

**GOVERNMENT OF KHYBER PUKHTUNKHWA
IRRIGATION DEPARTMENT**



Name of Work: “CONSTRUCTION OF FLOOD PROTECTION WORKS ON LEFT BANK OF RIVER INDUS IN MOUZA NOORPUR PLYAR TEHSIL PAROA DISTRICT D.I.KHAN”.
(NON ADP).

**TERMS OF REFERENCE (TORs)
FOR**

Sub Work: CONSULTANCY SERVICES FOR DETAIL SITE SURVEY, DESIGN REVIEW, ESTIMATE, SUPERVISION OF EMERGENT WORKS.

E/ Cost Rs.4.05 (M)

EXECUTIVE ENGINEER, FLOOD DIVISION D.I.KHAN

March 2022

Project: CONSTRUCTION OF FLOOD PROTECTION WORKS ON LEFT BANK OF RIVER INDUS IN MOUZA NOORPUR PALYAR TEHSIL PAROA DISTRICT D.I.KHAN.

Sub Work: CONSULTANCY SERVICES FOR DETAIL SITE SURVEY, DESIGN REVIEW, ESTIMATE, SUPERVISION OF EMERGENT WORKS.

Estimated Cost:- Rs.4.05 Million.

Brief

The scheme pertains with survey & supervision of protection works for Moza Noorpur Palyar situated on left bank of river Indus to minimize the effects of river erosion and hence protect the area village & agricultural lands.

The topography of Dera Ismail Khan District in general consists of dry and Baranni plains with arid climate and scanty rain fall in most parts of the district. The country slope is from West to East. The area is traversed by river Indus flow North to South, from Chashma to Ramak on the East side of DIKhan. Generally flow of the river is normal around the year except in monsoon seasons and in March/ April, it has occasional potential floods which cause extensive damages to the lands & properties on either side of banks as was specially witnessed during floods 2010.

Due to such meandering behavior river Indus has developed a deep narrow channel along the entire belt of Mouza Noorpur Palyar, the turbulent river's action has retrograded the lands and damaged the property / houses, livestock and other infrastructures in a length of approximately 9 Km along left side of the river, about 7 Km area of land has been damaged at u/s side from Mouza Noorpur Palyar while 2 Km at d/s side. Due to continuous erosion along left side bank river has developed a large embayment about 2 Km U/S and 1 Km D/S along Mouza Noorpur Palyar from last 02 years. The affected strip of land is lying at latitude and longitude of (31°21'28"N70°48'47"E), about 1000 acres of land and 1500 Nos houses in the area being under threat, the residents of the area approached their political representative & District Administration to redress their grievances. Reportedly about 2400 Kanals (300 Acres) agricultural land, 15 Nos Kacha houses (complete) have been washed away and about 49 Nos houses (partially) damaged in recent past.

In the short term measures:-

1. Fibre/Plastic bags of 4-5 cft capacity dully filled by sand will be placed along the river bank in water and dry condition to stop bank erosion.
2. River bed will be channelized in a length of about 1900 ft and bed width of 200 ft.
3. Solid stone studs in a length of 25 ft and crest width of 15 ft with 1:1 side slope to be constructed so as minimize water pressure from left bank.

Therefore, for survey, design review, estimate and supervision of emergent works; consultancy services are required to be conducted. Hence necessary provision for consultancy services has been proposed in the scheme.



EXECUTIVE ENGINEER
Flood Division DIKhan

TERMS OF REFERENCE (TOR)
CONSULTANCY SERVICES

1. To carry out the hydrological study of the project area, peak floods and flood history.
2. To Collect/evaluate all available topographic, hydro-metrological, geological, geo-technical data necessary for planning of the project.
3. To carry out real time detail topographic survey, contours, supported by satellite images.
4. To prepare the Long-section and X-Sections at 1000 feet interval (or less if required) of the proposed area upto right side infrastructure line.
5. To carry out the detail survey of the affected area showing all hydraulic details of river morphology belas, Creeks, with their elevations.
6. To conduct site investigation for river bed material for medium grain size Dm for local scour partial size distribution curves, D50 for soil from 10' to 20' depth develop soil composition map of the surrounding area.
7. To assess the existing direct/indirect benefits, relating to agriculture and related sectors.
8. To review stud level design, prepare necessary drawings/plans and other details for designing of Flood protection works.
9. To propose items/ cost of various components of the project using Market Rate System (MRS) applicable in KPK.
10. To participate in the meetings/site visits and make presentation whenever directed by the client for which no separate TA/DA, boarding lodging other incidental charges or any other claim shall be entertained.
11. To provide supervision services during the execution period according to the construction schedule approved by client.
12. To verify contractor IPC as per work done at site and submit to client for payment.
13. Payment will be made on fixed lump sum method.
14. To submit documents as per Annexure-I.
15. Mode of Payments to the consultants will be as per Annexure-II.
16. To provide Key Staff as per Annexure-III.

OTHER CONDITIONS:-

1. Security deposit and income tax will be deducted as per the prevailing Government rules.
2. The consultant's supervisory staff shall ensure regular availability at construction site.
3. The consultant except with prior approval of the department shall not sublet the survey or any part thereof.
4. In case the consultants without sound reasons fail to complete the assignments according to the time schedule, the consultants shall pay compensation and damages to the department equal to 1% of the consultancy fee per day to a maximum of 10%.
5. The consultancy charges shall be inclusive of all costs of topographic survey, subsurface investigations, geophysical surveys and construction materials investigations etc.
6. If the consultant fails to complete any activity or part of activity the client reserve the right to execute the same at the consultant risk & cost.
7. If a project or part of project is dropped due to any reason, man months of the consultant key staff and logistics will be curtailed proportionally.
8. Project supervision/ working period is planned for six months (intermittent) depending upon the working period and whereas the overall consultancy duration for emergent works completion will be maximum one year.

