PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)

CONTRACT AWARD PROFORMA-I

(As per Rule 47 of PP Rules, 2004)

To Be Filled And Uploaded on PPRA Website In Respect of All Public Contracts of Works, Services & Goods

1	Name of the Organization/Deptt:	Karachi Port Trust
2	Federal / Provincial Govt:	Ministry of Maritime Affairs
3	Title of Contract	Consultancy Services for Conducting Feasibility Study for determining the existing Hydraulic Regime in the Karachi Port Area of Jurisdiction and Improving Marine Ecosystem while considering previous and future development projects.
4	Tender Number	P&D-G(661)/2021/Hyd
5	Brief Description of Contract	Brief Description of Contract is attached (Annex-A).
6	Tender Value	PKR 3000/-
7	Engineer's Estimate (for civil Works only)	N/A (for only conducting Feasibility Study)
8	Estimated Completion Period	18 Months
9	Whether the Procurement was included in annual procurement plan? yes / No	Yes
10	ADVERTISEMENT : (i) PPRA Website Yes / No (Federal Agencies) (If yes give date and PPRA's tender number) (ii) News Papers Yes / No (If yes give names of newspapers and dates)	(i) Yes (Karachi Port Trust) (PPRA's tender No. TS453335E dated June 2021) (ii) Yes (Daily Nawa-i-Waqt & Business Recorder on 06-06-2021, Gulf news and Daily Sabah on 23-06-2021
11	Tender Opened on (Date & Time)	30 September 2021 at 1530 hrs
12	Nature of Purchase (Local / International)	Local in PKR
13	Extension in Due Date (If any)Yes / No	Yes

14	Number of Tender Documents Sold (Attach list of Buyers)	Eight (08) firms (Annex-B)
15	Whether Qualification Criteria was included in Bidding/Tender Documents Yes / No (If yes enclose a copy)	Yes (Annex-C)
16	Whether Bid Evaluation Criteria was included in Bidding/Tender Documents Yes / No (If yes enclose a copy)	Yes (Annex-C)
17	Which Method of Procurement was used: - a) Single stage – One envelope procedure b) Single stage - Two envelope procedure. c) Two stage bidding procedure. d) Two stage – Two envelope bidding procedure. Please specify if any other method of procurement was adopted with brief reasons (i.e emergency, direct contracting, negotiated tendering etc.)	Single stage - Two envelope procedure.
19	Who is the Approving Authority	Board of Trustees, KPT
20	Whether approval of Competent Authority was obtained for using a Method other than open Competitive Bidding.	Not Applicable
21	Number of Bids Received	Four (04) bids received
22	Whether the Successful Bidder was Lowest Bidder Yes / No	Yes (Quality cum Cost-Based Selection)

23	Whether Integrity Pact was Signed Yes / No (If yes enclose a copy)	Yes (Annex-D)

Mr. Zia Ahmed Siddiqui
Project Engineer / Ag. Project Manager
Planning & Development Division, KPT

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)

CONTRACT AWARD PROFORMA-II

(As per Rule 47 of PP Rules, 2004)

To Be Filled And Uploaded on PPRA Website In Respect of All Public Contracts of Works, Services & Goods

1	Number of Bidders Present at the Time of Opening of Bids	Four (04) bidders
2	Name and Address of the Successful Bidder	M/s. HR Wallingford Ltd, UK (JV) with M/s. Techno-Consult International (Pvt) Ltd Pakistan HR Wallingford Ltd., Howbery Park, Wallingford, Oxfordshire, OX10 8BA, United Kingdom. Tel: +44 (0) 1491835381, Fax: +44 (0) 1491 832233 Techno-Consult International (Pvt) Ltd., Techno House; 37-K, Block 6, PECHS, Karachi 75400, Pakistan. Tel: 0213-4530630-32, Fax: 0213-4546606
3	Ranking of successful Bidder in evaluation Report (i.e. 1st, 2nd, 3rd evaluated bid).	First
4	Need Analysis (Why the procurement was necessary?)	i. Sediment Movement, Slum Siltation in the Channel, Slant Harbour. ii. Hydrological and Numerical methodology for future projects and port operations. iii. Improvement of Marine Ecosystem.
5	In case Extension was made in response time, What were the Reasons (Briefly describe)	On request of bidders due to i. Unavailability of staff due to Covid-19 ii. Foreign JV partners reluctant to visit due to Covid situation.
6	Whether names of the Bidders and their prices were read out at the time of opening of bids Yes / No	Yes
7	Date of Contract Signing (Attach a copy of agreement)	3rd November 2022 (Annex E)
8	Contract Award Price	Rs. 177,188,092/- (PKR One Hundred Seventy-

