the concrete shall be demolished and reconstructed by the Contractor and due all expenses shall be borne by the Contractor.
- 7.4. For any reason whatsoever, no watering shall be applied to the concrete in the transmixer or in the pump chamber before pumping into the formwork.
- 7.5. Concrete class shall be C30. The contractor is obliged to follow the hardening process of the concrete with respect to the weather conditions. It is obliged to supply curing and protection materials (nylon, curing blanket, etc.), any sensors or thermometers in case it is necessary.
- 7.6. It is necessary to obtain 1 set of concrete samples for each 100 m3 concrete.
- 7.7. For concrete testing, 1 set of concrete sample up to 100 m3, 3 sets of concrete samples between 100 200 m3, and an additional 1 set of concrete samples for every 100 m3 after 200 m3 shall be taken. 1 set consists of 6 cubic or cylinder samples. 3 samples are for 7-day compressive strength tests, the other 3 are for 28-days compressive strength tests. All such works are under the responsibility of the Contractor. The Contractor shall coordinate the tests by providing all kinds of facilities.
- 7.8. The cement type for the concrete to be supplied by the Contractor is Portland cement, the Portland cement shall be in accordance with TS EN 197-1.
- 7.9. The Contractor shall check whether there is a sufficient number of tools and equipment for casting and processing the concrete and keep all the necessary tools ready for use at the construction site.
- 7.10. Concrete should be poured as close to the its final place. Dumping up concrete in a distant location and moving it with a shovel is not a suitable method and should be avoided. Concrete should not be cast into the formwork with free fall at heights above 1.50 m.

- 7.11. Concrete will be poured in homogeneous layers. The Contractor shall prevent piles and sloping layers during placement. In order not to cause segregation of the materials in the concrete, the concrete will be compacted until the air bubbles disappear and the vibrator surface brightness appears generally in 45 cm intervals. The vibrator shall not be immersed deep to the lower layers that started to harden. Spare equipment shall be kept ready at site by taking into consideration any possible defects or breakdowns of the equipment.
- 7.12. The Contractor shall protect the fresh concrete from sudden temperature changes, rain, frosting, vibrations and shakes that may damage the structure until the concrete completely hardens.
- 7.13. The Contractor shall take any measures to prevent shrinkage cracks that may occur in concrete in windy weather conditions. In cold weather, The Contractor shall take the necessary measures by applying curing or any other acceptable method in order to prevent possible cracks.
- 7.14. The concrete shall be protected after casting and shall be watered for7 days (early morning and in the evening). The Contractor shall provide all the required tools and workmanship.
- 7.15. The Contractor shall keep all kinds of tools, equipment, materials, consumables and qualified workforce on the site available in order to carry out the works in the most efficient way possible.
- 7.16. The Contractor shall ensure that the formwork tie holes used in formwork construction are suitable and are filled with the approved method by the Employer.
- 7.17. The placement and compression speeds of concrete shall be parallel. The Contractor shall not allow delays and pauses that may cause cold joints to occur during casting. When required, the admixtures shall be used by the approval of the Employer in places where cold joints will occur. All additive materials are included in unit prices.
- 7.18. Materials not approved by the Employer shall not be used and no such work shall be accepted.
- 7.19. The method determined by the Employer shall be followed in the constructions. The procedures specified by the Employer shall be strictly followed in the constructions and any other works shall not be carried out without the approval of the Employer.
- 7.20. Even if the work completed is carried out with the approval of the Employer, in case it is not at the required quality by the Employer, all responsibility shall belong to the Contractor.

- 7.21. Any finished work that is included in the progress payment does not mean that the related construction is accepted by the Employer.
- 7.22. Concrete shall be handed over to the Contractor with a delivery note. Delivery notes shall be submitted weekly to the Employer.

### 8. BACKFILLING AND COMPACTION WORKS

- 8.1. Backfilling shall not be started until the formworks are dismantled and the concrete surfaces are free of dust, oil and other chemicals.
- 8.2. Backfilling should not be started before 7 days after the concrete is cast.
- 8.3. Backfilling works should not be performed in heavy rainy weather.
- 8.4. Filled finished surfaces shall be compressed, with smooth slopes and free from irregular surface changes.
- 8.5. Backfilling and compaction shall proceed in accordance with the details provided in drawings.

