SARAHAND PEYIAL SANSADHAN VIKAS EVAN NIBARANGAN

Request for Proposal

RFP No:-STATE/UKPJN/2018-19

Consultancy Services for

Proposal for Improvement and Revamping of the Existing Water Supply System for 24x7 System and Underground Sewerage System of Dehradun City

Superintending Engineer, Construction Circle, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Street No.-11 Rajendra Nagar, Dehradun-248001 (Uttarakhand).

E-mail- se9circle10@yahoo.com

SELECTION OF BIDDER

REQUEST FOR PROPOSALS

RFP No.	:	State/UKPJN/2018-19
	A	
Selection of Consulting Services for	:-	Proposal for Improvement and Revamping of the Existing Water Supply System for 24x7 System and Underground Sewerage System of Dehradun City
Department	:-	Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam
Country	de de	India
Project	:-	Dehradun city
Issued on	·-	

Contents

	RT I	
	tion 1. Notice Inviting Tender	
	tion 2. Instructions to Bidder and Data Sheet	
Α.	General Provisions	11
1.	Definitions11	l
2.	Introduction	2
3.	Conflict of Interest	2
4.	Unfair Competitive Advantage13	3
5.	Corrupt and Fraudulent Practices13	3
6.	Eligibility	
	Preparation of Proposals	
Ь.		
	8. Cost of Preparation of Proposal 14	
	9. Language 12	
	10. Documents Comprising the Proposal	
	11. Proposal Validity	
	12. Clarification and Amendment of RFP	
	13. Technical Proposal Format and Content)
~	14. Financial Proposal)
C.	Submission, Opening and Evaluation	
	15. Submission, Sealing, and Marking of Proposals	
	16. Confidentiality	
	17. Opening of Technical Proposals	
	18. Proposals Evaluation18	
	19. Evaluation of Technical Proposals18	}
	20. Financial Proposals for QCBS18	
	21. Public Opening of Financial Proposals (for QCBS methods)18	3
	22. Correction of Errors)
	23. Taxes)
D.	Negotiations and Award	20
Ε.	Data Sheet	
Sec	tion 3. Technical Proposal – Standard Forms	25
	tion 4. Financial Proposal - Standard Forms (Envelope-B)	
	tion 6. Department Policy - Corrupt and Fraudulent Practices	
I.	Form of Contract	
Π.	General Conditions of Contract	
	GENERAL PROVISIONS	
2.	Relationship between the Parties64	Ļ
3.	Law Governing Contract64	ļ
	Language64	
	Headings	

6.	Communications64	
7.	Location65	
8.	Authority of Member in Charge65	
9.	Authorized Representatives65	
10.	Corrupt and Fraudulent Practices65	
В.	COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT	65
11.	Effectiveness of Contract65	
12.	Termination of Contract for Failure to Become Effective65	
13.	Commencement of Services65	
14.	Expiration of Contract66	
15.	Entire Agreement66	
16.	Modifications or Variations66	
17.	Force Majeure66	
18.	Suspension67	
	Termination	
C.	OBLIGATIONS OF THE BIDDER	69
20.	General	
21.	Conflict of Interests	
22.	Confidentiality71	
23.	Liability of the Bidder71	
24.	Insurance to be Taken out by the Bidder71	
25.	Accounting, Inspection and Auditing71	
26.	Reporting Obligations71	
27.	Proprietary Rights of the Department in Reports and Records72	
28.	Equipment, Vehicles and Materials72	
	BIDDER'S EXPERTS AND SUB-BIDDER	72
29.	Description of Key Experts72	
30.	Replacement of Key Experts72	
31.	Removal of Experts or Sub-Bidder73	
E.	OBLIGATIONS OF THE DEPARTMENT	73
32.	Assistance and Exemptions73	
33.	Access to Project Site74	
34.	Change in the Applicable Law Related to Taxes and Duties74	
35.	Services, Facilities and Property of the Department74	

36. Counterpart Personnel	74
37. Payment Obligation	74
F. PAYMENTS TO THE BIDDER	75
38. Contract Price	75
39. Taxes and Duties	75
40. Currency of Payment	75
41. Mode of Billing and Payment	75
42. Interest on Delayed Payments	76
G. FAIRNESS AND GOOD FAITH	76
43. Good Faith	76
H. SETTLEMENT OF DISPUTES	76
44. Amicable Settlement	76
45. Dispute Resolution	76
Attachment 1: Department's Policy – Corrupt and Fraudulent Practices III. Special Conditions of Contract IV. Appendices	
Appendix A – Terms of Reference	83
Appendix B - Key Experts	83
Appendix C – Breakdown of Contract Price	83
Appendix D - Form of Advance Payments Guarantee	86



Phone/Fax: 0135-2751879; off. E-mail: se9circle10@yahoo.com

Uttarakhand Payjal Sansadhan Vikash Evam Nirman Nigam Office of the Superintending Engineer, Constructions Circle Street No. 11 Rajendra Nagar. Dehradun.

Letter No. 6488 /

1391

Dated 26. 10.18

Corrigendum Notice

Expression of Interest

Last date of submission of Expression of interest invited vide this office letter no. 6186/Nivida/372 dated 09-10-2018 is extended up to 05.11.2018 upto 15:00 hour and will open on same date at 16:00 hour other condition will remain same.

(L.M Karnatak)
Superintending Engineer

Letter No. and date as above.

Copy forwarded to the following for information and necessary action :-

- 1. Chief Engineer (G), Uttarakahand Peyjal Nigam, Pauri.
- 2. Executive Engineer, Dehradun Division, Uttarakahand Peyjal Nigam, Dehradun for publication in one national English & one local Hindi News Paper.
- 3. Executive Engineer, Central Store Division, Uttarakhand Peyjal Nigam, Dehradun.
- 4. All Participant through mail mentioned by them.

Superintending Engineer

12

J sent - 26-10-18 Time -12:19 * Save Water-Save Environment, Stop Pollution *



E.mail-se9circle10@yahoo.com उत्तराखण्ड पेयजल संसाधन विकास एवं निर्माण निगम कार्यालय : अधीक्षण अभियन्ता, निर्माण मण्डल, स्ट्रीट नं-11, राजेन्द्र नगर, देहरादुन।

HIVIda 372

INVITATION FOR EXPRESSION OF INTEREST

Proposal / EOI are invited from experienced consultancy firms in water supply and sanitation sector for the improvement and revamping of the existing water supply system and underground sewerage system of Dehradun city by carrying out the following work in an integrated manner in two envelop separately (Envelop-A - Expression of Interest, Envelop-B - Price bid).

A. GIS based survey using a high-end Differential GPS (DGPS with RTK) for capturing existing water supply system and existing sewerage system, Advance Drone survey technology, GIS

mapping with house to house consumer survey and topographical survey.

B. GIS based hydraulic modeling for converting existing water supply system of Dehradun city to continuous 24X7 water supply system, planning and designing of new water supply system and also planning and designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal. Preparation of detailed project report (DPR) along with design, technical drawings, GIS maps and financial

C. GIS based sewerage modeling of existing sewerage system along with planning of new sewerage system for the Dehradun city. Preparation of detailed project report (DPR) along with

design, technical drawings, GIS maps and financial estimates

1- Scope & TOR Document for EOI available at website of Uttarakhand Pey Jal Nigam

http://peyjal.uk.gov.in from 11.10.2018 at 12:00 Hrs.

A meeting, with consultants / firms before submission of EoI, to be held on at office of Superintending Engineer, Construction Circle, Uttarakhand Peyjal Nigam, Dehradun on dated 18.10.2018 at 15:00 Hrs, for discussion or any query (mail id - se9circle10@yahoo.com, Mob. No. 9412044670).

3- Last Date for submission of Expression of Interest on dated 31.10.2018 up to 15:00 Hrs. in office of Superintending Engineer, Construction Circle, Uttarakhand Peyjal Nigam, Dehradun. by speed post/ hand delivery/ courier.

4- Technical proposal opening date is 31.10.2018 at 16:00 Hrs.

Note: Scope & TOR can be seen at website http://peyjal.uk.gov.in or if any consultant provides their e-mail id department can also provide at mail.

(L.M. Karnataka) Q. Superintending Engineer

Date and letter As per above Copy to the following:-

1. Chief Engineer (G), Uttarakhand Peyjal Nigam, Pauri.

2. Executive Engineer, Dehradun Division, Uttarakhand Peyjal Nigam, Dehradun for publication in one national English & one local Hindi News Paper.

3. Executive Engineer, Central Store Division, Uttarakhand Peyjal Nigam, Dehradun

4. All participant through mail mentioned by them.

Superintending Engineer

PART I

Section 1. Notice Inviting Tender

RFP No. State-UKPJN/2018

Location - Dehradun

Dated: 24.10.2018

Expression of Interest

Proposal / EOI are invited from experienced consultancy firms in water supply and sanitation sector for the improvement and revamping of the existing water supply system and underground sewerage system of Dehradun city by carrying out the following work in an integrated manner:-

- A. GIS based survey using a high-end Differential GPS (DGPS with RTK) for capturing existing water supply system and existing sewerage system, Advance Drone survey technology, GIS mapping with house to house consumer survey and topographical survey
- B. GIS based hydraulic modeling for converting existing water supply system of Dehradun city to continuous 24X7 water supply system, Planning and designing of new water supply system and also planning and designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal. Preparation of detailed project report (DPR) along with Design, technical drawings, GIS maps and financial estimates.
- C. GIS based sewerage modeling of the existing sewerage system along with planning of new sewerage system for the Dehradun city. Preparation of detailed project report (DPR) along with design, technical drawings, GIS maps and financial estimates.

Experienced consultants in water supply sector and sanitation sector shall have experience of similar nature of works of GIS mapping, carrying out point of interest survey for water supply system and sewerage system, DGPS survey with real time kinematics, Drone survey for generation of high resolution or the image and contours, GIS mapping along with house to house survey, GIS based hydraulic modeling, GIS based sewerage modeling, Design

and preparation of detailed project report with GIS maps, working drawings and financial estimates etc as per the direction of Engineer in charge.

The proposed project is for the Dehradun City (Municipal Area) covering an area of approximate 64.88 Sq. Kms. with 60 ward's and a population of 5.69 Lakhs (as per census 2011) and with a Population Density of 1,900 persons /km². The average elevation of Dehradun city is 635 m above MSL. The existing water supply system is approx. 700 Km and 400 Km new water supply network is planned for the city. The existing sewerage network is approx. 403 Kms and about 200 Km new sewer network planned for the city to increase the coverage. The details of the existing system for Dehradun city are as under:

Sr.	Description	Quantity
No.		
1	Area of Dehradun City (Municipal Area)	64.88 Sq. Km.
2	Population of City (Census 2011)	5.69 Lakhs
3	Number of Wards	60 Ward
4	Length of Road network in the city	700 Km (Approx)
5	Number of sources of water	150 TW & 5 Surface Water Sources
6	Number of Water treatment plants	3 Nos.
7	Length of existing pipe line network – Raw Water	700 Kms.
8	Length of existing pipe line network – Pure Water transmission line.	41.25 Kms.
9	Number of ESR/GSR	71/14
10	Number of Water Supply Zones	46 Zones & 5 Sub Zones
11	Number of properties	1.5 Lakhs (Approx)
12	Number of Water connections	1.0 Lakhs (Approx)
13	Length of existing Sewer network	404.00 Km.
14	Number of sewerage treatment plants	7 Nos. & capacity 115.13 MLD
15	Number of Sewerage pumping stations	4 Nos.
16	Number of sewer zones	13 Nos.
17	Number of Manholes	13,433 Nos.
18	Average Elevation above MSL	635 m

Interested consultants may collect the EOI documents from office of Superintending Engineer, Construction Circle, Uttarakhand Peyjal Nigam, Dehradun from 28/10/2018 and submit EOI with relevant documents by registered A.D. Post / hand delivery / Speed Post /courier only to office of Superintending Engineer, Construction Circle, Uttarakhand Peyjal

Nigam, Dehradun on / before Date 05/11/2018, up to 15:00 Hours (IST). (Department will not be responsible for postal delay and tender will be rejected).

1. The RFP includes the following documents:

Section 1 –Notice Inviting Tender

Section 2 - Instructions to Bidder and Data Sheet

Section 3 - Technical Proposal (FTP)- Standard Forms

Section 4 - Financial Proposal - Standard Forms

Section 5 – Eligible Countries-NA

Section 6 – Department's Policy – Corrupt and Fraudulent Practices

Section 7 - Terms of Reference

Section 8 - Standard Forms of Contract-Lump-Sum



Section 2. Instructions to Bidder and Data Sheet

A. General Provisions

1. Definitions

- (a) "Affiliate(s)" means an individual or an entity that directly or indirectly controls, is controlled by, or is under common control with the Bidder.
- (b) "Applicable Guidelines" means the policies of the Department governing the selection and Contract award process as set forth in this RFP.
- (c) "Applicable Law" means the laws and any other instruments having the force of law in the Department's country, or in such other country as may be specified in the **Data Sheet**, as they may be issued and in force from time to time.
- (d)"Department" means the implementing agency that signs the Contract for the Services with the selected Bidder.
- (e) "Bidder" means a legally-established professional consulting firm or an entity that may provide or provides the Services to the Department under the Contract.
- (f) "Contract" means a legally binding written agreement signed between the Department and the Bidder and includes all the attached documents listed in its Clause 1 (the General Conditions of Contract (GCC), the Special Conditions of Contract (SCC), and the Appendices).
- (g)"Data Sheet" means an integral part of the Instructions to Bidder (ITC) Section 2 that is used to reflect specific country and assignment conditions to supplement, but not to over-write, the provisions of the ITC.
- (h) "Day" means a calendar day.
- (i) "Government" means the government of the Department's country.
- (j) "Key Expert(s)" means an individual professional whose skills, qualifications, knowledge and experience are critical to the performance of the Services under the Contract and whose CV is taken into account in the technical evaluation of the Bidder's proposal.
- (k) "ITC" (this Section 2 of the RFP) means the Instructions to Bidder that provides—the shortlisted Bidder ith all information needed to prepare their Proposals.
- (l) "LOI" (this Section 1 of the RFP) means the Letter of Invitation being sent by the Department to the shortlisted Bidder.

- (m) "Non-Key Expert(s)" means an individual professional provided by the Bidder or its Sub-Bidder and who is assigned to perform the Services or any part thereof under the Contract and whose CVs are not evaluated individually.
- (n) "Proposal" means the Technical Proposal and the Financial Proposal of the Bidder.
- (o) "RFP" means the Request for Proposals to be prepared by the Department for the selection of Bidder, based on the QCBS method.
- (p) "QCBS" means the Quality- and Cost-Based Selection, which will be used for selection of the bidder.
- (q) "Services" means the work to be performed by the Bidder/bidder pursuant to the Contract.
- (r) "TORs" (this Section 7 of the RFP) means the Terms of Reference that explain the objectives, scope of work, activities, and tasks to be performed, respective responsibilities of the Department and the Bidder, and expected results and deliverables of the assignment.
- 2.1 The Bidder should familiarize themselves with the local conditions and take them into account in preparing their Proposals, including attending a pre-bid conference.
- 2.2 The Department will timely provide, at no cost to the Bidder, the inputs, relevant project data, and reports required for the preparation of the Bidder's Proposal.
- 3.1 The Bidder is required to provide professional, objective, and impartial advice, at all times holding the Department's interests paramount, strictly avoiding conflicts with other assignments or its own corporate interests, and acting without any consideration for future work.
- 3.2 The Bidder has an obligation to disclose to the Department any situation of actual or potential conflict that impacts its capacity to serve the best interest of its Department. Failure to disclose such situations may lead to the disqualification of the Bidder or the termination of its Contract and/or sanctions by the Department.
- 3.2.1 Without limitation on the generality of the foregoing, and unless stated, the Bidder shall not be hired under the circumstances set forth below:
 - (i) Conflict between consulting activities and procurement of goods, works or non-consulting services: a firm that has been engaged by the Department to provide goods, works, or non-consulting services for a project, or any of its Affiliates, shall be disqualified from providing consulting services resulting from or directly related to those goods, works, or non-consulting services. Conversely, a firm hired to provide consulting services for the

2. Introduction

3. Conflict of Interest

a. Conflicting activities

- **b.** Conflicting assignments
- c. Conflicting relationships

4. Unfair Competitive Advantage

5. Corrupt and Fraudulent Practices

6. Eligibility

preparation or implementation of a project, or any of its Affiliates, shall be disqualified from subsequently providing goods or works or non-consulting services resulting from or directly related to the consulting services for such preparation or implementation.