		Seven Million, One Hundred Eighty-Eight Thousand and Ninety-two only – inclusive of sales tax @ 13%).
9	Whether copy of evaluation report given to all bidders Yes / No	Hosted / uploaded in PPRA website before Award of works as per PPRA Rule No.35
10	Any Complaints Received Yes / No (If yes result thereof)	No
11	Any Deviation from Specifications given in the Tender Notice/Documents Yes / No (If yes give details)	No
12	Deviation from Qualification Criteria Yes / No (If yes give details)	No
13	Special Conditions, if any (Give Brief Description)	No

Mr. Zia Ahmed Siddiqui
Project Engineer / Ag. Project Manager
Planning & Development Division, KPT

SECTION 6

Annex-A

TERMS OF REFERENCE

1. Karachi Harbour encloses an area of some 62 Km^2 stretching from the sandspit in the west to China Creek in the East. It is a natural harbour that has been developed over more than a century by a process of construction, reclamation and dredging.

2. Existing approach channel is 8.5 kilometers with width 300 meters and depth of 16 meters. The South Wharf (Ex-PDWCP) and Tipu Sultan channel is 3.8 Kilometers with depth of 16 meters. The old existing channel (upper & lower harbor) is 8.4 kilometers with average depth of 12 to13 meters. KPT's existing harbour has 33 dry cargo berths and 3 liquid cargo-handling berths.

3. By understanding the relevance and significance of the present studies with today's habour layout will pave the way for future developments based on knowledge and experience gained from the past and caution applied in decision making.

4. Various studies have been taken place during the past which are relevant to establish the bench mark for the future structures / developments and hydrological changes including the marine ecology. The port sea water hydrodynamic and sedimentation processes are dominated by the tides and the monsoon winds.

5. Port area jurisdiction includes Eastern and Western backwaters as shown on the chart let. Major changes have taken place in Eastern Backwater (Chinna Creek) and the Western Backwater due to the continuous process of reclamation / encroachment, resulting reduction in the tidal volume of the whole backwater system.

6. Study undertaken in year 1946 (Brow), mentioned that the cutting of an opening in the Napier Mole and the closing of the entrance of the Chinna Creek backwaters from the sea were intended to increase the velocity of the tidal flow between Keamari and Manora.

7. In July 1999, KPT conducted feasibility study of deepening the upper Harbour and Approach Channel by M/s. HR Wallingford, which included Eastern Back Waters (Chinna Creek area) and Western Back Waters having mudflats and mangroves. After passing of 2 decade, it has become necessary to conduct feasibility study for determining the existing hydraulic regime in following KPT's areas / water channels for easily flow of seawaters for maintaining and improving the marine ecosystem especially mangroves plantation while considering previous and future development projects etc.

8. Consultancy Services required for carrying out phase wise feasibility study in Karachi port area of jurisdiction for facilitating various Port Development Plans and improvement / mitigation with respect to marine ecology. Detail scope of consultancy services phase wise are as under:

DETAIL SCOPE OF WORKS

9. **General Information and Data for Study:** Scope of work is to span over 30 years. General information and data has been given under Chart-let depicting soundings in Eastern and Western Backwaters - 1998 etc, Generic Chart-let of KPT area of Jurisdiction, Google images of Years 2000 and 2020 depicting mangroves & Mud Flats and encroached / reclaimed areas (SH-1 to 4). Further, other data / information but not limited to shall be collected and referred for this study from various current and historical record, charts / maps like Old Karachi Harbour Charts 1838, 1873, 1953 & 1983, Map 1939, current chart Pak 5 & 30, geo-referred old & current satellite images, old & current hydrographic surveys, relevant national and international rules and regulations.