## 9. INSULATION AND SEGREGATION REPAIR OF TIE-ROD HOLES

- 9.1. All tie-rod holes shall be filled inside by a fill mortar material approved by the Employer.
- 9.2. The segregations, if any, that can be repaired shall be carried out with the repair mortars approved by the Employer. Structural segregations that cannot be repaired and other defective places with damages shall be broken/disassembled and reconstructed without interfering with the work schedule, at the Contractor's own cost.

### **10. PAINTING WORKS**

- 10.1. The materials shall be delivered to the construction site without damaging with the necessary precautions taken in accordance with the climate conditions during transportation. The Employer has the right to reject disturbed/damaged materials that do not comply with this condition.
- 10.2. The materials to be used in the construction should be stored in dry locations with adequate ventilation and with protection against changing weather conditions (humidity, direct sunlight, water, etc.). In

addition, the storage conditions determined by the supplier shall be considered

- 10.3. No materials that may cause chemical deterioration of the materials including sulfate, ash, etc. can be stored at the same place with the paints.
- 10.4. The written permission of the Employer's Representative shall be obtained for the use of equivalent materials.
- 10.5. The application surface must be free from dust, residues or any previous damages.
- 10.6. There should be no oil, paint, dirt and similar on the finished surface which would reduce the adherence of the paint.
- 10.7. Free aggregate particles on the surface should be cleaned completely from the surface. After this process is carried out on all surfaces, the surface should be cleaned of the dust generated during the process.
- 10.8. Even if the application process is completed, the detected faulty applications shall not be accepted. The areas that should be repainted shall be performed by the Contractor free of charge.
- 10.9. The Contractor shall be in charge of protection of any paint until it is handed over to the Employer.
- 10.10. Secure scaffolding shall be established in all constructions to be carried out at a height of 2.5 meters and above. The Contractor shall be responsible for providing the required scaffolding, installation and disassembly works and for taking all necessary occupational safety measures.
- 10.11. Water-based paint, in a color approved by the Employer, shall be applied with a roller brush in two layers, paying attention to the curing times.

### 11. ENVIRONMENTAL CONTROL

- 11.1. The Contractor shall be committed to good neighborliness and the continuing assessment of the environmental impacts of its operations, activities and materials.
- 11.2. The Contractor's management and staff shall be committed to the practice of minimizing waste and emissions as much as possible.
- 11.3. The Contractor shall foster among its employees at all levels and create an individual sense of responsibility for the environment and the need to be alert to potential sources of pollution in the work environment.

- 11.4. The Contractor shall not dispose of any generated waste or material into the adjacent waters or sea.
- 11.5. The Contractor shall seek any hazardous material at site in order to provide proper transportation, usage, storage and disposal related to its nature and properties.
- 11.6. The Contractor shall monitor and control the noise levels of its operations to an acceptable standard to mitigate human sufferings due to sound pollution as possible.
- 11.7. The Contractor shall minimize the noise exposure to neighboring persons and activities to its operation and ensure that applicable hearing protection is used if required.
- 11.8. The Contractor shall ensure to avoid not contributing anything to pollute the air environment as much as possible.
- 11.9. The Contractor shall provide water at site in order to control the dust generated by the construction and demolition activities.
- 11.10. The Contractor is obliged to implement all kinds of environmental laws, directives and regulations in force as of the day it starts works on the construction site. In the event of failure to comply with the environmental rules/regulations, the Employer shall send a written notice to the Contractor once; in case of repetition, the Employer may impose the fines stipulated in the environmental laws, regulations and directives.

# **BILL OF QUANTITIES**

Date: 13<sup>th</sup> February, 2021

	В	ILL OF QU/	ANTITIES		
PROJECT : Mogadishu Port Security Wall and Guard Towers Construction		Construction			
EMPLO	YER :		by Mogao	d Marine Transp dishu Port Auth and ort Corp. Albayı	
	QUALIFIED and   ENGINEER :   Sellhorn Ingenieurgesellschaft mbH   J.V.		-		
CONTR	ACTOR :				
ІТЕМ	DESCRIPTION	Unit	Quantity	Unit Price (USD)	Total Price (USD)
1	Security Wall Construction	meter	514		
2	Guard Towers Construction	NOS	3		
			GRAND TO	)TAL (USD)	

