PLANNING, DESIGN AND RESIDENT CONSTRUCTION SUPERVISION OF: A) ESTABLISHMENT OF BUSINESS PARK; B) MODIFICATION OF AUCTION HALL; C) ESTABLISHMENT OF COLD STORAGE AND FREEZING TUNNELS

REQUEST FOR PROPOSALS

FOR

HIRING OF SERVICES FOR CONDUCTING TESTS AT KORANGI FISH HARBOUR

1. Qualification Criteria

Qualification will be based on the criteria given in the following paras regarding the Applicant's experience, personnel and equipment capabilities, financial position and litigation history, as demonstrated by the Applicant's responses in the Forms attached as Annexure-A to this Document. The Employer reserves the right to waive minor deviations, if these do not materially affect the capability of an Applicant to perform the contract by the Applicant.

Experience and resources of the Company intended to be employed as sub-contractor shall not be taken into account in determining the Applicant's compliance with the qualifying criteria. However, for joint venture, collective experience, resources and financial soundness of all partners shall be considered.

1.1 General Information

The Applicant shall provide general information of his firm as per format specified in the Application Form A-1 attached in Annexure-A.

1.2 Experience of the Firm

The Applicant shall meet the following minimum criteria:

1) Successful experience as a contractor/ test conducting agency in the execution of at least three (3) projects involving testing of existing pre-stressed / reinforced concrete structures each having minimum cost of PKR. Two (2) million within the last ten (10) years. The Applicant will supply information as per the format specified in the Application Form A-2 attached in Annexure-A.

1.3 Personnel Capabilities

The Applicant must have in his employment, suitably qualified and experience personnel to fulfill the positions tabulated below. The Applicant will supply information as per the format specified in the Application Form A-3 attached in Annexure-A.

Sr. No.	Position	Qualification*	Minimum Numbers Required	Minimum Experience (Years)
1	Structure Engineer	M.Sc. Civil Engg. (Structures)	1	10
2	Civil Engineer	B.Sc. Civil Engg.	2	5
3	Certified Technicians	Certification course	2	3

1.4 Equipment Capabilities

The Applicant should own, or have assured access to the following key items of equipment in full working order, and must demonstrate that, based on known commitments; these will be available for deployment on the proposed works.

Sr. No.	Equipment Type & Characteristics	Minimum Number Required
1	Rebound Hammer (Schmidt hammer) Test apparatus.	1
2	Rebar Scanning or Ferro scanning machines.	1
3	CAPO Test apparatus.	1
4	Core Extraction and Compressive Strength Test machines.	1
5	Chloride Content Test apparatus.	1
6	Sulphate Content Test apparatus.	1
7	Concrete Composition Test.	1
8	Carbonation Test on extracted cores	1

The Applicant will supply information as per the format specified in the Application Form A-4 attached in Annexure-A.

1.5 Financial Capabilities

The Applicant shall meet the following minimum criteria:

1) Average annual turnover which is also termed as income from contracting and is defined as billing for works completed during the last three (3) years of at least Rs. 2.5 million. Audited balance sheets of the same should be submitted.

The Applicant shall also provide evidence of financial health such as bank account statements, available line of credits, etc., to show the soundness of the Applicant's financial position. The Applicant will supply annual turnover information as per the format specified in the Application Form A-5 attached in Annexure-A.

1.6 Litigation History

The Applicant should provide accurate information on any litigation or arbitration resulting from Contracts completed or under execution over the last five (05) years. The Applicant will supply information as per the format specified in the Application Form A-6 attached in Annexure-A. A consistent/ overwhelming history of litigation against the Applicant may result in rejection of the application. In case an Applicant claims Nil litigation, he shall submit the same statement on the letter head of his company.

1.7 Methodology

The Applicant should provide the detailed and project specific work methodology outlining the step-by-step approach for conducting structural testing. The methodology should include site preparation, access from sea or land, selection of testing techniques, execution procedures, and safety measures.

Application Form A-1 **Page___ of ____Pages**

General Information

All individual Applicants applying for qualification are requested to complete the information in this form. Nationality information (if applicable) is also to be provided for foreign owners as required under the PEC Bye-Laws as a Partnership.