- (ii) <u>Conflict among consulting assignments:</u> a Bidder (including its Experts and Sub-Bidder) or any of its Affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Bidder for the same or for another Department.
- (iii) Relationship with the Department's staff: a Bidder (including its Experts and Sub-Bidder) that has a close business or family relationship with a professional staff of the Borrower (or of the Department, or of implementing agency, or of a recipient of a part of the Department's financing) who are directly or indirectly involved in any part of (i) the preparation of the Terms of Reference for the assignment, (ii) the selection process for the Contract, or (iii) the supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Department throughout the selection process and the execution of the Contract.
- 4.1 Fairness and transparency in the selection process require that the Bidder or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to the assignment in question. To that end, the Department shall indicate in the **Data Sheet** and make available to all short listed Bidder together with this RFP all information that would in that respect give such Bidder any unfair competitive advantage over competing Bidder .
- 5.1 The Department requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section 6.
- 5.2 In further pursuance of this policy, Bidder shall permit and shall cause its agents, Experts, Sub-Bidder, sub-contractors, services providers, or suppliers to permit the Department to inspect all accounts, records, and other documents relating to the submission of the Proposal and contract performance (in case of an award), and to have them audited by auditors appointed by the Department.
- 6.1 The Department permits Bidder (individuals and firms, and their individual members) to offer consulting services for Department-financed projects.
- 6.2 Furthermore, it is the Bidder's responsibility to ensure that its Experts, joint venture members, Sub-Bidder, agents (declared or not), sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by the Department in the Applicable Guidelines.

6.3 As an exception to the foregoing Clauses 6.1 and 6.2 above:

a. Sanctions

6.3.1 A firm or an individual sanctioned by the Department in accordance with the above Clause 5.1 or in accordance with "Anti-Corruption Guidelines" shall be ineligible to be awarded a Department-financed contract, or to benefit from a Department-financed contract, financially or otherwise, during such period of time as the Department shall determine. The list of debarred firms and individuals is available at the electronic address specified in the **Data Sheet**.

B. Preparation of Proposals

- 7. General Considerations
- 7.1 In preparing the Proposal, the Bidder is expected to examine the RFP in detail. Material deficiencies in providing the information requested in the RFP may result in rejection of the Proposal.
- 8. Cost of Preparation of Proposal
- 8.1 The Bidder shall bear all costs associated with the preparation and submission of its Proposal, and the Department shall not be responsible or liable for those costs, regardless of the conduct or outcome of the selection process. The Department is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Bidder.
- 9. Language
- 9.1 The Proposal, as well as all correspondence and documents relating to the Proposal exchanged between the Bidder and the Department shall be written in the language(s) specified in the **Data Sheet**.
- 10. Documents
 Comprising the
 Proposal
- 10.1 The Proposal shall comprise the documents and forms listed in the **Data Sheet**.

11. Proposal Validity

- 11.1 **The Data Sheet** indicates the period during which the Bidder's Proposal must remain valid after the Proposal submission deadline.
- 11.2 During this period, the Bidder shall maintain its original Proposal without any change, including the availability of the Key Experts, the proposed rates and the total price.
- a. Extension of Validity Period
- 11.3 The Department will make its best effort to complete the negotiations within the proposal's validity period. However, should the need arise, the Department may request, in writing, all Bidder who

submitted Proposals prior to the submission deadline to extend the Proposals' validity.

- 11.4 If the Bidder agrees to extend the validity of its Proposal, it shall be done without any change in the original Proposal and with the confirmation of the availability of the Key Experts.
- b. Substitution of Key Experts at Validity Extension
- 11.5 If any of the Key Experts become unavailable for the extended validity period, the Bidder shall provide a written adequate justification and evidence satisfactory to the Department together with the substitution request. In such case, a replacement Key Expert shall have equal or better qualifications and experience than those of the originally proposed Key Expert. The technical evaluation score, however, will remain to be based on the evaluation of the CV of the original Key Expert.
- 11.6 If the Bidder fails to provide a replacement Key Expert with equal or better qualifications, or if the provided reasons for the replacement or justification are unacceptable to the Department, such Proposal will be rejected with the prior Department's no objection.
- 11.7 The Bidder shall not subcontract the whole of the Services.
- 12. Clarification and Amendment of RFP

c. Sub-Contracting

- 12.1 The Bidder may request a clarification of any part of the RFP during the period indicated in the **Data Sheet** before the Proposals' submission deadline. Any request for clarification must be sent in writing, or by standard electronic means, to the Department's address indicated in the **Data Sheet**. The Department will respond in writing, or by standard electronic means, and will send written copies of the response (including an explanation of the query but without identifying its source) to all shortlisted Bidder . Should the Department deem it necessary to amend the RFP as a result of a clarification, it shall do so following the procedure described below:
 - 12.1.1 At any time before the proposal submission deadline, the Department may amend the RFP by issuing an amendment in writing or by standard electronic means. The amendment shall be sent to all shortlisted Bidder and will be binding on them. The shortlisted Bidder shall acknowledge receipt of all amendments in writing.
 - 12.1.2 If the amendment is substantial, the Department may extend the proposal submission deadline to give the shortlisted Bidder reasonable time to take an amendment into account in their Proposals.
 - 12.2 The Bidder may submit a modified Proposal or a modification to any part of it at any time prior to the proposal submission deadline. No modifications to the Technical or Financial Proposal shall be accepted after the deadline.

13. Technical Proposal Format and Content

- 13.1 The Technical Proposal shall not include any financial information. A Technical Proposal containing material financial information shall be declared non-responsive.
 - 15.1.1 Bidder shall not propose alternative Key Experts. Only one CV shall be submitted for each Key Expert position. Failure to comply with this requirement will make the Proposal non-responsive.
- 13.2 Depending on the nature of the assignment, the Bidders required to submit a Full Technical Proposal (FTP) as indicated in the **Data Sheet** and using the Standard Forms provided in Section 3 of the RFP.

14. Financial Proposal

14.1 The Financial Proposal shall be prepared using the Standard Forms provided in Section 4 of the RFP.

b. Taxes

14.2 The Bidder and its Sub-Bidder and Experts are responsible for meeting all tax liabilities arising out of the Contract unless stated otherwise in the **Data Sheet**. Information on taxes in the Department's country is provided in the **Data Sheet**.

c. Currency of Proposal

14.3 The Bidder may express the price for its Services in the currency or currencies as stated in the **Data Sheet**. If indicated in the **Data Sheet**, the portion of the price representing local cost shall be stated in the national currency.

d. Currency of Payment

14.4 Payment under the Contract shall be made in the currency or currencies in which the payment is requested in the Proposal.

C. Submission, Opening and Evaluation

15. Submission, Sealing, and Marking of Proposals

- 17.1 TheBidder shall submit a signed and complete Proposal comprising the documents and forms in accordance with Clause 10 (Documents Comprising Proposal). The submission can be done by mail or by hand. If specified in the **Data Sheet**, the Bidder has the option of submitting its Proposals electronically.
- 17.2 An authorized representative of the Bidder shall sign the original submission letters in the required format for both the Technical Proposal and, if applicable, the Financial Proposals and shall initial all pages of both. The authorization shall be in the form of a written power of attorney attached to the Technical Proposal.
- 17.3 Any modifications, revisions, interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Proposal.
- 17.4 The signed Proposal shall be marked "ORIGINAL", and its copies marked "COPY" as appropriate. The number of copies is indicated in the

Data Sheet. All copies shall be made from the signed original. If there are discrepancies between the original and the copies, the original shall prevail.

- 17.5 The original and all the copies of the Technical Proposal shall be placed inside of a sealed envelope clearly marked "TECHNICAL PROPOSAL", "[Name of the Assignment]", reference number, name and address of the Bidder.
- 17.6 Similarly, the original Financial Proposal (if required for the applicable selection method) shall be placed inside of a sealed envelope clearly marked "FINANCIAL PROPOSAL" followed by the name of the assignment, reference number, name and address of the Bidder.
- 17.7 The sealed envelopes containing the Technical and Financial Proposals shall be placed into one outer envelope and sealed. This outer envelope shall bear the submission address, RFP reference number, the name of the assignment, Bidder's name and the address.
- 17.8 If the envelopes and packages with the Proposal are not sealed and marked as required, the Department will assume no responsibility for the misplacement, loss, or premature opening of the Proposal.
- 17.9 The Proposal or its modifications must be sent to the address indicated in the **Data Sheet** and received by the Department no later than the deadline indicated in the **Data Sheet**, or any extension to this deadline. Any Proposal or its modification received by the Department after the deadline shall be declared late and rejected, and promptly returned unopened.

16. Confidentiality

- 18.1 From the time the Proposals are opened to the time the Contract is awarded, the Bidder should not contact the Department on any matter related to its Technical and/or Financial Proposal. Information relating to the evaluation of Proposals and award recommendations shall not be disclosed to the Bidder who submitted the Proposals or to any other party not officially concerned with the process, until the publication of the Contract award information.
- 18.2 Any attempt by anyone on behalf of the Bidder to influence improperly the Department in the evaluation of the Proposals or Contract award decisions may result in the rejection of its Proposal, and may be subject to the application of prevailing Department's sanctions procedures.
- 18.3 Notwithstanding the above provisions, from the time of the Proposals' opening to the time of Contract award publication, if aBidder wishes to contact the Department or the Department on any matter related to the selection process, it should do so only in writing.

17. Opening of Technical Proposals

19.1 The Department's evaluation committee shall conduct the opening of the Technical Proposals in the presence of the Bidders' authorized

representatives who choose to attend (in person, or online if this option is offered in the **Data Sheet**). The opening date, time and the address are stated in the **Data Sheet**. The envelopes with the Financial Proposal shall remain sealed and shall be securely stored with a reputable public auditor or independent authority until they are opened in accordance with Clause 23 of the ITC.

18. ProposalsEvaluatio

- 20.1 Subject to provision of Clause 15.1 of the ITC, the evaluators of the Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.
- 20.2 The Bidder is not permitted to alter or modify its Proposal in any way after the proposal submission deadline except as permitted under Clause 12.7 of this ITC. While evaluating the Proposals, the Department will conduct the evaluation solely on the basis of the submitted Technical and Financial Proposals.

19. Evaluation of Technical Proposals

21.1 The Department's evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference and the RFP, applying the evaluation criteria, sub-criteria, and point system specified in the **Data Sheet**. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP or if it fails to achieve the minimum technical score indicated in the **Data Sheet**.

Evaluation is on QCBS method.

- 21.2 Criteria of the Evaluation is shown in Appendix E.
- 21.3 Bidder who scores minimum of 80 marks shall only be considered for financial offer. L1 of such bidders' marks shall be selected as a successful bidder.
- 20. Financial Proposals for QCBS
- 22.1 Following the ranking of the Technical Proposals, when the selection is based on quality only (QCBS), the L1Bidder is invited to negotiate the Contract.
- 21. Public Opening of Financial Proposals (for QCBS methods)
- 23.1 After the technical evaluation is completed the Department shall notify those Bidder whose Proposals were considered non-responsive to the RFP and TOR or did not meet the minimum qualifying technical score (and shall provide information relating to theBidder's overall technical score, as well as scores obtained for each criterion and sub-criterion) that their Financial Proposals will be returned unopened after completing the selection process and Contract signing. The Department shall simultaneously notify in writing those Bidder that have achieved the minimum overall technical score and inform them of the date, time and location for the opening of the Financial Proposals. The opening date should allow the Bidder sufficient time to make arrangements for attending the

opening.

23.2 The Financial Proposals shall be opened by the Department's evaluation committee in the presence of the representatives of those Bidder whose proposals have passed the minimum technical score. At the opening, the names of the Bidder, and the overall technical scores, including the break-down by criterion, shall be read aloud. The Financial Proposals will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. Copies of the record shall be sent to all Bidder who submitted Proposals and to the Department.

22. Correction of Errors

24.1 Activities and items described in the Technical Proposal but not priced in the Financial Proposal, shall be assumed to be included in the prices of other activities or items, and no corrections are made to the Financial Proposal.

a. Time-Based Contracts

24.1.1 If a Time-Based contract form is included in the RFP, the evaluation committee Department's will (a) correct any computational or arithmetical errors, and (b) adjust the prices if they fail to reflect all inputs included for the respective activities or items in the Technical Proposal. In case of discrepancy between (i) a partial amount (sub-total) and the total amount, or (ii) between the amount derived by multiplication of unit price with quantity and the total price, or (iii) between words and figures, the former will prevail. In case of discrepancy between the Technical and Financial Proposals in indicating quantities of input, the Technical Proposal prevails and the Department's evaluation committee shall correct the quantification indicated in the Financial Proposal so as to make it consistent with that indicated in the Technical Proposal, apply the relevant unit price included in the Financial Proposal to the corrected quantity, and correct the total Proposal cost.

23. Taxes

25.1 The Department's evaluation of the Bidder's Financial Proposal shall exclude taxes and duties in the Department's country in accordance with the instructions in the **Data Sheet**.

26. Combined Quality and Cost Evaluation

a. Quality- and Cost-Based Selection (QCBS) 26.1 In the case of QCBS, the total score is calculated by weighting the technical scores and adding them as per the instructions in the **Data Sheet**. The Bidder achieving the highest combined technical who is L1 in financial score will be invited for negotiations.

D. Negotiations and Award

27. Negotiations

- 27.1 The negotiations will be held at the date and address indicated in the **Data Sheet** with the Bidder's representative(s) who must have written power of attorney to negotiate and sign a Contract on behalf of the Bidder.
- 27.2 The Department shall prepare minutes of negotiations that are signed by the Department and the Bidder's authorized representative.

a. Availability of Key Experts

- 27.3 The invited Bidder shall confirm the availability of all Key Experts included in the Proposal as a pre-requisite to the negotiations, or, if applicable, a replacement in accordance with Clause 12 of the ITC. Failure to confirm the Key Experts' availability may result in the rejection of the Bidder's Proposal and the Department proceeding to negotiate the Contract with the next-ranked Bidder.
- 27.4 Notwithstanding the above, the substitution of Key Experts at the negotiations may be considered if due solely to circumstances outside the reasonable control of and not foreseeable by the Bidder, including but not limited to death or medical incapacity. In such case, the Bidder shall offer a substitute Key Expert within the period of time specified in the letter of invitation to negotiate the Contract, who shall have equivalent or better qualifications and experience than the original candidate.

b. Technical negotiations

27.5 The negotiations include discussions of the Terms of Reference (TORs), the proposed methodology, the Department's inputs, the special conditions of the Contractand finalizingthe "Description of Services" part of the Contract. These discussions shall not substantially alter the original scope of services under the TOR or the terms of the contract, lest the quality of the final product, its price, or the relevance of the initial evaluation be affected.

28. Conclusion of Negotiations

- 28.1 Thenegotiations are concluded with a review of the finalized draft Contract, which then shall be initialed by the Department and the Bidder's authorized representative.
- 28.2 If the negotiations fail, the Department shall inform the Bidder in writing of all pending issues and disagreements and provide a final opportunity to the Bidder to respond. If disagreement persists, the Department shall terminate the negotiations informing the Bidder of the reasons for doing so. After having obtained the Department's noobjection, the Departmentwill invite the next-ranked Bidder to negotiate a Contract. Once the Department commences negotiations with the next-ranked Bidder, the Department shall not reopen the earlier negotiations.

29. Award of Contract

- 29.1 After completing the negotiations the Department shallobtain the Department's no objection to the negotiated draft Contract, if applicable; sign the Contract; publish the award information as per the instructions in the **Data Sheet**; and promptly notify the other shortlisted Bidder .
- 29.2 The Bidder is expected to commence the assignment on the date and at the location specified in the **Data Sheet**.