## **RESPONSIBILITY MATRIX**

#### SECTION-5: RESPONSIBILITY MATRIX

	DESCRIPTION	<u>EMPLOYER</u>	CONTRACTOR
	GENERAL		
1	Mobilization and Demobilization (Including all required material, machinery, equipment supply)		x
2	All necessary Personnel (Managers, Engineers, Foreman, skilled and unskilled labors etc.)		x
3	All necessary materials		x
4	Electricity, gas, water etc. expenses		x
5	Testing and laboratory Works		x
	MACHINEARY AND EQUIPMENT		
1	Supplying all necessary machinery, equipment and tools with related accessories		x
2	All maintenance requirements and expenses including oil, filter, lubricants, tools, plant, equipment etc.		x
3	Fuel expenses		x
4	Formwork		x
5	Formwork accessories		x
	MATERIALS		
1	Any class of Concrete		x
2	Any type of Reinforcing Steel		x
3	Safety materials (Tape, Cone etc.)		x
4	Personnel Protective Equipment (PPE)		x
5	Insulation materials		x
6	Paint		x
7	Any construction consumables		x

#### SECTION-5: RESPONSIBILITY MATRIX

	DESCRIPTION	EMPLOYER	
	STAFF EXPENSES		•
1	Personnel wages and expenses (including overtime)		x
2	Work Permits for personnel and fees		x
3	Transportation of personnel from/to site		x
4	International and Local transfer of personnel		x
5	Accommodation and Food		x
6	Health Services		x
7	Insurance and Social Security		x
8	Personnel Protective Equipment (PPE)		x
	DESIGN AND SURVEY WORKS		
1	Design Works (All Engineering services regarding design)	x	
2	Shop Drawings		x
3	Site Survey and Survey Activities during Construction		x
4	Providing benchmark (reference) point for survey works	X	
	PERMITS AND FEES		
1	Environmental Permits, Royalties, relevant Permits from local Authorities		x
2	Port entry permits for Contractor's Personnel, material and equipment	х	
3	Disposal Site Permits and Fees		x
4	All duties, taxes, royalties related to permits		x
5	Port related cost and fees		x
6	All risk insurance	x	x

#### SECTION-5: RESPONSIBILITY MATRIX

	DESCRIPTION	<u>EMPLOYER</u>	CONTRACTOR
	SITE ACTIVITIES		
1	Space allocation for site office, warehouse and workshop.	x	
2	Building of facilities like warehouse, workshop, camp, etc.		x
3	Loading, unloading, moving or shipping the materials, equipment, etc. from/to site		x
4	Preparation of the Work Schedule		x
5	Daily, weekly and monthly reports		x
6	Earthworks		x
7	Reinforced Concrete Works		x
8	Painting Works		x
9	Ancillary Works		x
	QA/QC AND SAFETY		
1	Material approvals		x
2	Quality Assurance and Quality Control services and relevant tests		x
3	All kinds of laboratory services		x
4	Preparing the Safety Plan		x
5	Taking security and safety measures at site		x
6	Supply of Safety, Health, Environment and Quality Requirements		X