1.	Name of the Firm	
2.	Head Office Address	
3.	Telephone	Contact Person: Name: Title: Cell No.
4.	Fax	E-mail
5.	Place of Incorporation/Registration Certificates of the firm*	Year of incorporation/registration

*** Registration certificates must include:**

- Valid registration with Pakistan Engineering Council (PEC)
- Valid registration with Federal Board of Revenue (FBR)
- Valid registration with Provincial Revenue Authority (PRA)
- Proof of active taxpayer of FBR & PRA

Experience of the Firm

Name of Applicant: _____

Sr. No.	Name of Project	Value of Contract* (Pak Rs.)	Contract Duration

Attach copy of Letter of Awards and Project Completion Certificates for at least any three (3) latest projects involving testing of existing pre-stressed / reinforced concrete structures each having minimum cost of PKR. Two (2) million within the last ten (10) years.

Application Form A-3 **Page___ of ____Pages**

Personnel Capabilities

Name of Applicant: _____

Sr. No.	Name of Person	Qualification	Designation/ Position*	Total Experience

Attach CVs of the Key Staff Members.

Application Form A-4 **Page___ of ____Pages**

Equipment Capabilities

Name of Applicant: _____

Sr. No.	Equipment Description	Capacity	Number of Equipment	Working Condition a) Very good b) Good c) Satisfactory	Current Location

Application Form A-5 **Page___ of ____Pages**

Financial Capabilities

Name of Applicant: _____

Year	Annual Turnover (in PKR)
2023 – 2024	
2022 – 2023	
2021 – 2022	

Note: Audited Balance Sheets from Chartered Accountant firm and Financial soundness certificate from the bank(s) as specified in section 1.5 must be provided by the Applicant

Litigation History

Name of Applicant: _____

Year	Award for or against Applicant	Name of Client, cause of litigation, and matter in dispute	Disputed amount (current value Pak Rs. or equivalent)

TERMS OF REFERENCE (TOR)

1. Introduction

Korangi Fisheries Harbor Authority (KoFHA) intends to improve infrastructure and allied services of Korangi Fish Harbour (KoFH), especially seafood, handling and processing as per international standards. In this regard, KoFHA has to upgrade the existing jetty and related structures.

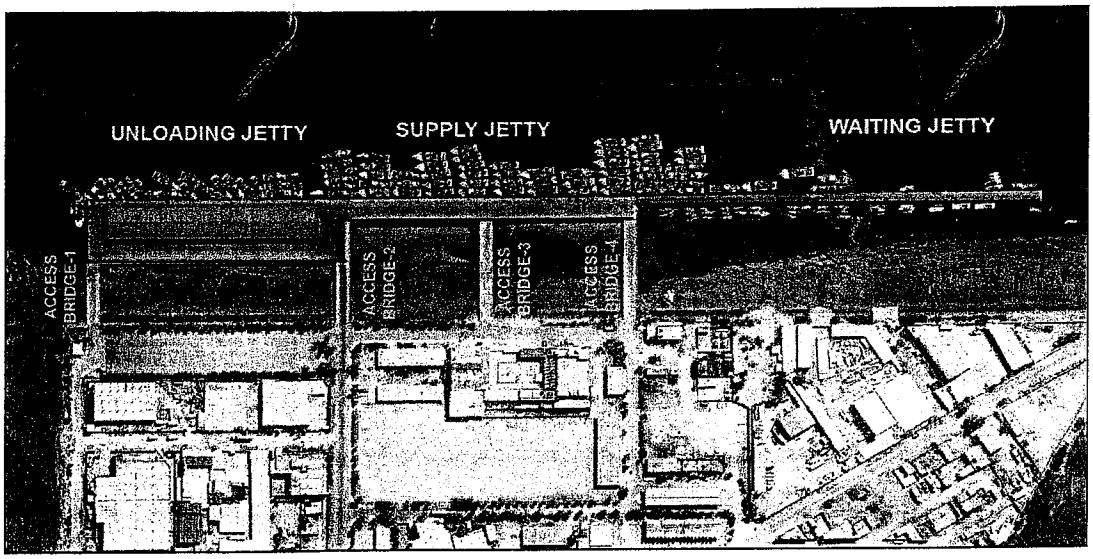
National Engineering Services Pakistan (Pvt.) Ltd. (NESPAK) has been engaged by KoFHA to carry out the condition survey and field testing of the elements of the existing Unloading Jetty and Access Bridges No.1 and No.2. For this purpose, NESPAK requires services of test conducting agencies / firms / contractors for various tests to be performed at Site and laboratory.