Instructions to Bidder

E. Data Sheet

	A. General				
ITC Clause Reference					
1 (c)	India				
2.1	Name of the Department: Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam. Method of selection: QCBS				
2.2	Financial Proposal to be submitted together with Technical Proposal: Yes. The name of the assignment is:-Proposal for Improvement and Revamping of the Existing Water Supply System for 24x7 System and Underground Sewerage System of Dehradun City				
2.3 A pre-proposal conference will be held: Yes Date of pre-proposal conference: Already done ON 18/10/2018 Time: 15:00 Hrs Address: Superintending Engineer, Construction Circle, Uttarakhan Sansadhan Vikas Evam Nirman Nigam, Street No11 Rajendra Nagar,I 248001 (Uttarakhand) Fax:0135-2751879 E-mail: se9circle10@yahoo.com Contact person/conference coordinator: Sh. L.M. Karnatakal, Superintendi Engineer Mo. +91 9412044670					
2.4	The Department will provide the following inputs, project data, reports, etc. to facilitate the preparation of the Proposals:				
	The Department will assist in providing all the necessary available data and relevant maps to the selected Bidder.				
The Department will provide any study report, existing design report data if available for the project town.					
	The Department will assist Bidder in obtaining the required permissions from concerned authorities.				
	The CDP of Dehradun town will be made available to the successful bidder in soft copy for reference only. The data available in the CDP like population projection, measurement of flow of nalas and their discharge and analysis reports are to be used				

for reference. The data provided in CDP have to be rechecked and reconfirmed by lab analysis etc during execution of work. Bidder will prepare the rate analysis based on the basic rates and other government procedures using Uttarakhand PWD/CPWD/DSR schedules or the schedule opted by Uttarakhand Peyjal Nigam as the case may be. The items which are not available in schedule of rates, the Bidder will use the market rates & provide analysis of rates for each item separately. **B.** Preparation of Proposals 9.1 This RFP has been issued in the English language. Proposals shall be submitted in English language. All correspondence exchange shall be in English language. 10.1 The Proposal shall comprise the following: **FULL TECHNICAL PROPOSAL (FTP):** 1st Inner Envelope with the Technical Proposal: (1) Power of Attorney to sign the Proposal (2) TECH-1 (3) TECH-2 (4) TECH-3 (5) TECH-4 (6) TECH-5 (7) TECH-6 **AND** 2d Inner Envelope with the Financial Proposal (if applicable): (1) FIN-1 (2) FIN-2 (3) FIN-3 (4) FIN-4 (5) Statement of Undertaking (if required under Data Sheet 10.2 below) 10.2 **Statement of Undertaking is required** Yes Participation of Sub-Bidder, Key Experts and Non-Key Experts in more than 11.1 one Proposal is permissible Yes

	1				
12.1	Proposals must remain valid for 90 calendar days after the proposal submission deadline.				
Clarifications may be requested no later than 10 days prior to the suldeadline.					
The contact information for requesting clarifications is:					
	Sh. L.M. Karnatakal, Superintending Engineer Mo. +91 9412044670				
15.2	The format of the Technical Proposal to be submitted is: Full Technical Proposal (FTP) Submission of the Technical Proposal in a wrong format may lead to the Proposal being deemed non-responsive to the RFP requirements.				
16.2	A price adjustment provision applies to remuneration rates:-No				
16.4	The Financial Proposal shall be stated in the following currencies: Indian Rupees				
	C. Submission, Opening and Evaluation				
17.1	The Bidder shall not have the option of submitting their Proposals electronically.				
17.4	The Bidder must submit: (a) Technical Proposal: one (1) original and (1) copy. (b) Financial Proposal: one (1) original.				
17.7 and 17.9	The Proposals must be submitted no later than: Date:05 Nov 2018 Time: 15:00 hours				
The Proposal submission address is: Superintending Engineer, Circle, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, S Rajendra Nagar, Dehradun—248001 (Uttarakhand)					
19.1	An online option of the opening of the Technical Proposals is offered: No				
	The opening shall take place at: same as the Proposal submission address, i.e., Superintending Engineer, Construction Circle, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Street No11 Rajendra Nagar, Dehradun—248001 (Uttarakhand) Date: 05 Nov 2018 Time: 16.00				
19.2	In addition, the following information will be read aloud at the opening of the Technical Proposals: Not Applicable				

	Expression of interest, points raised in pre bid meeting and its compliances are part of RFP and are biding on the bidder.					
	E. Negotiations and Award					
30.2	Expected date for the commencement of the Services: Date:01 Dec 2018 at: Dehradun (Uttarakhand)					
	The publication will be done within 10days after the contract signing.					
30.1	The publication of the contract award information following the completion of the contract negotiations and contract signing will be done as following:www.peyjal.uk.gov.in					
28.1	Expected date and address for contract negotiations: Date: 30.Nov 2018 Address: Superintending Engineer, Construction Circle, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Street No11 Rajendra Nagar, Dehradun–248001 (Uttarakhand)					
~ <	D. Negotiations and Award					
27.1 (QCBS only)	Bidder who scores minimum of 80 marks shall only be considered for financial offer. L1 of such bidders' marks shall be selected as a successful bidder.					
26.1	The single currency for the conversion of all prices expressed in various currencies into a single one is: Not Applicable					
25.1	For the purpose of the evaluation, the Department will exclude: (a) all local identifiable indirect taxes such as sales tax, excise tax, GST, VAT, or similar taxes levied on the contract's invoices; If a Contract is awarded, at Contract negotiations, all such taxes will be discussed, finalized (using the itemized list as a guidance but not limiting to it) and added to the Contract amount as a separate line, also indicating which taxes shall be paid by the Bidder and which taxes are withheld and paid by the Department on behalf of the Bidder.					
23.1	An online option of the opening of the Financial Proposals is offered: No					
	The minimum technical score (St) required to pass is:80					
21.1 (for FTP)	Criteria, sub-criteria, and point system for the evaluation of the Full Technical Proposals: In Appendix E					

Section 3. Technical Proposal – Standard Forms

{Notes to Bidder shown in brackets { } throughout Section 3 provide guidance to the Bidder to prepare the Technical Proposal; they should not appear on the Proposals to be submitted.}

CHECKLIST REQUIRED FOR FTP

S.No.	FORM	DESCRIPTION	Page Limit	
1.	TECH-1	Technical Proposal Submission Form.		
2.	Power of	No pre-set format/form. power of attorney for the		
	Attorney	representative of the lead member to represent the		
		Bidder.		
3.	TECH-2	Bidder's Organization and Experience.		
4.	TECH-2A	A. Bidder's Organization		
5.	TECH-2B	B. Bidder's Experience		
6.	TECH-3	Comments or Suggestions on the Terms of Reference and		
		on Counterpart Staff and Facilities to be provided by the		
		Department.		
7.	TECH-3A	A. On the Terms of Reference		
8.	TECH-3B	B. On the Counterpart Staff and Facilities		
9.	TECH-4	Description of the Approach, Methodology, and Work Plan		
	//	for Performing the Assignment		
10.	TECH-5	Work Schedule and Planning for Deliverables		
11.	TECH-6	Team Composition, Key Experts Inputs, and attached		
	137	Curriculum Vitae (CV)	1	

All pages of the original Technical and Financial Proposal shall be initialled by the same authorized representative of the Bidder who signs the Proposal.

FORM TECH-1

TECHNICAL PROPOSAL SUBMISSION FORM

	{Location, Date}
To,	

We, the undersigned, offer to provide the consulting services for Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam in accordance with your Request for Proposals dated 24-10-2018 and our Proposal for the same as per QCBS method for selection of Bidder for the work of "Proposal for Improvement and Revamping of the Existing Water Supply System for 24x7 System and Underground Sewerage System of Dehradun City."

"We are hereby submitting our Proposal, which includes this Technical Proposal and a Financial Proposal sealed in a separate envelope"

We hereby declare that:

Dear Sirs:

- (a) All the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification by the Department and/or may be sanctioned by the Department.
- (b) Our Proposal shall be valid and remain binding upon us for the period of time specified in the Data Sheet, Clause 12.1.
- (c) We have no conflict of interest in accordance with ITC 3.
- (d) We meet the eligibility requirements as stated in ITC 6, and we confirm our understanding of our obligation to abide by the Department's policy in regard to corrupt and fraudulent practices as per ITC 5.
- (e) In competing for (and, if the award is made to us, in executing) the Contract, we undertake to observe the laws against fraud and corruption, including bribery, in force in the country of the Department.
- (f) Except as stated in the Data Sheet, Clause 12.1, we undertake to negotiate a Contract on the basis of the proposed Key Experts. We accept that the substitution of Key Experts for reasons other than those stated in ITC Clause 12 and ITC Clause 28.4 may lead to the termination of Contract negotiations.

(g) Our Proposal is binding upon us and subject to any modifications resulting from the Contract negotiations.

We undertake, if our Proposal is accepted and the Contract is signed, to initiate the Services related to the assignment no later than the date indicated in Clause 30.2 of the Data Sheet.

We understand that the Department is not bound to accept any Proposal that the Department receives.

We remain,
Yours sincerely,
Authorized Signature {In full and initials}:
Contact information (phone and e-mail):
ेते संवर्धन हो वर्ष
जिस्साचल पेय जल विजास

FORM TECH-2(FOR FULL TECHNICAL PROPOSAL)

BIDDER'S ORGANIZATION AND EXPERIENCE

Form TECH-2: a brief description of the Bidder's organization and an outline of the recent experience of the Bidder that is most relevant to the assignment. For each assignment, the outline should indicate the names of the Bidder's Key Experts who participated, the duration of the assignment, the contract amount (total and, if it was done in a form of a joint venture or a subconsultancy, the amount paid to the Bidder), and the Bidder's role/involvement.

A - Bidder's Organization

- 1. Provide here a brief description of the background and organization of your company, and in case of ajoint venture of each member for this assignment.
- 2. Include organizational chart, a list of Board of Directors, and beneficial ownership

B - Bidder's Experience

- 1. List only previous similar assignments successfully completed.
- 2. List only those assignments for which the Bidder was legally contracted by the Department as a company. Assignments completed by the Bidder's individual experts working privately or through other consulting firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-Bidder, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by the Department.

Duration	Assignment name/& brief description of main deliverables/outputs	Name of Department& Country of Assignment	Approx. Contract value (in Rs./ equivalent)/ Amount paid to your firm	Role on the Assignment
{e.g., Jan.2013– Dec2013}	{e.g., "Improvement quality of": designed master plan for rationalization of; }	{e.g., Ministry of, country}	{e.g.,Rs Crore}	{e.g., Lead partner in a JV A&B&C}
{e.g., Jan.2012– Dec2012}	{e.g., "Support to subnational government": drafted secondary level regulations on}	{e.g., municipality of, country}	{e.g., Rs Crore}	{e.g., sole Bidder}
	9		16	

^{**} Note:- Relevant documentary proofs of similar work experiences indicating the estimated cost must be enclosed along with this technical proposal.

FORM TECH-3 (FOR FULL TECHNICAL PROPOSAL)

COMMENTS AND SUGGESTIONS ON THE TERMS OF REFERENCE, COUNTERPART STAFF, AND FACILITIES TO BE PROVIDED BY THE DEPARTMENT

NA



FORM TECH-4 (FOR FULL TECHNICAL PROPOSAL)

DESCRIPTION OF APPROACH, METHODOLOGY, AND WORK PLAN IN RESPONDING TO THE TERMS OF REFERENCE

Form TECH-4: a description of the approach, methodology and work plan for performing the assignment, including a detailed description of the proposed methodology and staffing for training, if the Terms of Reference specify training as a specific component of the assignment.

{Suggested structure of your Technical Proposal (in FTP format):

- a) Technical Approach and Methodology
- b) Work Plan
- c) Organization and Staffing}
- a) <u>Technical Approach and Methodology.</u> {Please explain your understanding of the objectives of the assignment as outlined in the Terms of Reference (TORs), the technical approach, and the methodology you would adopt for implementing the tasks to deliver the expected output(s), and the degree of detail of such output. <u>Please do not repeat/copy the TORs in here.</u>}
- b) Work Plan. {Please outline the plan for the implementation of the main activities/tasks of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Department), and tentative delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing your understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents (including reports) to be delivered as final output(s) should be included here. The work plan should be consistent with the Work Schedule Form.}
- c) Organization and Staffing. {Please describe the structure and composition of your team, including the list of the Key Experts, Non-Key Experts and relevant technical and administrative support staff.}

FORM TECH-5(FOR FTP)

WORK SCHEDULE AND PLANNING FOR DELIVERABLES



		<u>Deh</u> rad	un 24X7 W	<u>/ater Si</u>	gqı	ly Pr	<u>oject</u>	<u>& S</u>	<u>ewe</u> ı	age I	<u>Proje</u>	ct					
Sr. No	Activities	Desired Output	Work Quantity	(2018-19) Duration	Dec	Jan	(2019) Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Target Date for Completion
1	Drone Survey	4K Resolution, Ultra High Definition Stereo Images	60 Wards, 300 Km ²	3 Months													Mar -19
2	Processing of Drone Data	High Resolution Ortho Images and Contours	60 Wards, 300 Km2	3 Months													Mar -19
3	Digitization & Preparation of GIS Basemap	(Buildings, Roads, Water Bodies, Grids etc)	60 Wards, 300 Km2	3 Months													Apr -19
4	DGPS-RTK Survey for Existing Water Supply & Sewerage System / Scanning Georeferencing & Digitization of Existing Maps	GIS Map for Sources, WTPs, Tanks, Transmission Lines with Attribute Information	800 Km	4 Months													Apr -19
5	DGPS-RTK Survey for Existing Sewerage System / Scanning Georeferencing & Digitization of Existing Maps	GIS Map of Existing Sewer Network System with Attribute Dwtails	700 Km	4 Months	Offic	e Estab	ishment	& Mobil	lization	of Team							May-19
6	Calibrating Drone Contours wrt DGPS Elevation Data	Calibrated Contours with 1m & 5m Intervals	60 Wards, 300 Km2	2 Months													Jul -19
7	Consumer Survey	Detailed Household Survey	2,00,000 HH	7 Months													Aug-19
8	Data Entry of Survey Forms	Excel File with Connections & Population on each HH	2,00,000 HH	7 Months													Aug -19
9	GIS Map Updation & Linking of Consumer Survey Data	Connections & Population on each HH Mapped on GIS	2,00,000 HH	7 Months		S											Aug -19
10	Conditional Assessment of Existing Watet Supply System	Trial Pits of Size 1mX1mX2m upto 4mX1mX2m for capturing details of Pipelines at 500m interval	800 Km	3 Months		d							1				Jul -19
11	Conditional Assessment of Existing Sewerage System	Locating Manholes & Capturing Invert Level along with Conduit detils	700 Km	3 Months	7		,		9	7							Aug -19
12	GIS based Hydraulic Modeling - Designing of New System	Analysis of Existing System along with Design for New Water SupplybSystem	800 Km	3 Months	-		7] (CI		1							Oct -19
13	GIS based Sewerage Modeling - Dresigning of New System	Analysis of Existing System along with Design for New Sewer System	700 Km	3 Months													Oct -19
14	Detailed Project Report (DPR) for Water Supply & Sewerage Project comprising of Design Reports, Maps & Drawings, Result Tables, L Sections, Financial Estimates etc	'	Water Supply & Sewerage DPR	1 Month		10	Z										Nov-19

FORM TECH-6(FOR FTP)

Not Applicable



FORM TECH-6 (CONTINUED)

$CURRICULUM\ VITAE\ (CV)$

Position Title and No.	{e.g., K-1, TEAM LEADER}
Name of Expert:	{Insert full name}
Date of Birth:	{day/month/year}
Country of Citizenship/Residence	

Country of C	itizenship/Residence			
	{List college/university o dates attended, degree(s)/	-		ing names of educational
order. Pleas activities pe Department	nt record relevant to the e provide dates, name of erformed and location of s and employing organ t that is not relevant to the	employing orga f the assignme zation(s) who	anization, titles on nt, and contact can be contact	of positions held, types of information of previounted for references. Pas
Period	Employing organization ar title/position. Contact inforeferences		28/20	Summary of activities performed relevant to the Assignment
[e.g., May 2005- present]	[e.g., Ministry of, advisor/Bidder to For references: Tel/ mail; Mr. Hbbbbb, depu	the second secon	जल रि	नगरम
Membershi	p in Professional Associa	tions and Publ	ications:	
Language S	Skills (indicate only langu	ages in which y	ou can work): _	

Adequacy for the Assignment:

Detailed Tasks Assigned on Bidder's Team of Experts:	Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks
{List all deliverables/tasks as in TECH- 5 in which the Expert will be involved)	
-/-	

Expert's contact information	(e-mail, phone	.)
------------------------------	----------------	----

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Department, and/or sanctions by the Department.

3777		{day/month/year}
Name of Expert	Signature	Date
		{day/month/year}
Name of authorized Representative of the Bidder (the same who signs the Proposal)	Signature	Date

Envelope-B

Financial Proposal - Standard Forms

{Notes to Bidder shown in brackets { } provide guidance to the Bidder to prepare the Financial Proposals; they should not appear on the Financial Proposals to be submitted.}

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided in Section 2.

- FIN-1 Financial Proposal Submission Form
- FIN-2 Summary of Costs
- FIN-3 Breakdown of Remuneration, including Appendix A "Financial Negotiations Breakdown of Remuneration Rates" in the case of QBS method
- FIN-4 Reimbursable expenses

FORM FIN-1 FINANCIAL PROPOSAL SUBMISSION FORM

{Location, Date}

To:

Superintending Engineer, Construction Circle, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Street No.-11 Rajendra Nagar, Dehradun—248001 (Uttarakhand)

Dear Sirs:

We, the undersigned, offer to provide the consulting services for the work of Proposal for Improvement and Revamping of the Existing Water Supply System for 24x7 System and Underground Sewerage System of Dehradun City in accordance with your Request for Proposal dated 24-10-2018 and our Technical Proposal.

Our attached Financial Proposal is for the amount of {Indicate the corresponding to the amount(s) currency(ies)}{Insert amount(s) in words and figures}, including of all indirect local taxes in accordance with Clause 25.1 in the Data Sheet. The estimated amount of local indirect taxes is {Insert currency} {Insert amount in words and figures} which shall be confirmed or adjusted, if needed, during negotiations. {Please note that all amounts shall be the same as in Form FIN-2}.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in Clause 12.1 of the Data Sheet.

