



Government of West Bengal
Irrigation & Waterways Directorate
Burdwan Investigation & Planning Division
Purta Bhawan, 3rd Floor
Purba Burdwan-713103, West Bengal

NOTICE INVITING QUOTATION
NIQ NO.: WBIW/NHP/NIQ- 04 /2019-20

Memo No. 108/NHP-02/02

Dated.- 24.03.2020

Sealed quotations for rates are hereby invited by the Executive Engineer, Burdwan Investigation and Planning Division, Irrigation and Waterways Directorate, Govt. of West Bengal, Purta Bhawan 3rd Floor, Purba Burdwan-713103 from the bonafied and resourceful agencies to ascertain unit rate (budget quote) in connection to the work: **ENGAGEMENT OF AGENCY FOR SURVEY OF EMBANKMENTS IN HOOGHLY DISTRICT AND CORRESPONDING MAPPING UNDER NHP OF I & W DEPTT., GOWB** as per enclosed schedule.

Eligibility Criteria:

Interested quotationers are required to apply for quotation papers to the undersigned enclosing all papers satisfying the eligibility criteria as given below:

- The quotationer having experience of dealing with similar type of work in any Government/Government undertaking/Public sector, Zila Parishad etc (Agency has to furnish self attested copy of such supply order/completion certificate) will be preferable.
- The intending quotationer should apply for quotation papers in respective Letter Heads enclosing self attested photocopies of valid Trade License, PAN, valid PT, GST, IT etc. as applicable.

Time Schedule of Quotation:

1. Last date and time of receiving quotation paper : 27.04.2020 at 15:00 Hrs.
2. Date and time of opening quotation : 27.04.2020 at 15:30 Hrs.

Terms and Conditions:

1. The schedule of items and other documents are to be collected by the eligible quotationers free of cost from the office of the Executive Engineer, Burdwan Investigation and Planning Division, Irrigation and Waterways Directorate, Govt. of West Bengal, Purta Bhawan 3rd Floor, Purba Burdwan-713103 and can be downloaded from the Departmental website : **wbiwd.gov.in**
2. The intending agencies should submit budgetary quotes in closed envelope in tender box at
 - i. Office of the Superintending Engineer, I & P Circle-II, Jalsampad Bhavan, Saltlake, Kolkata – 91
 - ii. Office of the Executive Engineer, Burdwan Investigation and Planning Division, Irrigation and Waterways Directorate, Govt. of West Bengal, Purta Bhawan 3rd Floor, Purba Burdwan-713103

3. The eligible quotationers should quote their rates both in figures and in words. Any correction in the rates must be duly signed by the quotationer and each page of the schedule are to be signed by the quotationer along with his seal.
4. Quotation papers will not be submitted by post/e-mail/fax.
5. No quotation paper will be issued after expiry of date and time mentioned above.
6. Duly filled up sealed quotation as supplied from this office is to be submitted with a forwarding letter to the office of the undersigned.
7. Accepting authority i.e. the Superintending Engineer, I & P Circle-II, Jalsampad Bhavan, Saltlake reserves the right to accept or reject any or all quotations without assigning any reasons whatsoever.
8. Informal/conditional quotation is liable to summarily rejected.
9. Any letter or other instrument submitted separately in modification of sealed quotation may not be entertained.
10. **This rate is to ascertain unit rate (budget quote) for official purpose only.**

Sd/-
Executive Engineer
Burdwan Investigation & Planning Division
Purta Bhawan, 3rd Floor
Purba Burdwan-713103, West Bengal



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Schedule of Items

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1	2	3	4	5	6	7
SI No	Description of items	Qty	Unit	Unit Rate with all taxes and all incidental charges (Rs) (Excluding GST)	Amount (without GST) (3 x 5)	GST payable per item.
1.	Detailed topographic survey of embankments along rivers/khals in Hooghly District by Total Station and GPS taking cross sections @ 30m interval and long section along the centre line of the embankment on both sides of the rivers/khals showing detailed terrain topographic information to a scale not greater than 1:5000 showing locations of all relevant /important objects/structures in the vicinity and corresponding mapping in the designated portal.	1400	KM			
Total Amount (Rs.)						
Total Amount with GST (Rs.)						

Note 1: Unit rates should be quoted inclusive of all taxes (IT,Cess) and all incidental charges like engagement of manpower, machinery, mobilization charges etc.

Note 2: Unit rates should be quoted after observing all terms and conditions as mentioned in the enclosed TOR.