# SITE PHOTOS

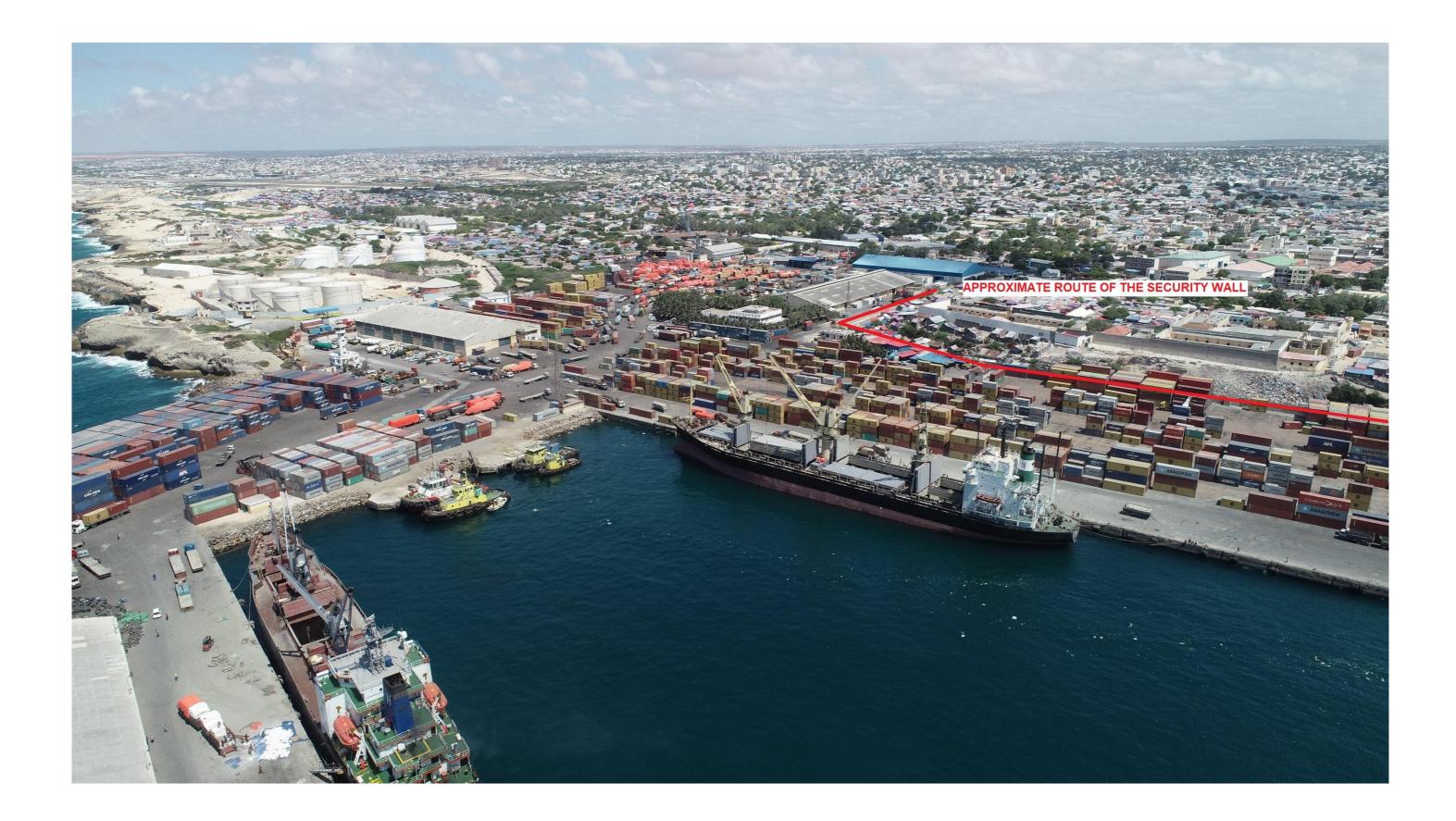
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2.	MOGADISHU PORT GENERAL VIEW	. 3