Commissions and gratuities paid or to be paid by us to an agent or any third party relating to preparation or submission of this Proposal and Contract execution, paid if we are awarded the Contract, are listed below:

Name and Address	Amount and	Purpose of Commission
of Agents	Currency	or Gratuity
•		

{If no payments are made or promised, add the following statement: "No commissions or gratuities have been or are to be paid by us to agents or any third party relating to this Proposal and Contract execution."}

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature {In full and initials}	:
Name and Title of Signatory:	
In the capacity of:	
Address:	
E-mail:	

{For a joint venture, either all members shall sign or only the lead member/Bidder, in which case the power of attorney to sign on behalf of all members shall be attached}



FORM FIN-2 SUMMARY OF COSTS

Financial Proposal (Costing)

1. GIS WORK

Sr. No	Item Description	Rate Quantity Amount (Rs		
	GIS based Drone Survey for 60 wards of Dehradun city High Resolution Ortho Image			
	High end computer, drones and software (Part loading)			
1	1m Contour Intervals after Processing Digital Surface Model / Digital Elevation		30000 Hesteres	
1	Model Differential GPS Points (Minimum 1500) across the area for calibrating drone contours with establishing Ground Control Points (GCPs) and Bench Marks (BMs)	Hectares (300 Sqkm)		
	Collecting details of existing administrative boundaries, Ward boundaries, Zones etc.			
2	Digitisation &preparation of GIS base map (Building footprints, Roads, Rivers, Railways etc) on very high resolution Image (Drone) and generating seamless data.	8	30000 Hectares (300 Sqkm)	
3	Door to Door consumer survey (GIS based survey with geotagging of consumers), Data entry, map updation, linking of consumer survey data with GIS maps,	2,00,000		
	streamlining billing data, consumer Indexing etc		НН	
4	DGPS survey of existing water supply system along with Scanning, georeferencing & digitization of the existing maps of water supply system with attribution	n M	800 km	8
5	DGPS survey of existing sewer system along with scanning, georeferencing & digitization of the existing maps of sewer network system with attribution		700 km	
6	Condition Assessment (water supply) by taking trial pits of sizes 1mx1mx2m to 4mx1mx2m at 500m intervals through the system at appropriate locations and capturing relevant details and updating GIS maps	7	800 km	
7	Condition Assessment (sewerage), locating manholes & capturing invert level and conduit details and updating GIS maps		700 km	
			Total Amount	

2.Water Supply

SN	Design and Network Analysis	Quantity	Unit	Rate (Rs/km)	Amount
1	Preparation of Hydraulic Model for Existing Pipelines & Analysis				
2	Preparation of Hydraulic Model for Designing New Pipelines				
3	Preparation of Hydraulic Model for combined existing and New Pipelines				
4	Data elevations to the nodes using TREX of the WaterGems.				
5	Demand to all the nodes using a LoadBuilder of the WaterGems.				
6	Preparation of the operational zones of the 22 zones as per Tender Document.				
7	Checking of existing service tanks for adequacy of the storage with a emphasis that the tanks shall not remain empty nor overflowing.				
8	Creation of the District Metering Areas (DMA)s		10		
9	Network simulation and Fixing location of the bulk meters at the entry point of each DMA with sizing of the meters.	800 kms	Lump sum	9	
10	Working out quantities required for Cost Estimate	1		10	
11	WaterGems Software (loading of part cost)			1	
12	Fixing location and sizing of Isolation Valve				
13	Fixing location and sizing of Scour Valve		-	-84	
14	Steady State Analysis design for sizing of proposed pipelines	ल विका			
15	Design of transmission feeder main connecting MBR to various service tanks				
16	Design of duty points of Required pumps	_/			
17	Preparation of network drawings of the operational zones, DMAs and that of the network models using Water GEMS and ArcGIS and presenting hard copies				
18	Training of the five candidates on WaterGems software and hydraulic model.				
19	Travel costs and Boarding & Lodging				
	Subtotal				
	GST				
	Total Amount				

3.Sewerage

SN	Design and Network Analysis	Quantity	Unit	Rate (Rs/km)	Amount
1	Preparation of Hydraulic Model for Existing Sewerage System & Analysis				
2	Preparation of Hydraulic Model for Designing New Sewerage System				
3	Preparation of Hydraulic Model for combined existing and New Sewerage System				
4	Data elevations to the nodes using TREX of the Sewer Gems.				
5	Demand to all the nodes using a Load Builder of the Sewer Gems.				
6	Preparation of the operational zones of the zones	7 7			
8	Creation of the District Metering Areas (DMA)s	16	100		
10	Working out quantities required for Cost Estimate	700 kma	Lump		
11	Sewer Gems Software (loading of part cost)	700 kms	sum	(b).	
14	Steady State Analysis design for sizing of proposed pipelines	5		1	
15	Design of trunk sewer connecting to STPs and SPS				
16	Design of duty points of Required pumps		000		
17	Preparation of DPR including Sewerage network drawings of the operational zones, DMAs and that of the network models using sewer GEMS and Arc GIS and presenting hard copies	er Po	Poli		
18	Training of the five candidates on Sewer Gems software and hydraulic model.	100			
19	Travel costs and Boarding & Lodging				
	Total Amount	-			

Note:

- (1) For the works of GIS, water supply and sewerage, it is assumed that GST for water supply and sewerage works is not applicable. However, if it is made applicable it will be paid extra.
- (2) The length of distribution is assumed as 800 kms. If the length is increased then cost shall be proportionally paid extra on per km basis
- (3) Above rates (GIS, water supply and sewerage) are tentative and for reference only. Bidder should make his offer based on his own study.



FORM FIN-3 BREAKDOWN OF REMUNERATION



Appendix A.Financial Negotiations - Breakdown of Remuneration Rates



FORM FIN-4 BREAKDOWN OF REIMBURSABLE EXPENSES

Not Applicable



Section 6. Department Policy – Corrupt and Fraudulent Practices

(This Section 6 shall not be modified)

Guidelines for Selection and Employment of Bidder under IBRD Loans and IDA Credits &Grants by World Department Borrowers, dated January 2011:

"Fraud and Corruption

1.23 It is the Department's policy to require that Borrowers (including beneficiaries of Department loans), Bidder, and their agents (whether declared or not), sub-contractors, sub-Bidder, service providers, or suppliers, and any personnel thereof, observe the highest standard of ethics during the selection and execution of Department-financed contracts [footnote: In this context, any action taken by a Bidder or any of its personnel, or its agents, or its sub-Bidder, sub-contractors, services providers, suppliers, and/or their employees, to influence the selection process or contract execution for undue advantage is improper.]. In pursuance of this policy, the Department:

- (a) Defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party¹;
 - (ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation²;
 - (iii) "collusive practices" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party³;
 - (iv) "coercive practices" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party⁴;

¹ For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the selection process or contract execution. In this context "public official" includes World Department staff and employees of other organizations taking or reviewing selection decisions.

² For the purpose of this sub-paragraph, "party" refers to a public official; the terms "benefit" and "obligation" relate to the selection process or contract execution; and the "act or omission" is intended to influence the selection process or contract execution.

³ For the purpose of this sub-paragraph, "parties" refers to participants in the procurement or selection process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish prices at artificial, non-competitive levels, or are privy to each other's bid prices or other conditions.

- (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Department investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (bb) acts intended to materially impede the exercise of the Department's inspection and audit rights;
- (b) will reject a proposal for award if it determines that the Bidder recommended for award or any of its personnel, or its agents, or its sub-Bidder, sub-contractors, services providers, suppliers, and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- (c) will declare misprocurement and cancel the portion of the Loan allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the Loan were engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the selection process or the implementation of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Department to address such practices when they occur, including by failing to inform the Department in a timely manner they knew of the practices;
- (d) will sanction a firm or an individual at any time, in accordance with prevailing Department's sanctions procedures⁵, including by publicly declaring such firm or an ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Department-financed contract, and (ii) to be a nominated⁶ sub-Bidder, supplier, or service provider of an otherwise eligible firm being awarded a Department-financed contract.

⁴For the purpose of this sub-paragraph, "party" refers to a participant in the selection process or contract execution.

⁵ A firm or an individual may be declared ineligible to be awarded a Department-financed contract upon (i) completion of the Department's sanctions proceedings as per its sanctions procedures, including inter alia: cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Departments, and through the application of the World Department Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceedings. See footnote 12 and paragraph 8 of Appendix 1 of these Guidelines.

⁶ A nominated sub-consultant, supplier, or service provider is one which has been either (i) included by the consultant in its proposal because it brings specific and critical experience and know-how that are accounted for in the technical evaluation of the consultant's proposal for the particular services; or (ii) appointed by the Borrower.

TermsofReference

Short Description of the Project

The project includes GIS based surveying and mapping of the existing water supply and sewerage system of the Dehradun city using a high-end Differential GPS with real time kinematics (DGPS with RTK), GIS based Drone survey for generation of high resolution or the image and contours for Dehradun city, GIS based door to door consumer survey / Household survey for identifying the demand for water by different beneficiaries (Residential / Non-Residential / Institutional etc..).

Based on the data available after carrying out above survey, the work of GIS based hydraulic modeling for simulation and analyzing the existing system, Planning and designing of new water supply system, also planning and designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal and converting the existing system to 24X7 water supply systems, Preparation of detailed project report with working drawings and maps along with financial estimates shall be carried out.

Based on data generated, the work also includes designing of the sewerage system in an integrated manner with existing sewerage system for Dehradun city. It further includes preparation of DPR for sewerage system with working drawings and financial estimates. All the assets of the water supply system and the sewerage system need to be mapped on GIS platform and the design needs to be carried out in an integrated manner for both the water supply and the sewerage system. All the necessary actions like planning for new system along with remedial measures for improvisation and revamping of the existing system needs to be carried out from time to time as per the priorities of Dehradun city and as per the directions of Engineer in charge.

Introduction to Water Supply Dehradun City and Role of Uttarakhand Peyjal Nigam **Dehradun City**

Dehradun or Dehra Dun is the interim capital city of Uttarakhand, a state in the northern part of India. Located in the Garhwal region, it lies 236 kilo meters north of India's capital New Delhi and 168 kilo meters from Chandigarh. It is one of the "Counter Magnets" of the National Capital Region (NCR) being developed as an alternative centre of growth to help ease the migration and population explosion in the Delhi metropolitan area and to establish a smart city at Dehradun. During the days of British Raj, the official name of the town was Dehra.

Dehradun as Educational Hub and Tourist Destination

Dehradun is a world known educational hub. Premier research institute based in Dehradun are the Forest Research Institute, Indian Institute of Remote Sensing, Indian Institute of Petroleum, Wildlife Institute of India, Instruments Research and Development Establishment and Wadia Institute of Himalayan Geology. State and private universities located in Dehradun are Doon University, Uttarakhand Technical University Uttaranchal University, ICFAI University, Dehradun, Graphic Era University, University of Petroleum and Energy Studies. The Forest Research Institute campus hosts the Indira Gandhi National Forest Academy (IGNFA), the staff college that trains officers selected for the Indian Forest Service (IFS). Wildlife Institute of India (WII) is an autonomous institution under the Ministry of Environment Forest and Climate change, Government of India which carries out wildlife research. म पेय जल दिन्य

Local Administration

Dehradun Municipal Corporation is locally known as Nagar Nigam Dehradun. Other urban entities involved in civic services and city governance and management include Mussoorie Dehradun Development Authority (MDDA), Special Area Development Authority (SADA), Jal Nigam and Jal Sansthan among others.

Uttarakhand Peyjal Nigam:-

The major objective behind the establishment of the Nigam was to have a responsible body for supplying water in the state of Uttarakhand. The major function or work performed by the Nigam is supplying water to the people residing in the state of Uttarakhand.

Uttarakhand Peyjal Nigam has its Headquarter at 11, Mohini Road Dehradun. The Nigam is responsible for planning, survey, design and execution of urban as well as rural water supply and sewage schemes in the state of Uttarakhand. In addition to above the Nigam has also been authorized as a construction agency.

The proposed project is for the Dehradun City (Municipal Area) covering an area of approximate 64.88 Sq. Kms. with 60 Wards and having a Population of 5.69 Lakhs (as per census 2011) with a Population Density of 1,900 /Km2. The Average Elevation of Dehradun City is 635 m above MSL. The Existing Water Supply System is approx 700 Km and 400 Km new Water Supply

Network is planned for the city. The Existing Sewerage Network is approx 400 Km and 100 Km New Sewer Network planned for the city to increase the Coverage. The details of the Existing System for Dehradun city are -

The City Details are -

Sr. No.	Description	Quantity
1	Area of Dehradun City (Municipal Area)	64.88 Sq. Km.
2	Population of City (Census 2011)	5.69 Lakhs
3	Number of Wards	60 Ward
4	Length of Road network in the city	700 Km (Approx)
5	Number of sources of water	150 TW & 5 Surface Water Sources
6	Number of Water treatment plants	3 Nos.
7	Length of existing pipe line network – Raw Water	700 Kms.
8	Length of existing pipe line network — Pure Water transmission line.	41.25 Kms.
9	Number of ESR/GSR	71/14
10	Number of Water Supply Zones	46 Zones & 5 Sub Zones
11	Number of properties	1.5 Lakhs (Approx)
12	Number of Water connections	1.0 Lakhs (Approx)
13	Length of existing Sewer network	403.15 Kms.
14	Number of sewerage treatment plants	7 Nos. & capacity 115.15 MLD
15	Number of Sewerage pumping stations	3 Nos.
16	Number of sewer zones	13 Nos.
17	Number of Manholes	13,433 Nos.
18	Average Elevation above MSL	635 m

Objectives and Scope of Services

The broad objective of the consulting service is to carry out survey and do GIS mapping And geo tagging of all the assets of the existing water supply system and sewerage system of Dehradun city (More than 1145.00 Kms. network), Verification of network and collection of all the necessary information as required for building a GIS based hydraulic model and GIS based sewerage model Then, carrying out simulation of the same for identifying the problems with existing water supply system and sewerage system. To carrying out planning for new network for both water supply and sewerage, re designing and suggesting remedial measures for the improvisation and revamping of the existing system. GIS mapping of all the existing Tube wells (More than 150) in Dehradun city and developing a plan for converting existing intermittent water supply to continuous 24X7 water supply system along with a plan for water crisis management of Dehradun city with GIS technology. Survey, identification of leakages as on major lines and assisting in developing a strategy for NRW reduction. All the work for GIS based survey, water supply system and sewerage system needs to be carried out in an integrated manner.

The objective of this work is to prepare a detailed working plan in the form of detailed project report (DPR) for –

- 1. Water Supply Projects:- Improvisation and revamping of the existing water supply system of Dehradun city and converting it to 24X7 continuous water supply system using advance technologies of GIS and hydraulic modeling, also planning & designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal. and
- 2. Sewerage Projects:- Planning of new sewerage system in an integrated manner with existing sewerage system for Dehradun city using GIS based sewerage modeling

For the same, the scope of work can be broadly classified into following 3 parts / activities-

- A. GIS based survey for generation of baseline data
- B. GIS based hydraulic modeling and DPR for water supply projects
- C. GIS based sewerage modeling and DPR for sewerage projects

		A. GIS based survey for Dehradun city	
Sr. No	Activity	Sub Activity	Output Expected
1	Drone survey	 Carrying out Drone missions at appropriate altitudes with ultra high definition camera for capturing very high-resolution images Processing the data with international standard softwares with GIS compatibility and generating very high resolution seamless georeferenced ortho image for the defined area Preparation of 3D models digital surface model, digital elevation model, digital terrain model and extraction of contours with 1m and 3m intervals 	 High resolution ortho image 1m contours and 3m contours Digital elevation model Slope and aspect maps 3D model
2	GIS basemap	Digitization on high resolution rrtho image and extraction of features like – Building footprints, road centreline, road edges, railway lines, rivers, water bodies, parking places, open plots, playgrounds, slum areas etc.	 Digital GIS map for planning of water supply and sewer lines Number of properties Road length etc
3	Scanning and georeferencing of existing maps for water supply and sewerage system	 Data collection from department, scanning existing water supply maps, georeferencing, digitization of existing drawings, maps etc Data collection from department, scanning existing sewerage system maps, georeferencing, digitization of existing drawings, maps etc City development plan (DP map), ward boundaries etc 	and ward boundaries
4	DGPS-RTK survey for the existing water supply system	Detailed DGPS – RTK survey for capturing all the details of the existing water supply system with the help of field persons (Technicians, valve man, plumber etc) along with verification of existing drawings. All the details related to sources, WTP, ESR/GSR, raw water and pure water transmission lines and distribution lines, valves, pumps etc. needs to be surveyed	 Verified and updated GIS maps for existing water supply system GIS data as required for hydraulic modeling and analysis

		and mapped on GIS system with attributes	
5	DGPS-RTK survey for the existing sewerage system of Dehradun city	Detailed DGPS – RTK survey for capturing all the details of the existing sewerage system with the help of field persons, Technicians along with verification of existing drawings. All the details related to manholes, STP, conduits, wet wells, pumping stations etc. needs to be surveyed and mapped on GIS system with attributes	 Verified and updated GIS maps for existing sewerage system GIS Data as required for sewerage modeling and analysis
6	Consumer Survey	 Grid formation for Dehradun city Unique GIS ID generation for each of the property on GIS system Detailed GIS based door to door household survey for collecting the information as required by Dept. Data entry of the surveyed data into Excel File / mdb file GIS Map updation after consumer survey Linking of consumer survey data with GIS maps Classification and identification of residential and non residential demand Analysis and report as required by the Dept. 	 Consumer survey data linked with GIS maps Consumer mapping and indexing Identification of water used by different beneficiaries Identification of population and point demand as required for hydraulic modeling and sewerage modeling
7	Conditional assessment of the existing water supply network system	 Taking trial pits of various sizes 1mX1mX2m in depth to 4mX1mX2m in depth at a distance of 500m for existing 800 kms of water supply network Capturing the details of the pipeline network GPS location with photograph Map updation 	Updated GIS maps with trial pits results & identification of the condition of the pipeline as good, ok or bad (needs replacement). Capturing details as required for hydraulic modeling
8	Conditional assessment of the existing sewer network system	 Identification of location of each manhole Capturing the details of the conduits & invert level at each manhole GPS location with photograph Map updation with conduit & manhole details 	Updated GIS maps with manholes & conduit details as required for sewer modeling

