

| SCHEDULE OF QUANTITY | | | | | | | |
|--|---|-----------------|-------------|-----------------------|---------------|------------------|--|
| Name of Work:- A/R & M/O Water Testing Laboratory at I& PH Sub-Division Churag, Tehsil Karsog, Distt. Mandi (HP)(SH:-Annual running repair maintenance and operation of the Water Testing Laboratory for One Year.) | | | | ESTIMATED COST | | 298200.00 | |
| | | | | EARNEST MONEY | | 5964.00 | |
| | | | | TIME LIMIT: | | 1 Year | |
| Sr. No. | Items of work | Quantity | Unit | Rate | Amount | | |
| 1 | 2 | 3 | 4 | 5 | 6 | | |
| 1 | Operation, running , maintenaceof water sample testing lab. by providing skilled / unskilled labour & materials required for testing of sample in fully equipped lab. including testing of water sample for physical, chemical & Bacteriological tests. | 1.00 | Job | | | | |
| Total | | | | | | | |

TERMS AND CONDITIONS:-

- 1 The contractor shall have to employ qualified and well experienced Assistant Chemist for the testing of water samples for physical, Chemical and Bacteriological tests.
- 2 The contractor /firm shall be responsible for proper handing of equipments.
- 3 The contractor /firm shall be held responsible for any accident/losses caused due to negliency.
- 4 The contractor /firm shall be penalized for any theft/breakage or any damages of the equipments of the lab and is liable to replace the same with new one.
- 5 The necessary chemicals and materal required for the testing of samples shall be provided by the contractor /firm & shall keep its inventory of register of usages.
- 6 The contractor /firm shall keep register/Record of all tested samples and submit its report to the Assistant Engineer I&PH Sub Division Churag every fortnightly.
- 7 The contractor /firm shall report and suggest the measures to be taken for the disinfection of the water sample where found any thing unhigenic for human consumption.
- 8 The inventory of all the glass were shall be managed by the contractor/firm.
- 9 All the vesseles /bottles shall be sterlized and mouth wrapped using for collection of water samples.
- 10 The water samples reaching in the lab after 8 hours of its collection shall not be allowed for testing.
- 11 The electric charges shall be born by the department.
- 12 The payment shall be made on quarterly basis in equal installment.
- 13 All the water samples reached in the lab have to be tested. Maximum 125 test shall be done in a month and its report alongwith photo copy of register shall be submitted to
- 14 The contractor /firm shall be responsible for proper house keeping of the lab during working hours.
- 15 The contractor /firm shall be penalized @ Rs. 500/- per day for keeping the lab non operational without any reason.
- 16 If the work of the contractor is found satisfactory the period of the agreement can be extended.
- 17 The contractor /firm bidding for the job must have previous experience of operation and maintenance of the laboratory not conducting less than 500 water sample tests.
- 18 Online entries of the sample tested on a particular day shall be made within next 24 hours in the format available in the link www.indiawater.gov.in.
- 19 Contractor will start his commissioning of lab from the date, as which lab is fully equiped with all items.