## 1. MOGADISHU PORT SATELLITE IMAGE



## 2. MOGADISHU PORT GENERAL VIEW



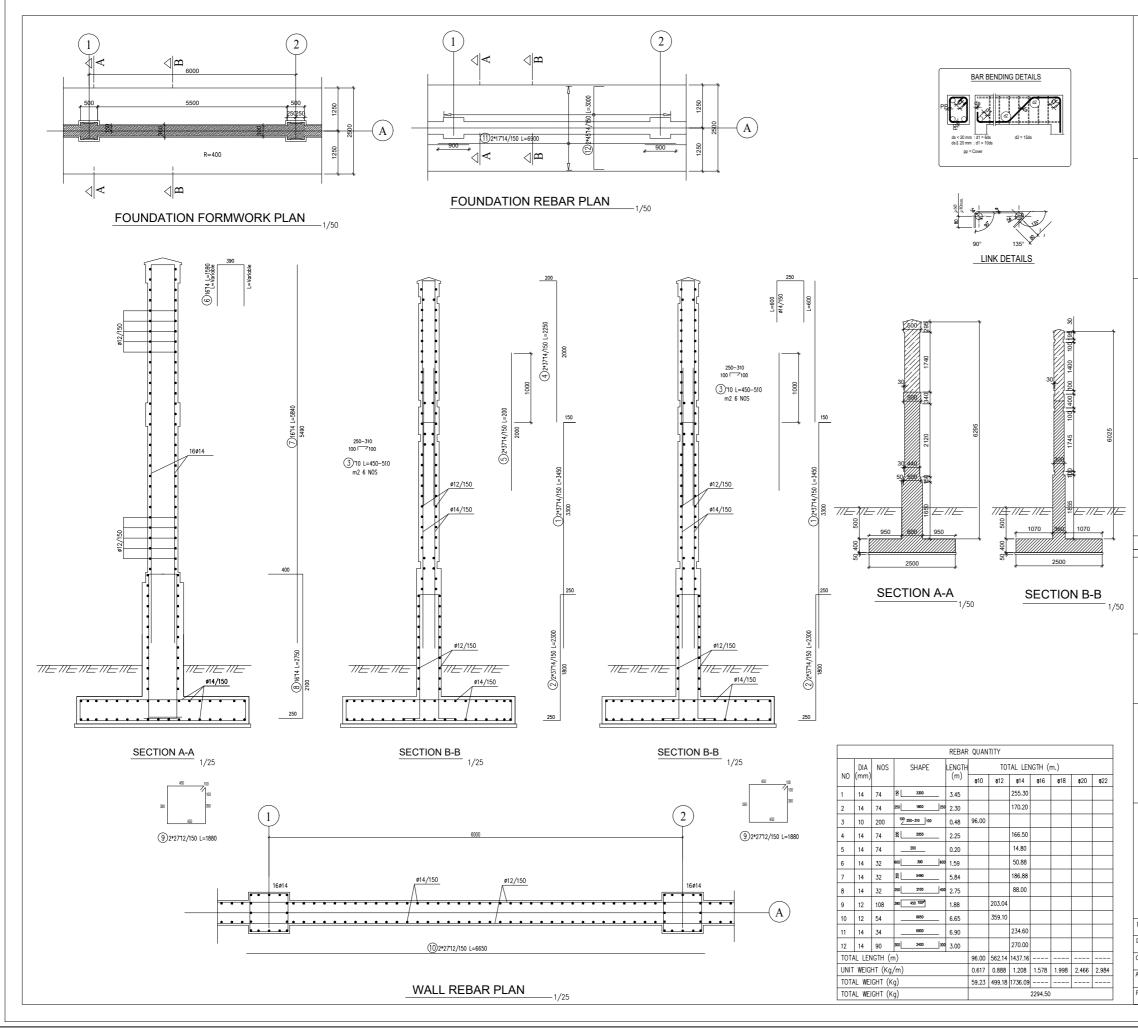