	B. GIS based Hydraulic Modeling and DPR for Water Supply Projects		
Sr.	Activity	Sub Activity	Output Expected
No	-	-	_
	GIS based hydraulic modeling for the existing and new water supply system	 Creation of GIS based hydraulic model Demand forecasting and assigning demand to the model based on GIS based consumer survey/ Land use Assigning levels to various nodes using GIS based digital elevation model (DEM) Simulation and analysis of the various elements of the existing water supply system (Source, WTP, ESR/GSR, Pumps, Pipelines, etc.) Steady state and extended period simulation over 24 hours to study the behavior of the existing system Identification of problems in the existing system (low pressure areas etc) Remedial measures to overcome the problems in the system Design of optimum operational zones so that tanks shall not remain empty or overflowing 	GIS based hydraulic model as required for planning, designing, operation and maintenance, including the scenarios for remedial measures for improvisation of water supply system Design report with drawings and maps
3	Preparation of	 Formation of DMAs / Redesigning of zones / DMAs Location and sizing of isolation valves Pressure management that leads to equitable distribution of flow and pressure Refurbishment of pipelines Analysis and report Detailed Project Report (DPR) 	Detailed Project Report
3	detailed project report (DPR) for water supply project	 Design along with results for pipe and Junctions, ESR, Pumps etc Working drawings and GIS maps Financial estimate 	(DPR) as required for submission to State Govt / Central Govt

	C. GIS	based Sewerage Modeling and DPR for Sewe	erage Projects
Sr. No	Activity	Sub Activity	Output Expected
1	modeling of the sewerage system for the existing and new System and planning in an integrated manner	 Creation of GIS based sewerage model for usable existing network and planning / designing of new network Demand forecasting and assigning demand to the model based on GIS based consumer survey/ Land use Assigning levels to various manholes 	 GIS based sewerage model as required for planning, designing, operation and maintenance etc Remedial measures
		 Assigning levels to various mannotes using GIS based digital elevation model (DEM) Simulation and analysis of the various elements of the existing sewerage system (Conduits, Manholes, STP, Pumping Stations, Wet Wells etc.) 	for improvisation of existing Sewer system in accordance with panning for new sewer system
		 Formation of sewer zones/ sewer districts Identification of problems in the existing system Remedial measures to overcome the problems in the system Analysis and report 	Analysis and report with working drawings and maps
2	Preparation of detailed project report (DPR) for sewerage project	 Detailed Project Report (DPR) Design along with results for Conduits and Manholes, Pumping Station, Wet wells etc Working drawings and GIS maps Financial estimate 	Detailed Project Report (DPR) as required for submission to State Govt / Central Govt

In general, the scope of the services to be undertaken shall cover, but not be limited to, the activities mentioned above. The scope of work and priorities may change as per the site conditions and as per the Directions of Engineer in Charge.

The study should identify shortfalls in the system; suggest suitable measures/works to be undertaken; finalize priority of improvement/ augmentation work to be under taken along with an implementation plan to achieve the desired target, in a phased manner and as per the Directions of the Engineer in Charge.

Form of Contract

उत्तरांचल पेय जल

CONTRACT FOR BIDDER'S SERVICES

Project Name :Proposal for Improvement and Revamping of the Existing Water Supply System for 24x7 System and Underground
Sewerage System of Dehradun City
Sewerage System of Demaddin City
Contract No. :
Between
Superintending Engineer, Construction Circle, Uttarakhand Peyja Sansadhan Vikas Evam Nirman Nigam, Street No11 Rajendra
Nagar,Dehradun–248001 (Uttarakhand)
And
उत्तरांचल पेय जल विगिष्ठ
[Name of the Bidder]

I. Form of Contract

NA



II. General Conditions of Contract

A. GENERAL PROVISIONS

1. Definitions

- 1.1. Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:
- (a) "Applicable Guidelines" means Guidelines for Selection and Employment of Bidder under IBRD Loans and IDA Credits & Grants by World Department Borrowers, dated January 2011.
- (b) "Applicable Law" means the laws and any other instruments having the force of law in the Department's country, or in such other country as may be specified in the **Special Conditions of Contract (SCC)**, as they may be issued and in force from time to time.
- (c) "Department" means the implementing agency that signs the Contract for the Services with the Selected Bidder.
- (d) "Bidder" means a legally-established professional consulting firm or entity selected by the Department to provide the Services under the signed Contract.
- (e) "Contract" means the legally binding written agreement signed between the Department and the Bidder and which includes all the attached documents listed in its paragraph 1 of the Form of Contract (the General Conditions (GCC), the Special Conditions (SCC), and the Appendices).
- (f) "Day" means a working day unless indicated otherwise.
- (g) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GCC 11.
- (h) "Experts" means, collectively, Key Experts, Non-Key Experts, or any other personnel of the Bidder, Sub-Bidder or JV member(s) assigned by the Bidder to perform the Services or any part thereof under the Contract.
- (i) "Foreign Currency" means any currency other than the currency of the Department's country.
- (j) "GCC" means these General Conditions of Contract.
- (k) "Government" means the government of the Department's country.
- (1) "Joint Venture (JV)" means an association with or without a legal personality distinct from that of its members, of more than one entity where one member has the authority to conduct all businesses for and on behalf of any and all the members of the JV, and where the members of the JV are jointly and severally liable to the

Department for the performance of the Contract.

- (m) "Key Expert(s)" means an individual professional whose skills, qualifications, knowledge and experience are critical to the performance of the Services under the Contract and whose Curricula Vitae (CV) was taken into account in the technical evaluation of the Bidder's proposal.
- (n) "Local Currency" means the currency of the Department's country.
- (o) "Non-Key Expert(s)" means an individual professional provided by the Bidder or its Sub-Bidder to perform the Services or any part thereof under the Contract.
- (p) "Party" means the Department or the Bidder, as the case may be, and "Parties" means both of them.
- (q) "SCC" means the Special Conditions of Contract by which the GCC may be amended or supplemented but not over-written.
- (r) "Services" means the work to be performed by the Bidder pursuant to this Contract, as described in Appendix A hereto.
- (s) "Sub-Bidder" means an entity to whom/which the Bidder subcontracts any part of the Services while remaining solely liable for the execution of the Contract.
- (t) "Third Party" means any person or entity other than the Government, the Department, the Bidder or a Sub-Bidder.
- 2. Relationship between the Parties
- 2.1. Nothing contained herein shall be construed as establishing a relationship of master and servant or of principal and agent as between the Department and the Bidder. The Bidder, subject to this Contract, has complete charge of the Experts and Sub-Bidder, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.
- 3. Law Governing Contract
- 3.1. This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.
- 4. Language
- 4.1. This Contract has been executed in the language specified in the **SCC**, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.
- 5. Headings
- 5.1. The headings shall not limit, alter or affect the meaning of this Contract.
- 6. Communications
- 6.1. Any communication required or permitted to be given or made pursuant to this Contract shall be in writing in the language specified in Clause GCC 4. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in the SCC.

- 6.2. A Party may change its address for notice hereunder by giving the other Party any communication of such change to the address specified in the **SCC**.
- 7. Location
- 7.1. The Services shall be performed at such locations as are specified in **Appendix A** hereto and, where the location of a particular task is not so specified, at such locations, whether in the Government's country or elsewhere, as the Department may approve.
- 8. Authority of Member in Charge
- 8.1. In case the Bidder is a Joint Venture, the members hereby authorize the member specified in the **SCC** to act on their behalf in exercising all the Bidder's rights and obligations towards the Department under this Contract, including without limitation the receiving of instructions and payments from the Department.
- 9. Authorized Representatives
- 9.1. Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the Department or the Bidder may be taken or executed by the officials specified in the **SCC.**
- 10. Corrupt and Fraudulent Practices
- 10.1. The Department requires compliance with its policy in regard to corrupt and fraudulentpractices as set forth in **Attachment 1** to the GCC.
- a. Commissions and Fees
- 10.2. The Departmentrequires the Bidder to disclose any commissions, gratuities or fees that may have been paid or are to be paid to agents or any other party with respect to the selection process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee. Failure to disclose such commissions, gratuities or fees may result in termination of the Contract and/or sanctions by the Department.

B. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

- 11. Effectiveness of Contract
- 11.1. This Contract shall come into force and effect on the date (the "Effective Date") of the Department's notice to the Bidder instructing the Bidder to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the **SCC** have been met.
- 12. Termination of Contract for Failure to Become Effective
- 12.1. If this Contract has not become effective within such time period after the date of Contract signature as specified in the SCC, either Party may, by not less than twenty two (22) days written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party with respect hereto.
- 13. Commencement of
- 13.1. The Bidder shall confirm availability of Key Experts and begin

Services

carrying out the Services not later than the number of days after the Effective Date specified in the SCC.

14. Expiration of Contract

14.1. Unless terminated earlier pursuant to Clause GCC 19 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SCC.

15. Entire Agreement

15.1. This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

16. Modifications or Variations

16.1. Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification or variation made by the other Party.

16.2. In cases of substantial modifications or variations, the prior written consent of the Department is required.

17. Force Majeure

a. Définition

17.1. For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible under the circumstances, and subject to those requirements, includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action confiscation or any other action by Government agencies.

17.2. Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Experts, Sub-Bidder or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected to both take into account at the time of the conclusion of this Contract, and avoid or overcome in the carrying out of its obligations hereunder.

17.3. Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

b. No Breach of Contract

17.4. The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

c. Measures to be Taken

17.5. A Party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of

any event of Force Majeure.

17.6. A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any case not later than fourteen (14) calendar days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible.

17.7. Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

17.8. During the period of their inability to perform the Services as a result of an event of Force Majeure, the Bidder, upon instructions by the Department, shall either:

- (a) demobilize, in which case the Bidder shall be reimbursed for additional costs they reasonably and necessarily incurred, and, if required by the Department, in reactivating the Services; or
- (b) continue with the Services to the extent reasonably possible, in which case the Bidder shall continue to be paid under the terms of this Contract and be reimbursed for additional costs reasonably and necessarily incurred.

17.9. In the case of disagreement between the Parties as to the existence or extent of Force Majeure, the matter shall be settled according to Clauses GCC 44 & 45.

18. Suspension

18.1. The Department may, by written notice of suspension to the Bidder, suspend all payments to the Bidder hereunder if the Bidder fails to perform any of its obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Bidder to remedy such failure within a period not exceeding thirty (30) calendar days after receipt by the Bidder of such notice of suspension.

19. Termination

19.1. This Contract may be terminated by either Party as per provisions set up below:

a. By the Department

19.1.1. The Department may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (f) of this Clause. In such an occurrence the Department shall give at least thirty (30) calendar days' written notice of termination to the Bidder in case of the events referred to in (a) through (d); at least sixty (60) calendar days' written notice in case of the event referred to in (e); and at least five (5) calendar days' written notice in case of the event referred to in (f):

- (a) If the Bidder fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension pursuant to Clause GCC 18;
- (b) If the Bidder becomes (or, if the Bidder consists of more than one entity, if any of its members becomes) insolvent or Departmentrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
- If the Bidder fails to comply with any final decision reached as (c) a result of arbitration proceedings pursuant to Clause GCC 45.1:
- If, as the result of Force Majeure, the Bidder is unable to (d) perform a material portion of the Services for a period of not less than sixty (60) calendar days;
- If the Department, in its sole discretion and for any reason (e) whatsoever, decides to terminate this Contract;
- If the Bidder fails to confirm availability of Key Experts as (f) required in Clause GCC 13.
- 19.1.2. Furthermore, if the Department determines that the Bidder has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Department may, after giving fourteen (14) calendar days written notice to the Bidder, terminate the Bidder's employment under the Contract.
- The Bidder may terminate this Contract, by not less than thirty (30) calendar days' written notice to the Department, in case of Bidder the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause.
 - If the Department fails to pay any money due to the Bidder pursuant to this Contract and not subject to dispute pursuant to Clause GCC 45.1 within forty-five (45) calendar days after receiving written notice from the Bidder that such payment is overdue.
 - (b) If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days.
 - If the Department fails to comply with any final decision reached as a result of arbitration pursuant to Clause GCC 45.1.
 - If the Department is in material breach of its obligations (d) pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Bidder may

By the b.

have subsequently approved in writing) following the receipt by the Department of the Bidder's notice specifying such breach.

c. Cessation of Rights and Obligations

19.1.4. Upon termination of this Contract pursuant to Clauses GCC 12 or GCC 19 hereof, or upon expiration of this Contract pursuant to Clause GCC 14, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth in Clause GCC 22, (iii) the Bidder's obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause GCC 25, and (iv) any right which a Party may have under the Applicable Law.

d. Cessation of Services

19.1.5. Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GCC 19a or GCC 19b, the Bidder shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Bidder and equipment and materials furnished by the Department, the Bidder shall proceed as provided, respectively, by Clauses GCC 27 or GCC 28.

e. Payment upon Termination

19.1.6. Upon termination of this Contract, the Department shall make the following payments to the Bidder:

- (a) payment for Services satisfactorily performed prior to the effective date of termination; and
- (b) in the case of termination pursuant to paragraphs (d) and (e) of Clause GCC 19.1.1, reimbursement of any reasonable cost incidental to the prompt and orderly termination of this Contract, including the cost of the return travel of the Experts.

C. OBLIGATIONS OF THE BIDDER

20. General

a. Standard of Performance

20.1 The Bidder shall perform the Services and carry out the Services with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Bidder shall always act, in respect of any matter relating to this Contract or to the Services, as a faithful adviser to the Department, and shall at all times support and safeguard the Department's legitimate interests in any dealings with the third parties.

20.2. The Bidder shall employ and provide such qualified and experienced Experts and Sub-Bidder as are required to carry out the Services.

20.3. The Bidder may subcontract part of the Services to an extent and

with such Key Experts and Sub-Bidder as may be approved in advance by the Department. Notwithstanding such approval, the Bidder shall retain full responsibility for the Services.

b. Law Applicable to Services

- 20.4. The Bidder shall perform the Services in accordance with the Contract and the Applicable Law and shall take all practicable steps to ensure that any of its Experts and Sub-Bidder, comply with the Applicable Law.
- 20.5. Throughout the execution of the Contract, the Bidder shall comply with the import of goods and services prohibitions in the Department's country when
 - (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country; or
 - (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country.
- 20.6. The Department shall notify the Bidder in writing of relevant local customs, and the Bidder shall, after such notification, respect such customs.

21. Conflict of Interests

- 21.1. The Bidder shall hold the Department's interests paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.
- a. Bidder Not to Benefit from Commissions, Discounts, etc.
- 21.1.1 The payment of the Bidder pursuant to GCC F (Clauses GCC 38 through 42) shall constitute the Bidder's only payment in connection with this Contract and, subject to Clause GCC 21.1.3, the Bidder shall not accept for its own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or in the discharge of its obligations hereunder, and the Bidder shall use its best efforts to ensure that any Sub-Bidder, as well as the Experts and agents of either of them, similarly shall not receive any such additional payment.
- 21.1.2 Furthermore, if the Bidder, as part of the Services, has the responsibility of advising the Department on the procurement of goods, works or services, the Bidder shall comply with the Department's Applicable Guidelines, and shall at all times exercise such responsibility in the best interest of the Department. Any discounts or commissions obtained by the Bidder in the exercise of such procurement responsibility shall be for the account of the Department.
- b. Bidder and Affiliates Not to Engage in Certain
- 21.1.3 The Bidder agrees that, during the term of this Contract and after its termination, the Bidder and any entity affiliated with the Bidder, as well as any Sub-Bidder and any entity affiliated with such Sub-Bidder , shall be disqualified from providing goods, works or non-consulting services resulting from or directly related to the

Activities

- Bidder's Services for the preparation or implementation of the project, unless otherwise indicated in the SCC.
- c. Prohibition of Conflicting Activities
- 21.1.4 The Bidder shall not engage, and shall cause its Experts as well as its Sub-Bidder not to engage, either directly or indirectly, in any business or professional activities that would conflict with the activities assigned to them under this Contract.
- d. Strict Duty to Disclose Conflicting Activities
- 21.1.5 The Bidder has an obligation and shall ensure that its Experts and Sub-Bidder shall have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Department, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Bidder or the termination of its Contract.

22. Confidentiality

- 22.1 Except with the prior written consent of the Department, the Bidder and the Experts shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Bidder and the Experts make public the recommendations formulated in the course of, or as a result of, the Services.
- 23. Liability of the Bidder
- 23.1 Subject to additional provisions, if any, set forth in the SCC, the Bidder's liability under this Contract shall be provided by the Applicable Law.
- 24. Insurance to be Taken out by the Bidder
- 24.1 The Bidder (i) shall take out and maintain, and shall cause any Sub-Bidder to take out and maintain, at its (or the Sub-Bidder', as the case may be) own cost but on terms and conditions approved by the Department, insurance against the risks, and for the coverage specified in the SCC, and (ii) at the Department's request, shall provide evidence to the Department showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid. The Bidder shall ensure that such insurance is in place prior to commencing the Services as stated in Clause GCC 13.