N.I.T Conditions

1. As per Clause 37 (A) of KPPRA Rules, all bidders must be registered with Khyber Pakhtunkhwa Revenue Authority.
2. Bid Solicitation documents including Instructions to Bidders can be downloaded from Irrigation website www.irrigation.gkp.pk also KPPRA Website before submission date / time.
3. The procuring entity the right to reject the bids as per provision containing in Rule 47 of KPPRA Procurement Rules 2014.
4. Terms and Conditions as per KPPRA Act 2014 and prevailing Notifications, and where as matters pertaining to Additional Bid Security as per KPPRA SRO No. (13) Vol-1-21/2021-22 dated 15/09/2021 will be applicable.
5. Venue of Bids Opening is office of Executive Engineer Flood Division, DIKhan.

ANNEXURE-I

Documents to be submitted

1. To submit 03 copies of the detail design, Survey & initial report.
2. To prepare 03 copies of monthly progress report, as per implementation schedule and to submit it to the client for review, vetting & approval.
3. To submit 03 copies of final report, drawings/design, & other documents as enumerated in the TORs.

ANNEXURE II

Payment Schedule

- a) Fifteen percent (15 %) on the signing of contract agreement and mobilization.
 - b) Twenty five percent (25 %) on the submission of detail design Survey & initial report.
 - c) Thirty percent (30 %) for monthly supervision charges.
 - d) Thirty percent (30 %) on the submission of final report, drawings/design, & other documents as enumerated in the TORs & after returning of machinery/ equipment's if any.
1. Security Deposit @ 10% will be retained by the Department on each payment.
 2. Payment will be paid according to above break up subject to release of funds.

ANNEXURE III

Consultant's Key staff & Qualification

Senior Engineer (for Design & Survey)

- Should have Master degree in Civil Engineering from recognized university with 10 Years similar design related experience or B.Sc Engineering (Civil) from recognized university with at least 15 Years' Experience of similar design related works.

Assistant Resident Engineer.

- Should have Bachelor degree in Civil Engineering from recognized university with 05Years similar supervision related experience. Higher qualification will be given additional weightage.

Surveyor/ CAD Optr.

- Should have DAE Civil or Diploma in Auto Cad from recognized institute with 05 Years similar supervision related experience.

**CONSULTANCY SERVICES FOR DETAIL SITE SURVEY, DESIGN
REVIEW, ESTIMATE, SUPERVISION OF EMERGENT WORKS.**

S.No	Discription	Cost in (Rs)
1	Direct Cost	2,000,000
2	Indirect Cost	2,050,000
Total (Rs)		4,050,000
Total (Million)		4.05

- 1 Terms & conditions as per N.I.T & TORs.
Consultant or their representantive may attend the pre-bid meeting regarding queries
- 2 relating TORs/ Consultancy on dated 05-04-2022 at 11.00 am in Executive Engineer
Flood Division DIKhan office.
The Consultant shall quote rate _____% above/ below on Estimated Cost.



Sub Divisional Officer
Flood Sub Division No.III DIKhan

1 DIRECT COST.**A. Key Staff.**

SI No.	Position.	No of Personnel	Months	Man months	Monthly Rate (RS)	Amount (Rs)
1-	Senior Engineer (Design & survey)	1	12	2	250000	500000
2-	Assistant Resident Engineer.	1	12	6	150000	900000
3-	Surveyor/CAD Oprt:	1	12	6	50000	300000
4-	Helper	2	12	6	25000	300000
					Total	2000000

2 IN DIRECT COST.**A. Machinery & Equipment.**

1	Survey charges	Lum Sum	No.	200000	200000
2	Desktop Computer (Core i7 5th gen: complete with all assesories)*	1	No.	90000	90000
3	Printer (laser jet with min 30 ppm)*	1	No.	30000	30000
				S. Total.	320000
B.	FURNITURE & FIXTURES.				
1	Office Table.*	1	No.	15000	15000
2	Office Chair.*	4	No.	10000	40000
6	Computer Table with chair.*	1	No.	25000	25000
				S. Total.	80000
C.	OPRATIONAL CHARGES				
1	Recurring expenses.	-	-	-	-
1.a.	Telephone with Internet.	6	Month.	20000	120000
1.b.	Utility charges including Gas, Water, and Electricity Bills.	6	Month.	30000	180000
				S. Total.	300000
D.	Commodities & Services.				
1	Postage & Telegraph.	6	Month.	10000	60000
2	Office Supplies & Stationary.	6	Month.	10000	60000
3	Vehicle rent (for field duty)	6	No.	75000	450000
4	POL charges for 1 Vehicle.	6	Month.	80000	480000
5	Rent of office.	6	Month.	50000	300000
				S. Total.	1350000
				G. Total (a+b+c+d)	2050000

* Note: to be returned to Flood Division on completion of work.

CONSTRUCTION OF FLOOD PROTECTION WORKS ON LEFT BANK OF RIVER INDUS IN MOUZA NOORPUR PALIYAR TEHSIL PAROA DISTRICT D.I.KHAN DURING 2021-2022. (NON ADP).