DRAWINGS

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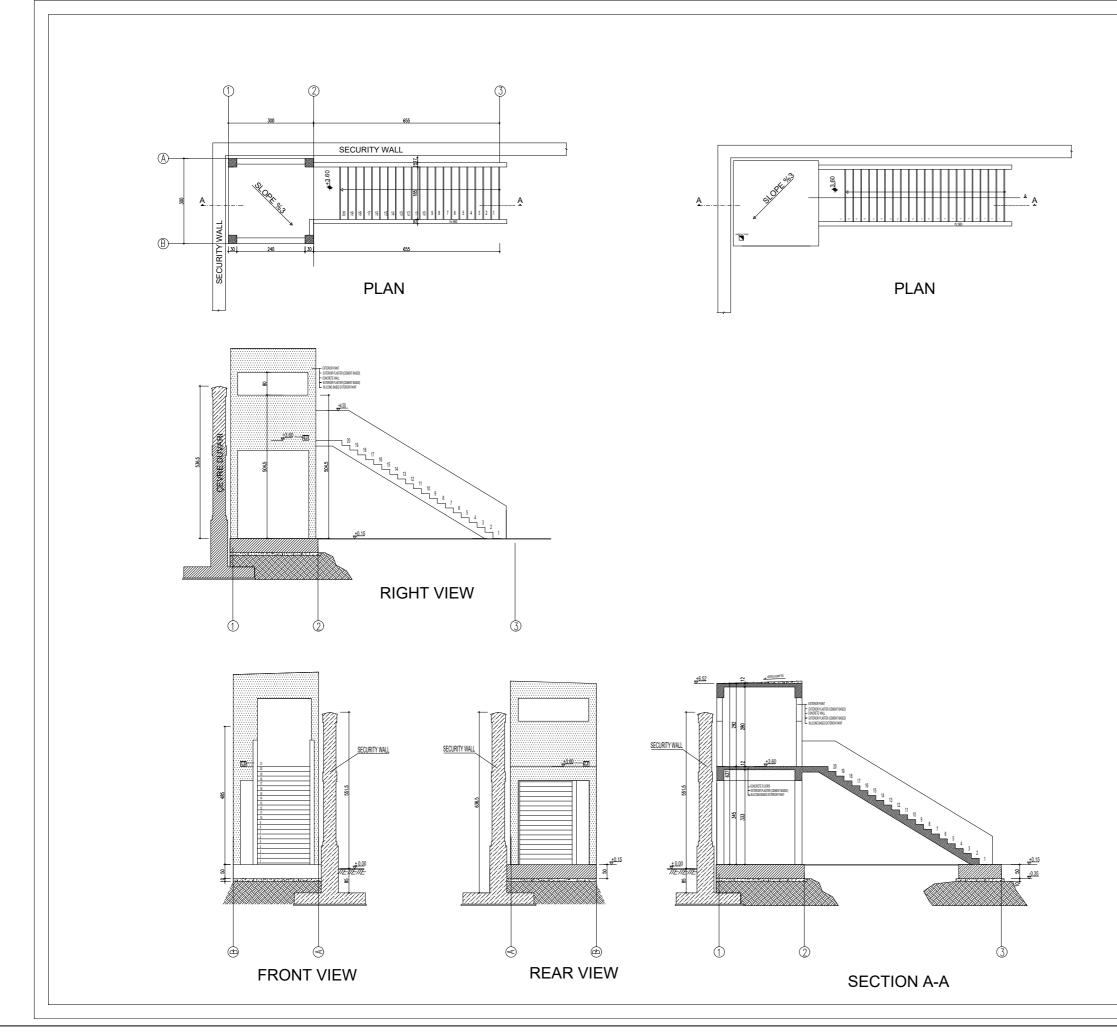