25. Accounting, Inspection and Auditing

- 25.1 The Bidder shall keep, and shall make all reasonable efforts to cause its Sub-Bidder to keep, accurate and systematic accounts and records in respect of the Services and in such form and detail as will clearly identify relevant time changes and costs.
- 25.2 The Bidder shall permit and shall cause its Sub-Bidder to permit, the Department and/or persons appointed by the Department to inspect the Site and/or all accounts and records relating to the performance of the Contract and the submission of the Proposal to provide the Services, and to have such accounts and records audited by auditors appointed by the Department if requested by the Department. The Bidder's attention is drawn to Clause GCC 10 which provides, inter alia, that acts intended to materially impede the exercise of the Department's inspection and audit rights provided for under this Clause GCC25.2 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under the Department's prevailing sanctions procedures.)

26. Reporting

26.1 The Bidder shall submit to the Department the reports and

Obligations

documents specified in **Appendix A**, in the form, in the numbers and within the time periods set forth in the said Appendix.

27. Proprietary Rights of the Department in Reports and Records

- 27.1 Unless otherwise indicated in the SCC, all reports and relevant data and information such as maps, diagrams, plans, databases, other documents and software, supporting records or material compiled or prepared by the Bidder for the Department in the course of the Services shall be confidential and become and remain the absolute property of the Department. The Bidder shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Department, together with a detailed inventory thereof. The Bidder may retain a copy of such documents, data and/or software but shall not use the same for purposes unrelated to this Contract without prior written approval of the Department.
- 27.2 If license agreements are necessary or appropriate between the Bidderand third parties for purposes of development of the plans, drawings, specifications, designs, databases, other documents and software, the Biddershall obtain the Department's prior written approval to such agreements, and the Department shall be entitled at its discretion to require recovering the expenses related to the development of the program(s) concerned. Other restrictions about the future use of these documents and software, if any, shall be specified in the **SCC**.

28. Equipment, Vehicles and Materials

- 28.1 Equipment, vehicles and materials made available to the Bidder by the Department, or purchased by the Bidder wholly or partly with funds provided by the Department, shall be the property of the Department and shall be marked accordingly. Upon termination or expiration of this Contract, the Bidder shall make available to the Department an inventory of such equipment, vehicles and materials and shall dispose of such equipment, vehicles and materials in accordance with the Department's instructions. While in possession of such equipment, vehicles and materials, the Bidder, unless otherwise instructed by the Department in writing, shall insure them at the expense of the Department in an amount equal to their full replacement value.
- 28.2 Any equipment or materials brought by the Bidder or its Experts into the Department's country for the use either for the project or personal use shall remain the property of the Bidder or the Experts concerned, as applicable.

D. BIDDER'S EXPERTS AND SUB-BIDDER

- 29. Description of Key Experts
- 29.1 The title, agreed job description, minimum qualification and estimated period of engagement to carry out the Services of each of the Bidder's Key Experts are described in **Appendix B.**
- 30. Replacement of Key Experts
- 30.1 Except as the Department may otherwise agree in writing, no changes shall be made in the Key Experts.
- 30.2 Notwithstanding the above, the substitution of Key Experts during

Contract execution may be considered only based on the Bidder's written request and due to circumstances outside the reasonable control of the Bidder, including but not limited to death or medical incapacity. In such case, the Bidder shall forthwith provide as a replacement, a person of equivalent or better qualifications and experience, and at the same rate of remuneration.

31. Removal of Experts or Sub-Bidder

- 31.1 If the Department finds that any of the Experts or Sub-Bidder has committed serious misconduct or has been charged with having committed a criminal action, or shall the Department determine that Bidder's Expert of Sub-Bidder have engaged in corrupt, fraudulent, collusive, coercive or obstructive practice while performing the Services, the Bidder shall, at the Department's written request, provide a replacement.
- 31.2 In the event that any of Key Experts, Non-Key Experts or Sub-Bidder is found by the Department to be incompetent or incapable in discharging assigned duties, the Department, specifying the grounds therefore, may request the Bidderto provide a replacement.
- 31.3 Any replacement of the removed Experts or Sub-Bidder shall possess better qualifications and experience and shall be acceptable to the Department.
- 31.4 The Bidder shall bear all costs arising out of or incidental to any removal and/or replacement of such Experts.

E. OBLIGATIONS OF THE DEPARTMENT

32. Assistance and Exemptions

- 32.1 Unless otherwise specified in the **SCC**, the Department shall use its best efforts to:
- (a) Assist the Bidder with obtaining work permits and such other documents as shall be necessary to enable the Bidder to perform the Services.
- (b) Assist the Bidder with promptly obtaining, for the Experts and, if appropriate, their eligible dependents, all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in the Department's country while carrying out the Services under the Contract.
- (c) Facilitate prompt clearance through customs of any property required for the Services and of the personal effects of the Experts and their eligible dependents.
- (c) Issue to officials, agents and representatives of the Government all such instructions and information as may be necessary or appropriate for the prompt and effective implementation of the Services.
- (d) Assist the Bidder and the Experts and any Sub-Bidder employed by the Bidder for the Services with obtaining exemption from any requirement to register or obtain any permit to practice their

- profession or to establish themselves either individually or as a corporate entity in the Department's country according to the applicable law in the Department's country.
- (e) Assist the Bidder, any Sub-Bidder and the Experts of either of them with obtaining the privilege, pursuant to the applicable law in the Department's country, of bringing into the Department's country reasonable amounts of foreign currency for the purposes of the Services or for the personal use of the Experts and of withdrawing any such amounts as may be earned therein by the Experts in the execution of the Services.
- (f) Provide to the Bidder any such other assistance as may be specified in the SCC.

33. Access to Project Site

- 33.1 The Department warrants that the Bidder shall have, free of charge, unimpeded access to the project site in respect of which access is required for the performance of the Services. The Department will be responsible for any damage to the project site or any property thereon resulting from such access and will indemnify the Bidder and each of the experts in respect of liability for any such damage, unless such damage is caused by the willful default or negligence of the Bidder or any Sub-Bidder or the Experts of either of them.
- 34. Change in the Applicable Law Related to Taxes and Duties
- 34.1 If, after the date of this Contract, there is any change in the applicable law in the Department's country with respect to taxes and duties which increases or decreases the cost incurred by the Bidder in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Bidder under this Contract shall be increased or decreased accordingly by agreement between the Parties hereto, and corresponding adjustments shall be made to the Contract price amount specified in Clause GCC 38.1
- 35. Services, Facilities and Property of the Department
- 35.1 The Department shall make available to the Bidder and the Experts, for the purposes of the Services and free of any charge, the services, facilities and property described in the Terms of Reference (**Appendix A**) at the times and in the manner specified in said **Appendix A**.
- **36.** Counterpart Personnel
- 36.1 The Department shall make available to the Bidder free of charge such professional and support counterpart personnel, to be nominated by the Department with the Bidder's advice, if specified in **Appendix A**.
- 36.2 Professional and support counterpart personnel, excluding Department's liaison personnel, shall work under the exclusive direction of the Bidder. If any member of the counterpart personnel fails to perform adequately any work assigned to such member by the Bidder that is consistent with the position occupied by such member, the Bidder may request the replacement of such member, and the Department shall not unreasonably refuse to act upon such request.

37. Payment Obligation

37.1 In consideration of the Services performed by the Bidder under this Contract, the Department shall make such payments to the Bidder for the

deliverables specified in **Appendix A** and in such manner as is provided by GCC F below.

F. PAYMENTS TO THE BIDDER

38. Contract Price

- 38.1 The Contract price is fixed and is set forth in the **SCC**. The Contract price breakdown is provided in **Appendix C**.
- 38.2 Any change to the Contract price specified in Clause 38.1 can be made only if the Parties have agreed to the revised scope of Services pursuant to Clause GCC 16 and have amended in writing the Terms of Reference in **Appendix A**.

39. Taxes and Duties

- 39.1 The Bidder, Sub-Bidder and Experts are responsible for meeting any and all tax liabilities arising out of the Contract unless it is stated otherwise in the SCC.
- 39.2 As an exception to the above and as stated in the SCC, all local identifiable indirect taxes (itemized and finalized at Contract negotiations) are reimbursed to the Bidder or are paid by the Department on behalf of the Bidder.

40. Currency of Payment

40.1 Any payment under this Contract shall be made in the currency(ies) of the Contract.

41. Mode of Billing and Payment

- 41.1 The total payments under this Contract shall not exceed the Contract price set forth in Clause GCC 38.1.
- 41.2 The payments under this Contract shall be made in lump-sum installments against deliverables specified in **Appendix A**. The payments will be made according to the payment schedule stated in the **SCC**.
 - 41.2.1 <u>Advance payment:</u> Unless otherwise indicated in the SCC, an advance payment shall be made against an advance payment Department guarantee acceptable to the Department in an amount (or amounts) and in a currency (or currencies) specified in the SCC. Such guarantee (i) is to remain effective until the advance payment has been fully set off, and (ii) is to be in the form set forth in **Appendix D**, or in such other form as the Department shall have approved in writing. The advance payments will be set off by the Department in equal portions against the lump-sum installments specified in the SCC until said advance payments have been fully set off.
 - 41.2.2 <u>The Lump-Sum Installment Payments.</u> The Department shall pay the Bidder within sixty (60) days after the receipt by the Department of the deliverable(s) and the cover invoice for the related lump-sum installment payment. The payment can be withheld if the Department does not approve the submitted deliverable(s) as satisfactory in which case the Department shall provide comments to the Bidder within the 30 days period. The Bidder shall thereupon

promptly make any necessary corrections, and thereafter the foregoing process shall be repeated.

- 41.2.3 <u>The Final Payment</u>. The final payment under this Clause shall be made only after the final report 1 have been submitted by the Bidder and approved as satisfactory by the Department. The Services shall then be deemed completed and finally accepted by the Department. The last lump-sum installment shall be deemed approved for payment by the Department within ninety (90)calendar days after receipt of the final report by the Department unless the Department, within such forty five (45) calendar day period, gives written notice to the Bidder specifying in detail deficiencies in the Services, the final report. The Bidder shall thereupon promptly make any necessary corrections, and thereafter the foregoing process shall be repeated. 41.2.4 All payments under this Contract shall be made to the accounts of the Bidder specified in the SCC.
- 41.2.4 With the exception of the final payment under 41.2.3 above, payments do not constitute acceptance of the whole Services nor relieve the Bidder of any obligations hereunder.
- **42. Interest on Delayed Payments**
- 42.1 If the Department had delayed payments beyond fifteen (15) days after the due date stated in Clause GCC 41.2.2, interest shall be paid to the Bidder on any amount due by, not paid on, such due date for each day of delay at the annual rate stated in the **SCC**.

G. FAIRNESS AND GOOD FAITH

43. Good Faith

43.1 The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

H. SETTLEMENT OF DISPUTES

44. Amicable Settlement

- 44.1 The Parties shall seek to resolve any dispute amicably by mutual consultation.
- 44.2 If either Party objects to any action or inaction of the other Party, the objecting Party may file a written Notice of Dispute to the other Party providing in detail the basis of the dispute. The Party receiving the Notice of Dispute will consider it and respond in writing within fourteen (14) days after receipt. If that Party fails to respond within fourteen (14) days, or the dispute cannot be amicably settled within fourteen (14) days following the response of that Party, Clause GCC 49.1 shall apply.

45. Dispute Resolution

45.1 Any dispute between the Parties arising under or related to this Contract that cannot be settled amicably may be referred to by either Party to the adjudication/arbitration in accordance with the provisions specified in the **SCC**.

II. General Conditions

Attachment 1: Department's Policy – Corrupt and Fraudulent Practices

(The text in this Attachment 1 shall not be modified)

Guidelines for Selection and Employment of Bidder under IBRD Loans and IDA Credits & Grants by World Department Borrowers, dated January 2011:

"Fraud and Corruption

1.23 It is the Department's policy to require that Borrowers (including beneficiaries of Department loans), Bidder, and their agents (whether declared or not), sub-contractors, sub-Bidder, service providers, or suppliers, and any personnel thereof, observe the highest standard of ethics during the selection and execution of Department-financed contracts [footnote: In this context, any action taken by a Bidder or any of its personnel, or its agents, or its sub-Bidder, sub-contractors, services providers, suppliers, and/or their employees, to influence the selection process or contract execution for undue advantage is improper.]. In pursuance of this policy, the Department:

- (a) Defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party⁷;
 - (ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation⁸;
 - (iii) "collusive practices" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party⁹;

⁷ For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the selection process or contract execution. In this context "public official" includes World Department staff and employees of other organizations taking or reviewing selection decisions.

⁸ For the purpose of this sub-paragraph, "party" refers to a public official; the terms "benefit" and "obligation" relate to the selection process or contract execution; and the "act or omission" is intended to influence the selection process or contract execution.

⁹ For the purpose of this sub-paragraph, "parties" refers to participants in the procurement or selection process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish prices at artificial, non-competitive levels, or are privy to each other's bid prices or other conditions.

- (iv) "coercive practices" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party¹⁰;
- (v) "obstructive practice" is
 - (a) Deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Department investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (b) Acts intended to materially impede the exercise of the Department's inspection and audit rights;
- (b) will reject a proposal for award if it determines that the Bidder recommended for award or any of its personnel, or its agents, or its sub-Bidder, sub-contractors, services providers, suppliers, and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- (c) will declare misprocurement and cancel the portion of the Loan allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the Loan were engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the selection process or the implementation of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Department to address such practices when they occur, including by failing to inform the Department in a timely manner they knew of the practices;
- (d) will sanction a firm or an individual at any time, in accordance with prevailing Department's sanctions procedures¹¹, including by publicly declaring such firm or an ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Department-financed contract, and (ii) to be a nominated¹² sub-Bidder, supplier, or service provider of an otherwise eligible firm being awarded a Department-financed contract.

For the purpose of this sub-paragraph, "party" refers to a participant in the selection process or contract execution.

¹¹ A firm or an individual may be declared ineligible to be awarded a Department-financed contract upon (i) completion of the Department's sanctions proceedings as per its sanctions procedures, including inter alia: cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Departments, and through the application of the World Department Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceedings. See footnote 12 and paragraph 8 of Appendix 1 of these Guidelines.

¹² A nominated sub-consultant, supplier, or service provider is one which has been either (i) included by the consultant in its proposal because it brings specific and critical experience and know-how that are accounted for in the technical evaluation of the consultant's proposal for the particular services; or (ii) appointed by the Borrower.

III. Special Conditions of Contract

[Notes in brackets are for guidance purposes only and should be deleted in the final text of the signed contract]

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract	
1.1(b) and 3.1	The Contract shall be construed in accordance with the law of INDIA.	
4.1	The language is: English	
6.1 and 6.2	The addresses are: Department: Superintending Engineer, Construction Circle, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Street No11 Rajendra Nagar, Dehradun–248001 (Uttarakhand). Bidder: Attention: Facsimile: E-mail (where permitted):	
8.1	[If the Bidderconsists only of one entity, state "N/A";	
9.1	The Authorized Representatives are: For the Department: For the Bidder: [name, title]	
11.1	The effectiveness conditions are the following: Approval of the contract by the Department. Receipt by the Bidder of an advance payment. And by the Department of an advance payment guarantee.	
12.1	Termination of Contract for Failure to Become Effective: The time period shall be Two months	
13.1	Commencement of Services: The number of days shall be Seven Days Confirmation of Key Experts' availability to start the Assignment shall be submitted to the Department in writing as a written statement signed by each Key Expert.	