Sd/-
Executive Engineer
Burdwan Investigation & Planning Division
Purta Bhawan, 3rd Floor, Purba Burdwan-713103, West Bengal

Terms of Reference

For

ENGAGEMENT OF AGENCY FOR SURVEY OF EMBANKMENTS IN HOOGHLY DISTRICT AND CORRESPONDING MAPPING UNDER NHP OF I & W DEPTT.,GOWB. NIQ NO.: WBIW/NHP/NIQ- 04 /2019-20

A. Scope of Work: The work shall cover all technical aspects of topographic and hydrographic survey at par with standards including the following:-

1. Topographic Survey:

1.1 The survey is to be carried out using DGPS/RTK instrument to ensure accuracy as per instruction of Engineer-in-Charge. The survey consists of:-

Detailed topographic survey of embankment of river/khal by GPS system associated with RTK/DGPS taking cross section @ not exceeding 30m by using Echo Sounder interface with Hypack Software and long section along the centre line of the embankment on both sides of the rivers/khals showing detailed terrain topographic information from the centre line of embankment up to 50m on country side and up to 50m or low water level on canal/river side showing all relevant /important objects/structures falling within this domain.

In addition to the above, followings are also included in the Scope of Work -

- i. Establishing Bench Mark
- ii. Carrying out leveling/ traversing and mapping
 - Carrying out closed leveling from available nearest permanent GTS bench mark point and providing details with X,Y,Z co-ordinates using Digital level instrument at appropriate places including Raw data from digital level shall be submitted along with adjusted and unadjusted levels in tabular form & by using applicable Geo-Office software as per direction of E.I.C complete.

Note i) Digital leveling instrument (Make Leica DNA-03 or equivalent) to be used for the work shall have the minimum accuracy of order 0.30 mm per km (double run) with least count not more than 0.01 mm.

- iii. Reporting and charting
 - Details of any permanent/temporary establishment, electric lines, telephone lines, are to be collected and included in the report along with their co-ordinates and location.
 - Photographs of the prominent features on the marked area are to be taken and included in the report along with its position.
- iv. Furnishing any clarifications required by client during the process of acceptance of the reports.

1.2 Topographic Survey map preferably to a scale of 1:5000 to be prepared. The plan should clearly show the river/khal, with shoals and channels, embankments etc. Plan should also show all important structures like bridges, culverts, weirs, sluices etc. Important towns/ villages located in the area covered in the plan may also be marked in the same plan. The contractor shall deploy a suitable traversing equipment to undertake survey with vertical

accuracy of ± 0.1 m and horizontal accuracy of ± 1 m. However, at **least 3 lines of position should be used to determine location.**

1.3 The contractor shall accurately delineate the various existing physical features such as existing structures and road, houses, important town, villages en-route, embankments, bridges, landmarks, location of gauge discharge stations, rain gauge stations, critical locations to be protected etc. within the survey area and also mark important physical features which are adjacent to the survey area; important for orientation at the site as per directions of Engineer-in-charge. An index map covering all these features shall be included in the report.

2. Drawing:-

Survey maps shall be plotted at 1:5000 scale showing GTS bench marks and other important land marks .The final detailed Auto Cad drawings showing all cross sections and the whole longitudinal section and a site plan to a suitable scale showing the location of all important objects/structures in the near vicinity as mentioned above to be submitted both in hard (in triplicate in A-I or A-0 size paper) and soft copies (in CDs/DVDs).

3. Reports:

3.1 Apart from the hard copy report soft copies of all survey data are to be submitted in Excel, Arc-GIS and AutoCAD format for records and further analysis.

3.2 A KMZ/KML file of the detailed topographic survey of the embankment shall be made from the survey data such that the layer can be visualized in Google Earth/Arc GIS Earth.

4. SPECIAL TERMS & CONDITION FOR SURVEY WORK

The bidder shall furnish the technical compliance sheet as a part of his bid with supporting documents; which establishing the bidder’s eligibility to bid and his qualification to participate in the bid, without fulfilling the following parameter the bidder is liable for rejection without arising any reason.