2. Location

KoFH is located approximately 22 km east of the Karachi city center. It is a purpose-built facility designed to handle deep sea fishing vessels. Situated in the Korangi Creek, the KoFH is at a distance of around 15 km from the mouth of the Korangi Creek at the Arabian Sea. The construction work of KoFH was completed in 1998.

The existing jetty is 709 meter long comprised of three portions, 51m x 203.5 m Unloading Jetty, 19m x 212m Supply Jetty and 8m x 293.5m Waiting Jetty. There are four approach bridges to access the jetty from land side. Two access bridges are of size 8m x 81m and the two other bridges are of size 8m x 49m. Figure-1 show the three portions of the jetty highlighted on a satellite image.

Figure-1: KoFH Jetty comprising of three portions (Unloading, Supply and Waiting Jetties) and Access Bridges



3. Scope of Works

The scope of Works includes conducting condition survey and field & laboratory testing of existing pre-stressed/ reinforced concrete structures of Unloading Jetty and Access Bridges No.1 and No.2 at KoFH Jetty. The tests include the following:

a) Core Extraction and Compressive Strength Test

b) Determination of Water-Soluble Chloride in Concrete by Drill Dust Method

c) Chemical Composition of Concrete

d) Carbonation Depth Test on extracted cores

e) Delamination Survey of structural elements of Jetty and Access Bridges

The exact location of test points shall be selected/ finalized by NESPAK engineers at the time of testing.

a) Core Extraction and Compressive Strength Test

Extraction and Compressive Strength testing of Concrete Cores shall be in accordance with ASTM C42, ASTM C39 & ASTM C617 standards at selected points / locations of structural elements of the jetty.

Around Twenty-Eight (28) concrete cores shall be extracted and tested as per following frequency:

S. No.	Component	Minimum Frequency of Testing
1.	Pile Heads	Six (06)
2.	Transom	Thirteen (13)
3.	Planks / Deck	Nine (09)

- Exact location of cores shall be finalized by NESPAK engineers at the time of testing.
- Rebar / Ferro-scanning shall be performed by the testing agency before extraction of cores in order to avoid cutting of any existing reinforcement.
- Proper care shall be taken during cutting, storing, transportation and testing of the concrete cores to ensure the integrity of drilled cores. Extra core(s) shall be extracted by the testing agency without any extra fee to compensate for concrete cores damaged during extraction, storing, transportation or testing.
- If any core is damaged or broken during extraction, the other core shall not be extracted adjacent to it. NESPAK engineer shall be requested for locating / selecting the alternate location against the damaged core.
- Extracted cores shall be transported from site to the testing laboratory in a box with foam or polystyrene packing or other damping material to avoid any jerks/ impact on the extracted cores and collision with each other during transportation.
- Non-shrink cementitious grout with minimum cylindrical strength of 75MPa, manufactured by a reputable international brand, shall be provided and filled in all cut holes immediately after extraction of core by the testing agency.
- Potable water shall be used during extraction of cores. No contaminated or saline water shall be used during the extraction of cores.

b) Determination of Water-Soluble Chloride in Concrete by Drill Dust Method

Determination of water-soluble chloride in concrete by weight of cement shall be carried out in accordance with ASTM C1218. Rotary Impact Drill and drill or pulverizing bits of sufficient diameter should be used for sampling for testing. Spoon or other suitable means may be used to remove pulverized sample material from drill hole without contamination.

Sample containers capable of maintaining samples should be retained in an uncontaminated state. From each test location, samples shall be taken at depths of 25mm, 50mm, 75mm & 100mm and chloride content of each sample by weight of cement shall be carried out and separate results to be provided for each depth.