10. **Scope of Work**: The activities and the detail scope of work for the assignments will include, but not limited to the following:-

Phase-I Study

Given below is scope of work for Phase-I for following areas of Port, which shall encompass, but not limited to, period of last 30 years:

i. Eastern Back Waters inclusive Chinna Creek area and Wetland park areas as given in chartlet .
ii. KPT's reclaimed Area in Chinna Creek as given in chartlet.

a. Establishment of baseline data by collection and conduct of bathymetry (Mean High Water Spring Tides), topography, soil investigation (boreholes), tides, currents, sedimentation, erosion and scouring pattern of the proposed areas.

b. Collect, review and analyze of available data from the KPT's archive or other sources at your own arrangement including historical bathymetric charts, maps and studies reports.

c. Numerical modeling of back waters in the proposed areas of harbour /channel(s) with respect to sea currents, water displacement, monsoonal changes, sediment movements, reclamation/ encroachments, marine ecosystems etc.

d. Hydraulic Studies to examine the impacts caused by the geomorphologic changes to Eastern Back Waters Hydraulic Regime brought about by the reclamation and encroachment in chinna creek. Detail analysis of data and bathymetry charts to find the change in the upper harbour channel morphology.

e. Determine volume of seawater displaced through reclamation work in the reclaimed area and settlement/ compactness effect (pro & cons) of same in adjacent area of Chinna creek & Wetland park. Determine the encroachment area in Chinna creek and Wetland park from year 2000.

f. Prepare detailed reports of all surveys and easily flow of sea water channel options with pros and cons and recommendations while reviewing the previous surveys / studies (back waters, new navigational channel and existing land). Prepare and propose different maintenance dredging plan and additional possible route / widening of existing route/ canal for effectiveness of easily flow of seawater between Chinna Creek and Wetland Park for improvement of ecosystem especially mangroves plantation.

g. Possible dredging of canal to cater volume of water displaced and stoppage of encroachment in Chinna creek for KPT operational utilization of existing reclaimed land.

h. Undertake soil investigation (bore holes as required for the study) in reclaimed area and determine whether land reclaimed in Chinna creek is suitable for growing / cultivation of mangroves while considering the compositions / changes with respect to botanical, chemical and biological aspects. Determine cost & quantity (level) of additional soil to be removed other than dumped material at reclaimed area and other suitable soil to be placed for growing the mangroves.

i. Determine whether the level of ground after removing the dumped material will be suitable for growing the mangroves. Reasons / rational for reduction of area of mangroves in the Chinna creek area. Further determine other conditions / requirements for enriching the soil for growing of mangroves.

j. Determine the area of mangroves existed in reclaimed area in year 2000 in Chinna creek (enclosed chart let) and to propose alternate area for re-plantation.

k. Determine the existing mangroves areas and mudflats in Chinna creek and Wetland park including heavy metal test of soil and other important test of sea areas as per requirement.

l. Determine viability of reclaimed area for various port operation purpose or for growing mangroves as per marine ecological system. Propose various options for usage of reclaimed area for port operations and alternate site for growing / cultivation of mangroves.

m. Cost estimates and Cost benefit analysis for the following options with pros and cons:
   - Removal of reclaimed material & propose suitable disposal area with plantation of mangroves on removed land.
   - Removal of reclaimed material & propose suitable disposal area viz a viz Alternate area for plantation of mangroves.