The bidder is qualified only when he is the actual service provider and meets the required norms as specified below and all original evidences to be produced in due course of time as & when asked by the Tender Inviting Authority :-

<u>TECHNICAL COMPLIANCE SHEET</u>		
No	Item	Yes/No
1	The bidder should have completed at-least one “Hydrographic and Topographic Survey using High technology equipments like DGPS/RTK Integrated Hydrographic Survey System which should including Echo Sounder with Hypack software under any Govt. department.	
2	Having experienced manpower in hydrographic & topographical survey and equipment for the required of the job	
2.a	Having the following equipment required for the job, as explained in the specifications:-	
2.b	Echo-sounder interfaced with HYPACK Max Software.	
2.c	Marine Radio Beacon receiver Or Satellite based correction Receiver (OMNISTAR) to receive the Pseudo range corrections through Echo sounder and Hypack Software.	

2.d	Differential GPS for Off shore positioning (Leica, Trimble or Equivalent)	
2.e	Digital leveling instrument (Make Leica DNA-03 or equivalent) to be used for the work shall have the minimum accuracy of order 0.30 mm per km (double run) with least count not more than 0.01 mm.	
2.f	Motorized inflatable boat with GPS tracking system	
3	DGPS Software for downloading, processing & preparation of bathymetry chart, and contour map such as Hypack and Hydasproi or equivalent.	
4	Should provide a valid bench mark as described in the attached specifications at each of the sites	
5	Should carry the survey work as described in the specifications.	
6	Should provide the final processed data as described in the specifications.	

5. Detailed Location of Work:

Name of River/ Canal/ Tributary	Length of River/ Canal/ Tributary (Km)	Name of Block
Kana Damodar	46.848	Dhaniakhali, Tarakeshwar, Jangipara
Dy-D/1	48.463	Dhaniakhali, Tarakeshwar, Udaynarayanpur, Amta-1, Jangipara
Dy-D/2	28.087	Amta-1, Jangipara
Dy-D/2/B	5.029	Amta-1, Jangipara
Kana Nadi	19.66	Dhaniakhali, Tarakeshwar, Haripal
Koushiki	33.528	Dhaniakhali, Haripal, Chanditala-01, Jangipara
Dy-N/3	7.102	Singur, Chanditala-01
Dy-N/2	7.004	Dhaniakhali, Haripal
Dy-K/1	13.167	Haripal, Chanditala-01
Dy-K/1A	9.485	Chanditala-01
Metekhal	23.165	Singur, Chanditala-01
Mara-Metekhal	8.047	Chanditala-01
Branch 2/2	14.66	Jamalpur & Dhaniakhali
Branch 2/1	12.5	Dhaniakhali

WC at ch.596 of Br-1	2.68	Memari-I
WC -1/L at ch.695 of Br-1	2.68	Memari-I
N1 Canal	16.4	Dhaniakhali
N1A Canal	6.4	Dhaniakhali
KN-4	7.8	Dhaniakhali
P.N.C	4.63	Memari-I, Pandua
P.N.C/Mr-5	1.4	Pandua
P.N.C/Mr-6	1.1	Pandua
Name of River/ Canal/ Tributary	Length of River/ Canal/ Tributary (Km)	Name of Block
G-4	8.5	Kalna-II, Pandua
Darakeswar	35.27	Arambagh, Khanakul-I, Khanakul-II & Gohat-I
Sankari	19.80	Arambagh & Ghatal
Rupnarayan	12	Khanakul-I & Khanakul-II
Damodar	30.00	Tarakeswar , Jangipara, Jamalpur , Pursurah
Mundesawari	40.00	Raina II, Arambag, Khanakul-I, Khanakul - II, Jamalpur, Pursurah
Dakatia Khal	34.00	Jamalpur, Dhainakhali, Tarakeswar , Haripal , Jangipara
Roner Khal	32.50	Dhaniakhali , Tarakeswar, Jangipara
Upper Harinakhali Khal	15.60	Arambag & Pursurah
Lower Harinakhali Khal	14.50	Khanakul-I & Khanakul-II
Kana Dwarakeswar	15.00	Pursurah & Arambag
Kable Khal	5.00	Arambag
Akambari Khal	7.00	Pursurh
Rampur Khal	22.00	Pursurah & Khanakul -I
Hooghly River	91.25	Balagarh, Chinsura -Magra, Bansberia Municipality
Total=	702.255	

Hence, total length of embankment for both sides of rivers/khals = 1404.51 km say 1410 km

B. Period of Completion:03 (Three) months including rainy and festive season.

C. Mode of Payment : Payments will be released after successful completion of the work (as specified in the scope of work)on certification of the invoice (raised by the agency) by the **competent authority**.

Sd/-
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