SECTION-7: DRAWINGS



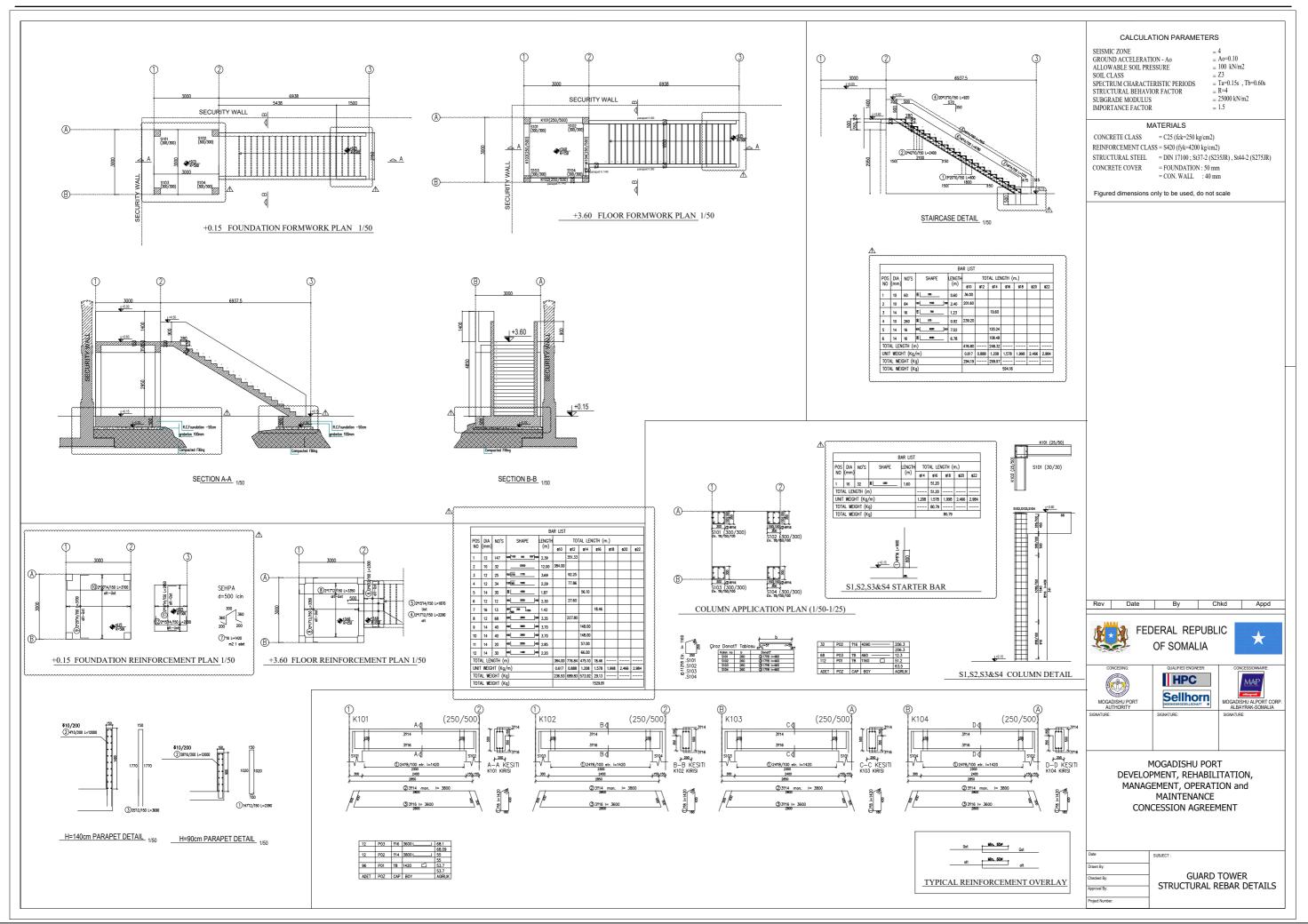
Security Wall and Guard Towers Construction