**Executive Engineer,
IPH Divison Karsog.**

SCHEDULE OF QUANTITY

| Name of Work:- Providing consultancy services for preparation of Detailed Project Report for construction of medium Irrigation Project Bithar, Pangna, Nagrawn, Suin, Bathuna and Mashog in Sub-Tehsil Pangna, Distt. Mandi (HP). | | | | | ESTIMATED COST | | 465500.00 |
|--|--|-----------------|-------------|-------------|-----------------------|---------------|------------------|
| | | | | | EARNEST MONEY | | 9310.00 |
| | | | | | TIME LIMIT: | | 2 Months |
| Sr. No. | Items of work | Quantity | Unit | Rate | | Amount | |
| 1 | 2 | 3 | 4 | 5 | | 5 | |
| 1 | Preparation of detailed project report (DPR) for Construction of Medium Irrigation Project Koncil to Bithar,Pangna, Nagrawn,Suin, Barthuna and Mashog in Tehsil Karsog, Distt. Mandi HP based on detailed survey, Preparation Shajra Plan and revenue record, Contour Plan, marking of proposal on plan, preparation of L-section of Rising Main and distribution system, detailed hydraulic design, design , design calculations, structural design, cost estimations complete for an Area of about 2328 Hect. and approval of Detail project report from different agencies etc. including prepration of working estimate, tender document, agreement, NIT, Schedule of quantity etc. required for tenders and approval thereof from the competent authority & investigation including the detailed study of all related parameters given in the following check list. | 500.00 | Per Hect. | | | | |
| 2 | Check List:-The Report shall be presented covering the following parameters. | | | | | | |
| | i) Check list as per CWC (MOWR) PMKSY latest guideline minor irrigation requirement. | | | | | | |
| | ii) Introduction | | | | | | |
| | iii)Salient features | | | | | | |
| | iv)Physical features | | | | | | |
| | v) General Investigations (Social, Climate, Geological, Population & other details. | | | | | | |
| | vi) Hydrological studies & water resources. This should include measurement of Discharge of source for a period of site. One year by installing a gauge of suitable site. | | | | | | |
| | vii) Design features. | | | | | | |
| | viii) Crop water requirement & meteorological (Irrigation planning). | | | | | | |
| | ix)Design of all components of the project i.e R/Main, Pumping machinery and distribution system etc.. | | | | | | |
| | x) Construction Material & Construction Programme. | | | | | | |
| | xi) Envioronmental & ecological studies:- The rates are exluding of Engironment Impact Assessment (EIA) or Environment and ecological studies and clearance from concerned departments. | | | | | | |
| | xii) Pre & post irrigation crop budget. | | | | | | |
| | xiii) Financial resources | | | | | | |
| | xiv) Estimates. | | | | | | |
| | xv) Revenues | | | | | | |
| | xvi) Benefit cost ratio and financial return | | | | | | |
| 3 | Following data needs to be collected from various department. | | | | | | |
| | a)Meteorological data in catchment area of source and command area of project from meteorological department | | | | | | |
| | b) Soil surveys pre and post project cropping pattern/budget from state agriculture department | | | | | | |
| | c) Ground water potential in command and area from ground water organization of GWO/CGWB. | | | | | | |

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|---|---|--|--|--|--|--|
| | d) Soil investigation survey has to be got conducted for ascertaining Bearing Capacity of soil for construction of various civil structures. | | | | | |
| 4 | Detailed Project Report (DPR) should contains the followings | | | | | |
| | Volume-I | | | | | |
| | i)History | | | | | |
| | ii) Salient features | | | | | |
| | iii) Physical features | | | | | |
| | iv) General Investigations (Social, Climate, Geological, Population & other details. | | | | | |
| | v) Hydrological studies & water resources. The old discharge data of source available with the concerned department shall be used for designing the scheme instead of setting new discharge site . | | | | | |
| | vi) Pre & post irrigation crop budget. | | | | | |
| | vii) Crop water requirement & meteorological (Irrigation planning). | | | | | |
| | viii) Design features. | | | | | |
| | ix)Design of main components of the project. Keeping in view all the external forces including wind, land slide, earth quake etc. | | | | | |
| | x) Construction Material & Construction Programme. | | | | | |
| | xi) Environment & ecological studies and clearance from concerned department | | | | | |
| | xii) Benefit cost ratio and financial return | | | | | |
| | xiii) Revenue record | | | | | |
| | XiV) The proposal should include complete automation of the project with provision of all modern equipment and material is to be used for construction of the project. The Detailed Project Report should include the long term for operation and maintenance of the project. | | | | | |
| 5 | Drawings. :- | | | | | |
| | i) Key plan on 100 m grid and contour plan (C.I =2.0m) on the scale 1:15000 (Detailed Topographical survey & contour plan (C.I = 1.0m) on 30mx30m grid at the scale 1:1000 Surveyed and prepared with the help of total station & shall be presented in auto CAD as Soft copy along with prints. | | | | | |
| | ii). L-section & X- section of R/main, G/main, distribution lines, Minor and Sub minor lines and Pucca field Channel & Kaccha Field channel etc. complete. | | | | | |
| | iii). Design & Drawing of all relates works such as pump houses, collection tanks, outlets,protection works etc.. | | | | | |
| | iv). Marking of Alignment of R/mains, Gravity mains and distribution system, pump houses, collection tanks, outlets,protection works etc. on Shajra plan. | | | | | |
| | v). Any item required in addition to above for preparation of Detailed Project Report (DPR). | | | | | |
| 6 | Volume-2 | | | | | |
| | i)General Abstract of Cost. | | | | | |
| | ii)Sub head wise abstract of cost & detail of measurements. | | | | | |
| | iii) Basic rates of material & labour | | | | | |
| | iv) carriage of material by mechanical transport & manual | | | | | |
| | v) Analysis of rates | | | | | |