Samples at depths as described above shall be taken from Thirty (30) test locations considering following frequency:

S. No.	Component	Minimum Frequency of Testing
1.	Pile Heads	Eight (08)
2.	Transom	Twelve (12)
3.	Planks / Deck	Ten (10)

c) **Chemical Composition of Concrete**

Chemical Composition of Concrete, like cement content, aggregate content, type of cement, type of aggregate and alkali content etc. shall be performed on Sixteen (16) extracted cores in compliance with the relevant ASTM / BS standards like BS 1881, ASTM C1218 etc.

d) **Carbonation Depth Test on Extracted Cores**

Carbonation Depth Tests shall be performed as per following Table on Twenty Four (24) extracted cores in compliance with the relevant ASTM / BS standards like BS 1881, ASTM C1218 etc.

e) **Delamination Survey of Structural Elements of Unloading Jetty and Access Bridges No. 1 and 2.**

Concrete delamination survey of all visible surfaces of RCC elements like piles, pile heads, transoms, Planks etc. from underside the jetty shall be carried out through hammer tapping to identify any signs of delamination, spalling, signs of corrosion, seepage, detachment of concrete cover.

The concrete surface areas shall be surveyed by tapping (min. 25 tap/m^2) in order to find all damages and cavities and marking the areas affected

The size, location and extent of the unsound, porous, detached, spalled areas of the structural elements shall be identified and mapped on the drawings.

4. Deliverables

Testing agency shall be required to submit following after successful completion of the job.

i. The results of all specimens / samples / test points shall be submitted for each sample/ test point for the above stated tests.

ii. All the activities performed at the Site and laboratory shall be documented in the form of a Testing Report which shall include but not limited to test dates, temperature & humidity during test, photographs & drawings showing locations of sample/ test points for each of the specified tests separately.

iii. Delamination Survey Drawings showing size, location and extent of delamination, detachment, spalling from the concrete surfaces of piles/ pile heads, transoms and planks / deck of the jetty.

iv. A Draft Report including all of the above shall be submitted for review, comments and approval of NESPAK.

v. Final Report shall be submitted after approval of NESPAK for Draft Report.

5. Time for Completion:

The whole survey and testing Works shall be completed in all respects within a period of thirty-five (35) days from the date of receipt of Letter of Acceptance/ Award.

6. **Payment:**

a) The quoted price shall be inclusive of all taxes, including but not limited to income tax and sales tax.

b) To obtain first-hand information on the Assignment and on the local conditions, you are encouraged to pay a visit to the subject Site before submitting a proposal. **You must fully inform yourself of local conditions and take them into account in preparing your proposal**. No financial claim whatsoever, shall be entertained if the work is suffered due to local conditions and law and order situation.

c) Please note that:

i. The cost of preparing the proposal and of negotiating the Contract, including a visit to the subject Site, are not reimbursable as a direct cost of the Assignment; and

ii. NESPAK is not bound to accept any of the proposals submitted and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the applicant/ firm.

d) No advance payment shall be made.

e) 100% payment shall be made on completion of the Works and successful review of the Deliverables and subject to payment of the Works by Korangi Fisheries Harbour Authority (KoFHA) to NESPAK.

f) No payment shall be made for incomplete works.

g) Liquidated Damages @ 1% of the Contract Price for each day of delay up to a maximum of 10% of the Contract Price shall be deducted for late completion of Works.

BILL OF QUANTITIES

S. No.	Testing Description	Unit	Qty.	Unit Rate (Rs.)	Amount (Rs.)
1	Core Extraction and Compressive Strength Test	Per Core	28		
2	Determination of Water-Soluble Chloride in Concrete by Drill Dust Method (samples shall be taken at depth of 25, 50, 75 &10mm)	Per Test	30		
3	Chemical Composition of Concrete	Per Core	16		
4	Carbonation Depth Test	Per Core	24		
5	Concrete Delamination Survey	LS	01		
a.	**Total Costs (A)**				
b.	**Sindh Sales Tax on Services @ 15% (B)**				
c.	**Grand Total (A+B)**				
Total Amount in Words:					