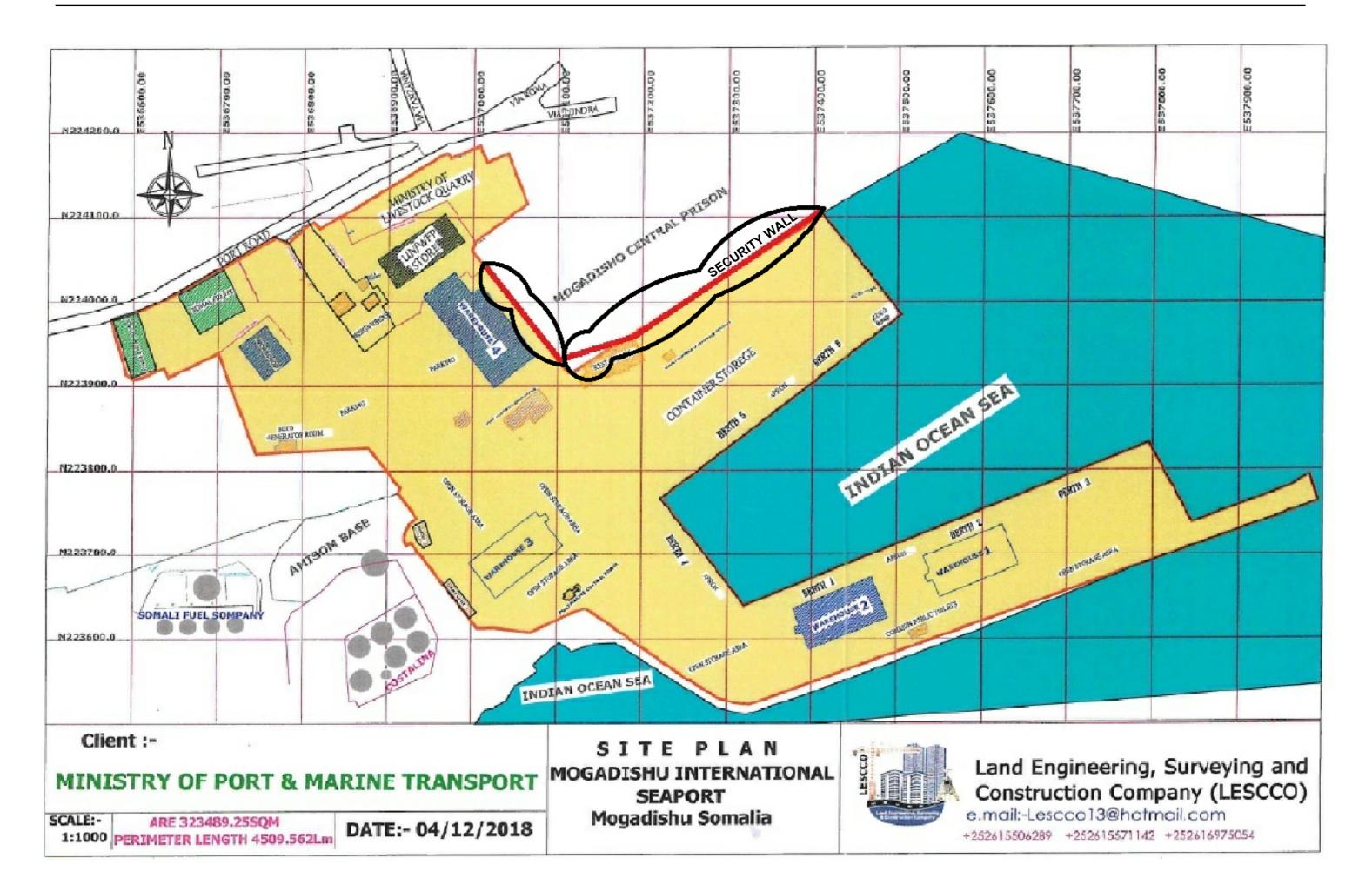
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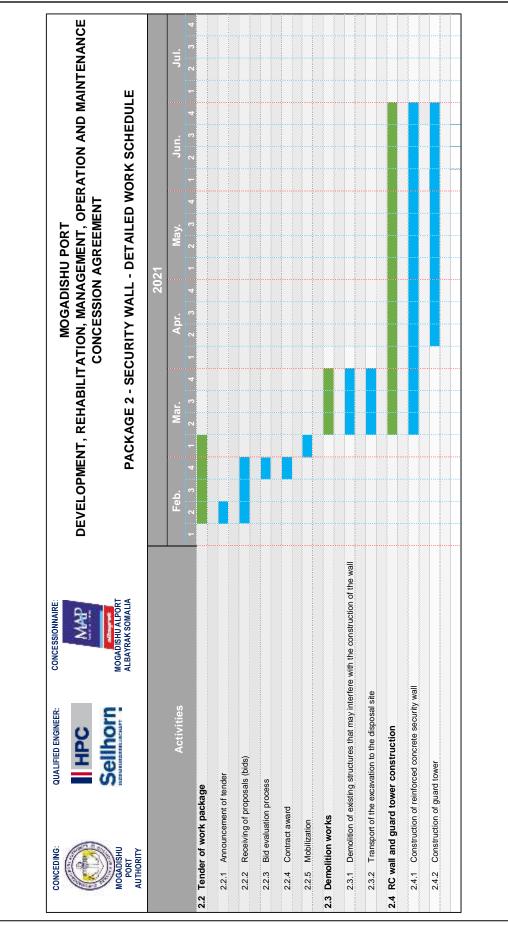
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	GEMENT, OPERATION and ICE CONCESSION AGREEMENT
PRATIN ( EINAI)	
Date:	SUBJECT :
Drawn By:	
Checked By: Approval By:	ARCHITECTURE OF GUARD TOWER
··· •	4
Project Number:	

SECTION-7: DRAWINGS





## SCHEDULE



### SECTION-8: SCHEDULE

## LETTER OF TENDER

## FEDERAL REPUBLIC OF SOMALIA

## **MOGADISHU PORT**

### PACKAGE-2

#### SECURITY WALL and GUARD TOWERS CONSTRUCTION

**To:** Ministry of Ports and Marine Transport represented by Mogadishu Port Authority and Mogadishu Alport Corp. Albayrak-Somalia

Dear Sir,

We have examined the Instruction to Tenderers, Agreement, Specifications, Bill of Quantities, Responsibility Matrix, Site Photos, Drawings, Schedule and Letter of Tender for Package-2 Security Wall and Guard Towers.

Authorized Person on Behalf of the .....

Name: .....

Signature

Date: .....