14.1	Expiration of Contract:		
	The time period shall be Ten months		
21 b.	The Department reserves the right to determine on a case-by-case basis whether the Bidder should be disqualified from providing goods, works or non-consulting services due to a conflict of a nature described in Clause GCC 21.1.3		
	Yes		
23.1	The following limitation of the Bidder's Liability towards the Department can be subject to the Contract's negotiations:		
	"Limitation of the Bidder's Liability towards the Department:		
	(a) Except in the case of gross negligence or willful misconduct on the part of the Bidder or on the part of any person or a firm acting on behalf of the Bidder in carrying out the Services, the Bidder, with respect to damage caused by the Bidder to the Department's property, shall not be liable to the Department:		
	(i) for any indirect or consequential loss or damage; and		
	(ii) for any direct loss or damage that exceeds two times the total value of the Contract;		
	(b) This limitation of liability shall not		
<	(i) affect the Bidder's liability, if any, for damage to Third Parties caused by the Bidder or any person or firm acting on behalf of the Bidder in carrying out the Services;		
	(ii) be construed as providing the Bidder with any limitation or exclusion from liability which is prohibited by the applicable law in the Department's country.		
24.1	The insurance coverage against the risks shall be as follows:		
	(a) Professional liability insurance, with a minimum coverage of twice the value of this consultancy contract.		
	(b) Third Party motor vehicle liability insurance in respect of motor vehicles operated in the Department's country by the Bidder or its Experts or Sub-Bidder, with a minimum coverage as per motor vehicle act of India.		
	 (c) Third Party liability insurance, with a minimum coverage of Rs. 20 lacs. (d) Employer's liability and workers' compensation insurance in respect of the experts and Sub-Bidder in accordance with the relevant provisions of the applicable law in the Department's country, as well as, with respect to such Experts, any such life, health, accident, travel or other insurance as may be appropriate. 		
	(e) Insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Bidder's property		

	used in the performance of the Services, and (iii) any documents prepared by the Bidder in the performance of the Services.	
27.1	N.A.	
27.2	[The Bidder shall not use the technical and topographical details and underground utilities details or any other detail for purposes unrelated to this Contract without the prior written approval of the Department.	
38.1	The Contract price is: insert amount in Rupees [indicate: inclusive of all direct and indirect taxes as applicable.But the details of contract price as well as applicable taxes for determining the total cost of project shall be given separately.	
24.1 and 39.2	The Department shall deduct from payments due to the Bidderand pay on behalf of the Bidder, all direct& indirect taxes as given by Bidderin form FIN-2 of financial proposal and as applicable under the law of the Department's country.	
	(a) Any payments whatsoever made to the Bidder in connection with the carrying out of the Services.	
41.2	Payment terms- (a)On submission of Data and DPR: 60% (b)On compliance of points on Data and DPR: 20% (c)On getting approval of DPR from competent authority: 20%	
41.2.4	The accounts are:	
42.1	For local currency: [insert account]. The interest rate is: 04% per annum	
45.1	The procedure for arbitration will be as follows: (a) In case of Dispute or difference arising between the Employer and a domestic Bidder relating to any matter arising out of or connected with this agreement, such disputes or differences shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 2 Arbitrators one each to be appointed by the Employer and the Bidder. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding Arbitrator. In case of failure of the two Arbitrators	

- appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the Arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the Indian Council of Arbitration (India).
- (b) If one of the parties fails to appoint its Arbitrator in pursuance of sub-clause (a) above within 30 days after receipt of the notice of the appointment of its Arbitrator by the other party, then the Indian Council of Arbitration (India), shall appoint the Arbitrator. A certified copy of the order of the Indian Council of Arbitration (India), making such an appointment shall be furnished to each of the parties.
- (c) Arbitration proceedings shall be held at Dehradun (India), and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.
- (d) The decision of the majority of Arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation, etc. of its proceedings as also the fees and expenses paid to the Arbitrator appointed by such party or on its behalf shall be borne by each party itself.
- (e) Where the value of the contract is Rs.50 million and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority, namely the Indian Council of Arbitration (India).
- (f) Performance under the contract shall continue during the arbitration proceedings and payments due to the Bidder by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceedings.

IV. Appendices

APPENDIX A – TERMS OF REFERENCE

[This Appendix shall include the final Terms of Reference (TORs) worked out by the Department and the Bidder during the negotiations; dates for completion of various tasks; location of performance for different tasks; detailed reporting requirements and list of deliverables against which the payments to the Bidder will be made; Department's input, including counterpart personnel assigned by the Department to work on the Bidder's team; specific tasks or actions that require prior approval by the Department.

	n 7 (Terms of Reference) of the ITC in the RFP and modified ugh TECH-5 of the Bidder's Proposal. Highlight the change
///	APPENDIX B - KEY EXPERTS
	CH-6 of the Bidder's Technical Proposal and finalized at the CVs (updated and signed by the respective Key Experts f Key Experts.]
उत्तरांह	M 922

APPENDIX C – BREAKDOWN OF CONTRACT PRICE

[Insert the table with the unit rates to arrive at the breakdown of the lump-sum price. The table shall be based on [Form FIN-3 and FIN-4] of the Bidder's Proposal and reflect any changes agreed at the Contract negotiations, if any. The footnote shall list such changes made to [Form FIN-3 and FIN-4] at the negotiations or state that none has been made.]

When the Bidder has been selected under Quality-Based Selection method, also add the following:

"The agreed remuneration rates shall be stated in the attached Model Form I. This form shall be prepared on the basis of Appendix A to Form FIN-3 of the RFP "Bidder' Representations regarding Costs and Charges" submitted by the Bidder to the Department prior to the Contract's negotiations.

Should these representations be found by the Department (either through inspections or audits pursuant to Clause GCC 25.2 or through other means) to be materially incomplete or inaccurate, the Department shall be entitled to introduce appropriate modifications in

the remuneration rates affected by such materially incomplete or inaccurate representations. Any such modification shall have retroactive effect and, in case remuneration has already been paid by the Department before any such modification, (i) the Department shall be entitled to offset any excess payment against the next monthly payment to the Bidder, or (ii) if there are no further payments to be made by the Department to the Bidder, the Bidder shall reimburse to the Department any excess payment within thirty (30) days of receipt of a written claim of the Department. Any such claim by the Department for reimbursement must be made within twelve (12) calendar months after receipt by the Department of a final report and a final statement approved by the Department in accordance with Clause GCC 45.1(d) of this Contract."



Model Form I Breakdown of Agreed Fixed Rates in Bidder's Contract

NA





Criteria	Description	Max
1	The company should have a Certificate of Registration from Government of India in case of a Partnership firm / Private Ltd firm/Joint Venture etc.	
2	The firm should be in consulting business at least for the last 5 years (either as a firm or Joint Venture)	
3	The firm shall have more than 4 years of experience in preparation of GIS Database and GIS based survey specifically for the water supply and sewerage projects for the Urban Local Bodies / Govt Departments.	10
4	The company should have experience of working on water supply / sewerage projects for at least 3 Urban Local Bodies / Govt Department and should have prepared or contributed in the work of preparation of detailed project report (DPR) using advance technologies of GIS & Hydraulic Modeling / GIS & Sewer Modeling.	10
5	The company should have prepared GIS data for the DPR of water supply scheme costing not less than INR 50 crore in a single work	5
6	The company should have experience of carrying out Drone Survey, DGPS-RTK Survey, Total Station Survey, GPS Survey, Water Network Survey, Point of Interest Survey for Residential & Non Residential Demand etc for a city with population not less than 2,00,000 and for pipeline network of not less than 150 kilometers in a single work.	10
7	The company should have worked on similar kind of assignment of not less than INR 90 lakh in a single work.	5
8	The company should have experience of working on international standard software of Arc GIS and Bentley Water Gems/Sewer Gems.	5
9	The company should have achieved a financial turnover of at least INR 75 lakh in any one of the last 3 financial years.	10
10	The company should have qualified Project Manager with minimum 30 years of experience in water supply project and sewerage projects. GIS Manager with minimum 12 years of experience in GIS field. Civil Engineers, GIS Engineers and Total Station & Consumer Surveyors withminimum 3 years of relevant experience.	30

The company should have own relevant machineries, survey instruments, softwares etc as required for GIS based survey activities.	5
Total	100

Minimum qualifying marks will be 80%.





OFFICE OF THE SUPERINTENDING ENGINEER, CONSTRUCTION CIRCLE, UTTARAKHAND PEYJAL SANSADHAN VIKAS EVAM NIRMAN NIGAM

Street No.-11 Rajendra Nagar, Dehradun-248001 (Uttarakhand).

Expression of Interest

Proposal / EOI are invited from experienced consultancy firms in water supply and sanitation sector for the improvement and revamping of the existing water supply system and underground sewerage system of Dehradun city by carrying out the following work in an integrated manner:-

- A. GIS based survey using a high-end Differential GPS (DGPS with RTK) for capturing existing water supply system and existing sewerage system, Advance Drone survey technology, GIS mapping with house to house consumer survey and topographical survey
- B. GIS based hydraulic modeling for converting existing water supply system of Dehradun city to continuous 24X7 water supply system, Planning and designing of new water supply system and also planning and designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal. Preparation of detailed project report (DPR) along with Design, technical drawings, GIS maps and financial estimates.
- C. GIS based sewerage modeling of the existing sewerage system along with planning of new sewerage system for the Dehradun city. Preparation of detailed project report (DPR) along with design, technical drawings, GIS maps and financial estimates.

Experienced consultants in water supply sector and sanitation sector shall have experience of similar nature of works of GIS mapping, carrying out point of interest survey for water supply system and sewerage system, DGPS survey with real time kinematics, Drone survey for generation of high resolution or the image and contours, GIS mapping along with house to house survey, GIS based hydraulic modeling, GIS based sewerage modeling, Design and preparation of detailed project report with GIS maps, working drawings and financial estimates etc as per the direction of Engineer in charge.

The proposed project is for the Dehradun City (Municipal Area) covering an area of approximate 64.88 Sq. Kms. with 60 ward's and a population of 5.69 Lakhs (as per census 2011) and with a Population Density of 1,900 persons /km². The average elevation of Dehradun city is 635 m above MSL. The existing water supply system is approx. 700 Km and 400 Km new water supply network is planned for the city. The existing sewerage network is approx. 403 Kms and about 200 Km new sewer network planned for the city to increase the coverage. The details of the existing system for Dehradun city are as under:

Sr. No.	Description	Quantity
1	Area of Dehradun City (Municipal Area)	64.88 Sq. Km.
2	Population of City (Census 2011)	5.69 Lakhs
3	Number of Wards	60 Ward
4	Length of Road network in the city	700 Km (Approx)
5	Number of sources of water	150 TW & 5 Surface Water
		Sources
6	Number of Water treatment plants	3 Nos.
7	Length of existing pipe line network – Raw Water	700 Kms.
8	Length of existing pipe line network - Pure Water	41.25 Kms.
	transmission line.	
9	Number of ESR/GSR	71/14
10	Number of Water Supply Zones	46 Zones &
		5 Sub Zones
11	Number of properties	1.5 Lakhs (Approx)
12	Number of Water connections	1.0 Lakhs (Approx)
13	Length of existing Sewer network	404.00 Km.
14	Number of sewerage treatment plants	7 Nos. & capacity 115.13
		MLD
15	Number of Sewerage pumping stations	4 Nos.
16	Number of sewer zones	13 Nos.
17	Number of Manholes	13,433 Nos.
18	Average Elevation above MSL	635 m

Interested consultants may download the EOI and RFP documents from website **http//peyjal.uk.gov.in** and submit EOI with relevant documents by registered A.D. Post / hand delivery / Speed Post /courier only to office of Superintending Engineer, Construction Circle, Uttarakhand Peyjal Nigam, Dehradun on / before Date 05/11/2018, up to 3.00 P.M. (IST). (Department will not be responsible for postal delay and tender will be rejected).

Signature of Applicant:

Name:

Company's seal:

Short Description of the Project

The project includes GIS based surveying and mapping of the existing water supply

and sewerage system of the Dehradun city using a high-end Differential GPS with real time

kinematics (DGPS with RTK), GIS based Drone survey for generation of high resolution or

the image and contours for Dehradun city, GIS based door to door consumer survey /

Household survey for identifying the demand for water by different beneficiaries (Residential

/ Non-Residential / Institutional etc..).

Based on the data available after carrying out above survey, the work of GIS based

hydraulic modeling for simulation and analyzing the existing system, Planning and designing

of new water supply system, also planning and designing of source augmentation from the

proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as

alternative proposal and converting the existing system to 24X7 water supply systems,

Preparation of detailed project report with working drawings and maps along with financial

estimates shall be carried out.

Based on data generated, the work also includes designing of the sewerage system in

an integrated manner with existing sewerage system for Dehradun city. It further includes

preparation of DPR for sewerage system with working drawings and financial estimates. All

the assets of the water supply system and the sewerage system need to be mapped on GIS

platform and the design needs to be carried out in an integrated manner for both the water

supply and the sewerage system. All the necessary actions like planning for new system

along with remedial measures for improvisation and revamping of the existing system needs

to be carried out from time to time as per the priorities of Dehradun city and as per the

directions of Engineer in charge.

Signature of Applicant:

Name:

Company's seal:

Date:

3

Abstract of the Proposal

Proposal is for the consultancy services having experience in water supply and sewerage sector for carrying out GIS survey work, GIS based hydraulic modeling and GIS based sewerage modeling for the improvement and revamping of the existing water supply system and sewerage system for Dehradun city. It also includes preparation of detailed project report (DPR) for water supply (including planning and designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal.) and sewerage system in an integrated manner considering current requirements and future requirements of Dehradun city.

Envelope	Serial No/ Section	Particular	
A	1	Notice for Inviting Expression of Interest (EOI)	
	2	Water supply in Dehradun City and Uttarakhand Peyjal Nigam	
	3	Objective and Scope of Service	
	4	Pre-Qualification criteria	
В	5	Financial Proposal	

Envelope –A

1 – Notice for Inviting Expression of Interest (EOI)

Subject: Proposal / EOI are invited from the experienced consultants in water supply and sanitation sector for the improvement and revamping of the existing water supply system and underground sewerage system of Dehradun city by carrying out the following work in an integrated manner:-

- A. GIS based survey using a high-end Differential GPS (DGPS with RTK) for capturing existing water supply system and existing sewerage system, Advance Drone survey technology, GIS mapping with house to house consumer survey and topographical survey.
- B. GIS based hydraulic modeling for converting the existing water supply system of Dehradun city to continuous 24X7 water supply system, Planning and designing of new water supply system and also planning and designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal. Preparation of detailed project report (DPR) along with design, technical drawings, GIS maps and financial estimates.

- C. GIS based sewerage modeling of the existing sewerage system along with planning of new sewerage system for the Dehradun city. Preparation of detailed project report (DPR) along with design, technical drawings, GIS maps and financial estimates
- 1. UTTARAKHAND PEYJAL NIGAM invites proposal for Expression of Interest (EOI) from consultants who have experience of similar nature of work for carrying out the work of GIS based survey, GIS based hydraulic modeling and GIS based sewerage modeling for existing water supply and sewerage system within the limits of Dehradun city and simultaneously planning for new systems (including planning and designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal)
- 2. Uttarakhand Peyjal Nigam intends to improve and revamp the existing water supply system and sewerage system of Dehradun city simultaneously through undertaking Necessary studies including survey, GIS mapping, GIS based hydraulic model, Identification of visible leakages and suggesting strategy to reduce NRW, and designing for up gradation of the existing system and converting it to 24X7 water supply system along with up gradation of existing sewerage system through GIS based sewerage modeling. The consultant needs to submit Detailed Project Report (DPR) for water supply and sewerage system considering current and future requirements of Dehradun city.
- 3. This Expression of Interest has been invited exclusively for the proposed work and acceptance or rejection of offer of any interested consultant or consulting firm is valid for the said project only.
- 4. Interested consulting firm shall have to attach the documents with the EOI as mentioned in the checklist of the documents to be submitted with EOI. One set of proposal for EOI documents duly completed in all respects shall be submitted, duly marked as "Original " on the envelops, as described further, so as to reach before 15.00 Hrs. on or before Dt. 31/10/2018 at the office of Superintending Engineer, Construction Circle, Uttarakhand Peyjal Nigam, Dehradun:
- 5. Interested consulting firm shall clearly state in the forwarding letter, to be enclosed with the EOI documents, the deviations, if any, from the general terms and conditions, with cross references. If, no such letter is received, it shall be presumed that the firm, submitting EOI, agrees entirely with the Terms and Conditions specified in the document.
- 6. Proposal for EOI received from the interested consultant or consulting firm, shall be opened in the presence of the representative of interested consultant or consulting firm, who choose to remain present at office of Superintending Engineer, Construction Circle, Uttarakhand Peyjal Nigam, Dehradun on date and time of opening.
- 7. EOI received without all the required documents shall be considered as non- responsive and shall be rejected outright.
- 8. Interested consulting firm's proposal shall provide accurate information on the litigation or arbitration history, resulting from contracts completed or under execution by it. This shall also include such cases, which are in process/progress. If, any case of litigation or arbitration comes to the notice of the Authority, whose information has not been provided, the Proposal shall be liable for rejection.

- 9. If interested consulting firm has any litigation history or case or has not completed any work on this account and the same is not reflected in the information submitted by it, Uttarakhand Peyjal Nigam reserves the right to disqualify the interested consulting firm without giving any reasons.
- 10. The conditional EOI shall not be accepted and shall be rejected outright, unless, the nature of condition(s) put forth by the interested consulting firm is acceptable.
- 11. Uttarakhand Peyjal Nigam reserves the right to reject all or any of the EOI, which in the judgment of Uttarakhand Peyjal Nigam, does not appear to be in its best interest for which the interested consultant or consulting firm shall have no cause of action or claim against the Uttarakhand Peyjal Nigam or its officers, employees, successors for assignees, for rejection of its EOI.
- 12. The Superintending Engineer, Construction Circle, Uttarakhand Peyjal Nigam, Dehradun does not bind himself to accept any EOI. EOI documents are not transferable.
- 13. Interested consulting firm shall carefully read the eligibility criteria, furnish the details and satisfy the same; otherwise the EOI shall be rejected without assigning any reason.
- 14. EOI should be bound properly and with page no. and references on front index for evaluation purpose and this index page shall be duly signed by interested consulting firm. Separate page without binding in EOI shall not be entertained. If the EOI document is submitted without binding properly, Uttarakhand Peyjal Nigam may out right reject the EOI at the time of opening.
- 15. Interested consulting firm may obtain further information and clarification on any matter relating to the EOI documents from the office of the office of Superintending Engineer, Construction Circle, Uttarakhand Peyjal Nigam, Dehradun, Uttarakhand.
- 16. The Terms and conditions of EOI notice published in newspaper shall form part of the EOI.