**Executive Engineer,
IPH Divison Karsog.**

TERMS AND CONDITIONS

Name of Work:- Providing Consultancy service for preparation of detail project report for c/o medium Irrigation project Bithar,Pangna,Nagravn,Suin,Barthuna and Mashog in Sub-Tehsil Pangna Distt. Mandi (H.P).

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|----|--|
| 1 | GST, labour cess, income tax and security will be deducted from each running bill of as admissible as per Govt. notification. |
| 2 | The work shall be executed as per HP,IPH, PWD specification and as per direction and satisfaction of the Engineer-in-Charge. |
| 3 | The schedule of quantity shall fond part of agreement. |
| 4 | The rates offered in the tender are through rates. |
| 5 | Nothing extra shall be paid on account of field visits, camps. Experts visit any other type of Investigations. Machinery or equipments used/hired. |
| 6 | One or more DPR shall be prepared strictly in accordance to the latest guidelines of PMKSY programme of CWC (Ministry of water resources New Delhi)/HP IPH/working |
| 7 | The rates to be adopted in the DPR shall be based on the HPSR/analyzed rates on market prices. The labour and material rates approved from the department before |
| 8 | The CCA of the scheme/DPR can be increased or decreased as per the actual revenue record and accordingly the cost of DPR/payments to made to the firms for preparation |
| 9 | Survey of complete CCA with the help of total station, contouring of complete CCA, marking of proposals (existing as well as proposed), preparation of L-section of R/main |
| 10 | The all drawings should be prepared on modern soft ware such as CAD etc. with GIS interface. The software along with soft copy and hard copy is to be provided to the |
| 11 | The consultant shall submit the three (03) copies of pre-feasibility report(PFR) for approval base on reconnaissance survey to the on approval of Draft DPR 6 copies (Six |
| 12 | Preliminary feasibility report shall contain following details:- (a) Command area i.e CCA which can be covered under the project (b) Available discharge in source. (c) Crop Water requirement. (d)Preliminary geological investigations to ascertain feasibility of Extension, Remodeling and Modernization of project. |
| 13 | Field data collection:- Preparation of Shajra maps and collection of detailed revenue record from Revenue Department. |
| 14 | Preparation of draft DPR will depend upon the prefeasibility report. If as per above report project is not feasible then no further report shall be required and work shall be |
| 15 | Preparation of working estimate and approval thereof from the competent authority. |
| 16 | Preparation of tender document, agreement, NIT, Schedule of quantity etc. required for tender and approval thereof from the competent authority. |
| 17 | In the event the survey being incorrect at any stage, consultant shall prepare the revised DPR at his own cost after conducting the fresh survey. |
| 18 | The proposal should include complete automation of the project with provision of all modern equipment and material is to be used for construction of the project. The |
| 19 | Hydraulic and structural design submitted for all components should be in detailed along with elaborate design calculation. Keeping in view all the external forces including |
| 20 | The consultant should have the experience successfully completing at least two major projects of similar nature in the state. |
| 21 | The Taxes / Securities shall be deducted as per rules. |
| 22 | The firm should be held responsible for the its submission and approval of from State as well as Central Govt. |
| 23 | The total time to complete the work is 30 days, the consultant will be liable to pay of penalty of 2% of the awarded amount for each delayed week in submission of the report, |
| 24 | The following time strictly adhere to the consultant for submission of the Report to the department. a) Submission of PFR 10 days after the award b) Submission of Draft-DPR 20 days after the award c) Submission of final DPR 30 days after the award |
| 25 | In case rescinded of work, it shall be awarded to next lowest, under same terms & conditions. |
| 26 | The DPR has to be got approved by consultant from the Competent authority of the state Govt. as well as center Govt.. In case any observations raised by the higher offices |
| 27 | Payment schedule a) On submission of draft DPR for STAC approval 20% b) After STAC approval and submission of DPR 50% c) On clearance of State Government 15% d) On approval of competent authority of center Govt. 15% |

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