

Schedule of Quantity

₹ 3,72,928.00

₹ 7,460.00

Time : - Two Months

Name of work : Consultancy Services for Providing Sewerage system for Gram Panchayat Janjehli, Dhim Kataroo in Tehsil Thunag, Distt. Mandi HP. (SH :- Preparation of Detailed Project Report including field survey, related studies, estimation, detailed hydraulic/process design of STP. design of sewer network including preparation of AutoCAD detailed drawings all components & getting the same approved from competent authority of the department)

S.No.	Description of work	Qty.	Rate	Unit	Amount
1	2	3	4	5	6
1.0	Carrying of topographical survey with total stations and preparation of comprehensive topographical maps on 1 cm = 5 m scale showing contours (contour interval 1 m), roads, streets, houses, sewer network, location of manholes, supporting pillars, STP, other geographical land marks. The scope of work shall include preparation of DPR by working out quantities & cost estimation based on analysis of rates on HPPWD/HPIPH pattern, evolving hydraulic/process design of STP based on Moving Bed Biofilm Reactor (MBBR)/extended aeration treatment process with root zone (Tertiary treatment) technology as per guidelines of CPHEEO manual, sewer network design. The process design shall be evolved to achieve latest HP Pollution control board standards of effluent. The scope of work shall also include preparation of AutoCAD drawings i.e. detailed contour plan on specified scale, L-Section of sewer lines, drawings of units of STP, manholes, supporting pillars plotted with coloured plotter. The DPR should be based on 2011 census population keeping 2020 as base year and 1.25% growth rate per annum for 30 years design period plus 3 years construction period. The scope shall also include preparation of power point presentation for STAC approval, approval of DPR, preparation of technical sanction estimate and its approval, preparation of bid document and its approval from competent authority of the IPH department with in all travelling etc. as per direction and satisfaction of the Engineer-in-Charge. All the documents shall be supplied in six sets each.				
1.0	At Janjehli Bazaar and adjoining area	1.50		Per Sq. km	
1.0	At Thunag Bazaar and adjoining area	1.00		Per Sq. km	
Total					

Terms & Conditions

- 1 The contour plan should be drawn to a readable scale and contour interval shall not more than 1.0 m. X-section shall be plotted on 1 cm = 1 m scale.
- 2 The need of the project, brief report, technical feasibility, social cultural environmental & institutional feasibility shall be described in DPR.
- 3 The DPR should be supported with location maps, economics analysis where necessary, Engineering design & drawing in respect of each physical component such as vital components of collection network treatment unit & Disposal system etc.
- 4 Design period, population forecasting by different methods, estimation of sewage flow, characterization of sewage, design of sewer network, minimum & maximum velocities to be maintained in the sewers under various condition of flow, depth of flow spacing of manholes, location of hatch boxes, drop man holes, flushing tanks, hydraulic process design of treatment plant and final effluent characteristics shall be strictly as per CPHEEO manual and HP pollution control standard.
- 6 The soft copy of DPR, design of network, hydraulic/process design of STP, drawing etc. should also be provided to the department
- 7 The velocity of sewerage flow should be as per manual of sewerage/CPHEEO to avoid the silting etc. i.e. self cleaning velocity is maintained at least once in 24 hours.
- 8 GST, labour cess and security as admissible will be deducted from the running bill of the contractor.
- 9 The work shall be executed as per HP, IPH, PWD specification and as per direction and satisfaction of Engineer-in-Charge.
- 10 Nothing extra shall be paid on account of field visits, camps, Experts visit any other type of investigation machinery or equipments used/hired.
- 11 Tender shall be issued to only those contractors who are registered with HPI&PH Department and having the experience of executing similar works .
- 12 The quantity shall be increased or decreased as per actual site conditions and accordingly the cost of DPR/payments to made to the firms for preparation of DPR will be increased or decreased accordingly
- 13 Payment Schedule
 - a) On preparation and Submission of DPR to department - 50% of awarded amount
 - b) On STAC approval - 10% of awarded amount.
 - c) On approval of Draft DPR (six sets) - 10% of awarded amount
 - d) On A/&E/S from competent authority - 10% of awarded amount
 - e) On preparation technical sanction estimate and approval from competent authority - 10% of awarded amount
 - f) On preparation and approval of bid document from competent authority - 10 % of awarded amount

Executive Engineer
IPH Division Thunag