Phase-II Study

Given below is scope of work for Phase-II for following areas wherein, substantial structural and morphological changes has taken place in the port area with respect to construction of South Wharf project (Ex-PDWCP), Approach Channel & Tipu sultan Channel, Breakwaters, Revetment, dredging depth of 16 meters, berths 10 to 17 A –C and reclamation and encroachment of KPT's land, which has resulted in hydrological changes in the area, which

necessitate the feasibility study to determine the facts & figure for safety of navigation and future development projects.

i. Western Backwaters in part cular and chinna creek (Eastern Backwater) in general as given in chart let

ii. Newly established approach channel, Tipu sultan Channel, south Wharf, upper Harbour, Lower Harbour, coast from KMC Pillar No.1 till mouth of Ghizri creek, SRO 1991.

a. Establishment of baseline data by collection and conduct of bathymetry, topography, soil investigation (boreholes), tides, currents, sedimentation, erosion, scouring pattern, mudflats, mangroves of the proposed areas.

b. Collect, review and analyze of available data from the KPT's archive or other sources at your own arrangement including current & historical bathymetric charts, maps and studies reports. Hydrographic survey data to be collected seaward limit up to 10 meters depth contour.

c. Numerical modeling of proposed areas with respect to sea currents, water displacement, volume of sea water of different tidal level, monsoonal changes, sediment movements (siltation / erosion), reclamation/ encroachments, marine ecosystems etc.

d. Hydraulic Studies to examine the impacts caused by the geomorphologic changes in the Hydraulic Regime of the proposed areas brought about by the reclamation and encroachment in western backwater, eastern backwater, younasabad & adjacent area and others associated areas. Detail analysis of data and bathymetry charts to find the change in the proposed areas morphology including port approaches/ harbour / channel with respect to siltation / erosion, currents. More emphasizes are required on area from South Wharf Breakwaters to Chanki Monkey.

e. Prepare detailed reports of all surveys and recommendations while reviewing the previous surveys / studies (back waters, new navigational channel and existing land).

f. Prepare and propose viability for deepening and widening of upper and lower harbour including PIDC channel (till Karachi fish harbour), PMA channel through Capital dredging works while considering and safeguarding the existing infrastructure of Berthing areas with maintenance dredging requirement on yearly basis. Further, determine total maintenance dredging volume for all navigable channels.

g. Propose and undertake soil investigation (bore holes) of upper & lower harbours, western backwaters, and South wharf basin with consideration of previous soil investigations report. Depth of bore holes will be confirmed by Employer.

h. Determine the existing mangroves areas and mudflats in the proposed areas including heavy metal test of soil and other important test of sea areas as per requirement.

B

Annex-B

Consultancy services for feasibility study for determining the existing hydraulic regime in the Karachi port area of jurisdiction and improving marine ecosystem.

Following consultant firms submit their pay orders.

S.no	Company	Phone# / Fax #
1	M/s techno –consult international (pvt) ltd. P.no 23408628 dt:- 10-06-2021.	021-34[illegible]3-0630-31-32 Fax-[illegible]3454-6606.
2	M/s National Engineering services Pakistan ltd (pvt) ltd. P.no 07224886 dt: 14-06-2021.	021-990900[illegible]00 , 99225277-84 Fax -21-3565[illegible]1994 , 99225366.
3	M/s EMC Pakistan Pvt ltd P.no 4724008 dt: 17-06-2021.	92-21-343[illegible]1466 , 34321717 Fax- 92-21-4311467
4	M/s National Engineering Corporation. P.no 81024 dt : 22-06-21.	3278-55[illegible]8&9, 32782368 Fax- 32782481.
5	M/s Bahria foundation P.no .0101.8196112 dt : 23-06-2021.	Office 3[illegible]5610242-43-44 Fax –92-21-35610749.
6	M/s Pak Shaheen Agencies P.O No. 4713698 dt 28-06-2021	Office 021-32857851 Fax-92-2132857854.
7	Dr Tariq Mairaj Rassol Khan Assistant Professor National university of Science & Technology Karachi . P.O No 07662866 dt:- 29/06/2021	N/A.
8	M/s Enviros P.O No .15100120 dt 7-07-2021	Office + 44 (0) 7542276032 Add: Enivro's House beach farm, cottages SO 41 OFE.WK.