Signature of Applicant:
Name:
Company's seal:
Date:

2 – Introduction to Water Supply Dehradun City and Role of Uttarakhand Peyjal Nigam Dehradun City

Dehradun or Dehra Dun is the interim capital city of Uttarakhand, a state in the northern part of India. Located in the Garhwal region, it lies 236 kilo meters north of India's capital New Delhi and 168 kilo meters from Chandigarh. It is one of the "Counter Magnets" of the National Capital Region (NCR) being developed as an alternative centre of growth to help ease the migration and population explosion in the Delhi metropolitan area and to establish a smart city at Dehradun. During the days of British Raj, the official name of the town was Dehra.

Dehradun as Educational Hub and Tourist Destination

Dehradun is a world known educational hub. Premier research institute based in Dehradun are the Forest Research Institute, Indian Institute of Remote Sensing, Indian Institute of Petroleum, Wildlife Institute of India, Instruments Research and Development Establishment and Wadia Institute of Himalayan Geology. State and private universities located in Dehradun are Doon University, Uttarakhand Technical University Uttaranchal University, ICFAI University, Dehradun, Graphic Era University, University of Petroleum and Energy Studies. The Forest Research Institute campus hosts the Indira Gandhi National Forest Academy (IGNFA), the staff college that trains officers selected for the Indian Forest Service (IFS). Wildlife Institute of India (WII) is an autonomous institution under the Ministry of Environment Forest and Climate change, Government of India which carries out wildlife research.

Local Administration

Dehradun Municipal Corporation is locally known as Nagar Nigam Dehradun. Other urban entities involved in civic services and city governance and management include Mussoorie Dehradun Development Authority (MDDA), Special Area Development Authority (SADA), Jal Nigam and Jal Sansthan among others.

Uttarakhand Peyjal Nigam:-

The major objective behind the establishment of the Nigam was to have a responsible body for supplying water in the state of Uttarakhand. The major function or work performed by the Nigam is supplying water to the people residing in the state of Uttarakhand.

Uttarakhand Peyjal Nigam has its Headquarter at 11, Mohini Road Dehradun. The Nigam is responsible for planning, survey, design and execution of urban as well as rural water supply and sewage schemes in the state of Uttarakhand. In addition to above the Nigam has also been authorized as a construction agency.

The proposed project is for the Dehradun City (Municipal Area) covering an area of approximate 64.88 Sq. Kms. with 60 Wards and having a Population of 5.69 Lakhs (as per census 2011) with a Population Density of 1,900 /Km2. The Average Elevation of Dehradun City is 635 m above MSL. The Existing Water Supply System is approx 700 Km and 400 Km new Water Supply

Network is planned for the city. The Existing Sewerage Network is approx 400 Km and 100 Km New Sewer Network planned for the city to increase the Coverage. The details of the Existing System for Dehradun city are –

The City Details are -

Sr. No.	Description	Quantity
1	Area of Dehradun City (Municipal Area)	64.88 Sq. Km.
2	Population of City (Census 2011)	5.69 Lakhs
3	Number of Wards	60 Ward
4	Length of Road network in the city	700 Km (Approx)
5	Number of sources of water	150 TW &
		5 Surface Water
		Sources
6	Number of Water treatment plants	3 Nos.
7	Length of existing pipe line network – Raw Water	700 Kms.
8	Length of existing pipe line network - Pure Water	41.25 Kms.
	transmission line.	
9	Number of ESR/GSR	71/14
10	Number of Water Supply Zones	46 Zones &
		5 Sub Zones
11	Number of properties	1.5 Lakhs (Approx)
12	Number of Water connections	1.0 Lakhs (Approx)
13	Length of existing Sewer network	403.15 Kms.
14	Number of sewerage treatment plants	7 Nos. & capacity
		115.15 MLD
15	Number of Sewerage pumping stations	3 Nos.
16	Number of sewer zones	13 Nos.
17	Number of Manholes	13,433 Nos.
18	Average Elevation above MSL	635 m

Signature of Applicant:

Name:

Company's seal:

3 – Objectives and Scope of Services

The broad objective of the consulting service is to carry out survey and do GIS mapping And geo tagging of all the assets of the existing water supply system and sewerage system of Dehradun city (More than 1145.00 Kms. network), Verification of network and collection of all the necessary information as required for building a GIS based hydraulic model and GIS based sewerage model Then, carrying out simulation of the same for identifying the problems with existing water supply system and sewerage system. To carrying out planning for new network for both water supply and sewerage, re designing and suggesting remedial measures for the improvisation and revamping of the existing system. GIS mapping of all the existing Tube wells (More than 150) in Dehradun city and developing a plan for converting existing intermittent water supply to continuous 24X7 water supply system along with a plan for water crisis management of Dehradun city with GIS technology. Survey, identification of leakages as on major lines and assisting in developing a strategy for NRW reduction. All the work for GIS based survey, water supply system and sewerage system needs to be carried out in an integrated manner.

The objective of this work is to prepare a detailed working plan in the form of detailed project report (DPR) for –

- 1. Water Supply Projects:- Improvisation and revamping of the existing water supply system of Dehradun city and converting it to 24X7 continuous water supply system using advance technologies of GIS and hydraulic modeling, also planning & designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal. and
- 2. Sewerage Projects :- Planning of new sewerage system in an integrated manner with existing sewerage system for Dehradun city using GIS based sewerage modeling

For the same, the scope of work can be broadly classified into following 3 parts / activities—

- A. GIS based survey for generation of baseline data
- B. GIS based hydraulic modeling and DPR for water supply projects
- C. GIS based sewerage modeling and DPR for sewerage projects

The detailed scope of work for each of the above activity are listed below –					
- C	A. GIS based survey for Dehradun city				
Sr. No	Activity	Sub Activity	Output Expected		
1	Drone survey	Carrying out Drone missions at appropriate altitudes with ultra high definition camera for capturing very high-resolution images Processing the data with international standard software's with GIS compatibility and generating very high resolution seamless geo-referenced or the image for the defined area Preparation of 3D models digital surface model, digital elevation model, digital terrain model and extraction of contours with 1m and 3m intervals	High resolution or the image 1m contours and 3m contours Digital elevation model Slope and aspect maps 3D model		
2	GIS base map	Digitization on high resolution or the image and extraction of features like – Building footprints, road centerline, road edges, railway lines, rivers, water bodies, parking places, open plots, playgrounds, slum areas etc.	Digital GIS map for planning of water supply and sewer lines Number of properties Road length etc		
3	Scanning and geo-referencing of existing maps for water Supply and sewerage system	Data collection from department, scanning existing water supply maps, geo-referencing, digitization of existing drawings, maps etc Data collection from department, scanning existing sewerage system maps, geo-referencing, digitization of existing drawings, maps etc City development plan (DP map), Ward boundaries etc	GIS maps of existing water supply system with all details GIS maps of existing sewerage system with all details GIS based DP map and ward boundaries		
4	DGPS-RTK survey for the existing Water supply system	Detailed DGPS — RTK survey for capturing all the details of the existing water supply system with the help of field persons (Technicians, valve man, plumber etc) along with verification of existing Drawings. All the details related to sources, WTP, ESR/GSR, raw water and pure water transmission lines and distribution lines, valves, pumps etc. needs to be surveyed and mapped on GIS system with attributes	Verified and updated GIS maps for existing water supply system GIS data as required for hydraulic modeling and analysis		

5	DGPS-RTK survey for the existing sewerage system of Dehradun city	Detailed DGPS – RTK survey for capturing all the details of the existing sewerage system with the help of field persons, Technicians along with Verification of existing drawings. All the details related to manholes, STP, conduits, wet wells, pumping stations etc. needs to be surveyed and mapped on GIS system with attributes	Verified and updated GIS maps for existing sewerage system GIS Data as required for sewerage modeling and analysis
6	Consumer Survey	Grid formation for Dehradun city Unique GIS ID generation for each of the property on GIS system Detailed GIS based door to door household survey for collecting the information as required by Dept. Data entry of the surveyed data into Excel File / mdb file GIS Map updating after consumer survey Linking of consumer survey data with GIS maps Classification and identification of residential and non residential demand Analysis and report as required by the Dept.	Consumer survey data linked with GIS maps Consumer mapping and indexing Identification of water used by different beneficiaries Identification of and population point demand as required Hydrauli for c modeling and sewerage modeling
7	Conditional assessment of the existing Water supply Network system	Taking trial pits of various sizes 1mX1mX2m indepth to 4mX1mX2m in depth at a distance of 500m for existing 800 kms of water supply network Capturing the details of the pipeline network GPS location with photograph Map updating	Updated GIS maps with trial pits results & identification of the condition Of the pipeline as good, ok or bad (needs Replacement). Capturing details as required for hydraulic modeling
8	Conditional assessment of the existing Sewer network system	Identification of location of each manhole Capturing the details of the conduits & invert level at each manhole GPS location with photograph Map updating with conduit & manhole details	Updated GIS maps with manholes & conduit details as Required for sewer modeling

	B. GIS based Hydraulic Modeling and DPR for Water Supply Projects			
Sr. No	•	Sub Activity	Output Expected	
1	GIS based hydraulic modeling for the existing and new water supply system, (including also planning and designing of source augmentation from the proposed Saung Dam situated at Saung River in Raipur Block of Dehradun District as alternative proposal) Preparation Of	Creation of GIS based hydraulic model Demand forecasting and assigning demand to the model based on GIS based consumer survey/ Land use Assigning levels to various nodes using GIS based digital elevation model (DEM) Simulation and analysis of the various elements of the existing water supply system (Source, WTP, ESR/GSR, Pumps, Pipelines, etc.) Steady state and extended period simulation over 24 hours to study the behavior of the existing system Identification of problems in the existing system (low pressure areas etc) Remedial measures to overcome the problems in the system Design of optimum operational zones so that tanks shall not remain empty or overflowing Formation of DMAs / Redesigning of zones / DMAs Location and sizing of isolation valves Pressure management that leads to equitable distribution of flow and pressure Refurbishment of pipelines Analysis and report Detailed Project Report (DPR)	GIS based hydraulic model as required for planning, designing, operation and maintenance, including the scenarios for remedial measures for Improvisation of water supply system Design report with drawings and maps Detailed Project	
	Detailed Project report (DPR) for Water Supply Project	Design along with results for pipe and Junctions, ESR, Pumps etc Working drawings and GIS maps Financial estimate	Report (DPR) as required for submission to State Govt / Central Govt	

	C. GIS based Sewerage Modeling and DPR for Sewerage Projects				
Sr. No	Activity	Sub Activity	Output Expected		
1	GIS Based modeling of the sewerage System for the existing and new System and planning in an	Creation of GIS based sewerage model for usable existing network and planning / designing of new network Demand forecasting and assigning demand to the model based on GIS	GIS based sewerage model as required for planning, designing, operation and maintenance etc		
	integrated manner	based consumer survey/ Land use Assigning levels to various manholes using GIS based digital elevation model (DEM) Simulation and analysis of the various elements of the existing sewerage system (Conduits, Manholes, STP, Pumping Stations, Wet Wells etc.) Formation of sewer zones/sewer districts Identification of problems in the existing system Remedial measures to overcome the problems in the system Analysis and report	Remedial measures for improvisation of existing Sewer system in accordance with panning for new sewer system Analysis and report with working drawings and maps		
2	Preparation of detailed project report (DPR) for sewerage project	Detailed Project Report (DPR) Design along with results for Conduits and Manholes, Pumping Station, Wet wells etc Working drawings and GIS maps Financial estimate	Detailed Project Report (DPR) as required for submission to State Govt / Central Govt		

In general, the scope of the services to be undertaken shall cover, but not be limited to, the activities mentioned above. The scope of work and priorities may change as per the site conditions and as per the Directions of Engineer in Charge.

The study should identify shortfalls in the system; suggest suitable measures/works to

be undertaken; finalize priority of improvement/ augmentation work to be under taken along with an implementation plan to achieve the desired target, in a phased manner and as per the
Directions of the Engineer in Charge.
Signature of Applicant:
Name:
Company's seal:

4- Pre-Qualification Criteria

The expression of interest *must include* the following information that would form criteria for pre-qualification and short listing:

- 1. Background of the consultant.
- 2. The specific capability statement of the consultant in the field of water supply and distribution, with particular reference to GIS, hydraulic modeling, and design of transmission and distribution pipes and sewer zoning, sewer districts etc.
- 3. Consultants are not allowed to associate with other Consultants or form a joint venture to enhance their qualifications.

Sr. No	Qualification Conditions			
1	The company should have a Certificate of Registration from Government of			
	India in case of a Partnership firm / Private Ltd firm etc.			
2	The firm should be in consulting business at least for the last 5 years (either as a			
	firm or Joint Venture)			
3	The firm shall have more than 4 years of experience in preparation of GIS			
	Database and GIS based survey specifically for the water supply and sewerage			
	projects for Urban Local Bodies / Govt. Departments			
4	The company should have experience of working on water supply / sewerage			
	projects for at least 3 Urban Local Bodies / Gov. Department and should have			
	prepared or			
5	Contributed in the work of preparation of detailed project report (DPR) using advance technologies of GIS and Hydraulic Modeling / GIS and Sewer Modeling.			
6	The company should have prepared GIS data for the DPR of water supply			
	scheme Costing not less than INR 60 crores in a single work.			
7	The company should have experience of carrying out DGPS-RTK Survey, Total			
	tation Survey, GPS Survey, Point of Interest Survey, Water Network Survey,			
	Point of			
8	Interest Survey for Residential and Non Residential Demand etc. for a city with			
	population not less than 2,00,000 and for pipeline network of not less than 150			
	kilometers in a single work.			
9	The company should have worked on similar kind of assignment of not less than INR 90 lakhs in a single work.			
10	The company should have experience of working on International standard			
	software of Arc GIS and Bentley Water Gems/Sewer Gems			
11	The company should have achieved a financial turnover of at least INR 75 lakh			
	in any One of the last 3 financial years.			
12	The company should have qualified Civil Engineers, GIS Engineers and Total Station			
13	And Consumer Surveyors with minimum 3 years of relevant experience.			
	The company should have own relevant machineries, Survey instruments,			
	software's			
14	Etc. as required for GIS based survey activities.			

Uttarakhand Peyjal Nigam invites eligible applicants to indicate their interest in providing the services. Interested consulting firm may obtain further information and clarification on any matter relating to the EOI document from the office of Superintending Engineer, Construction Circle, Uttarakhand Peyjal Nigam, Dehradun

Signature	of a	Ann	licant:
Digitature	01 1	TPP	mount.

Name:

Company's seal:

Envelop-B 5- Financial Proposal (Costing)

1. GIS WORK

Sr. No	Item Description	Rate	Quantity	Amount (Rs)
	GIS based Drone Survey for 60 wards of Dehradun city			
	High Resolution Ortho Image			
	High end computer, drones and software (Part loading)			
	1m Contour Intervals after Processing		2000	
1	Digital Surface Model / Digital Elevation Model	30000 Hectares (300 Sqkm)		
	Differential GPS Points (Minimum 1500) across the area for calibrating drone contours with establishing Ground Control Points (GCPs) and Bench Marks (BMs)			
	Collecting details of existing administrative boundaries, Ward boundaries, Zones etc.			
2	Digitisation & preparation of GIS Base map (Building footprints, Roads, Rivers, Railways etc) on very high resolution Image (Drone) and generating seamless data.		30000 Hectares (300 Sqkm)	
3	Door to Door consumer survey (GIS based survey with geotagging of consumers), Data entry, map updation, linking of consumer survey data with GIS maps,		2,00,000	
	streamlining billing data, consumer Indexing etc		НН	
4	DGPS survey of existing water supply system along with Scanning, georeferencing & digitization of the existing maps of water supply system with attribution		800	
5	DGPS survey of existing sewer system along with scanning, georeferencing & digitization of the existing maps of sewer network system with attribution		700	
6	Condition Assessment (water supply) by taking trial pits of sizes 1mx1mx2m to 4mx1mx2m at 500m intervals through the system at appropriate locations and capturing relevant details and updating GIS maps		800	
7	Condition Assessment (sewerage), locating manholes & capturing invert level and conduit details and updating GIS maps		700	
	GST / Service charges if applicable			
		Total An	nount (in figure)	
			In words	

2.Water Supply

SN	Design and Network Analysis	Quantity	Unit	Rate (Rs/km)	Amount
1	Preparation of Hydraulic Model for Existing Pipelines & Analysis				
2	Preparation of Hydraulic Model for Designing New Pipelines				
3	Preparation of Hydraulic Model for combined existing and New Pipelines				
4	Data elevations to the nodes using TREX of the Water Gems.				
5	Demand to all the nodes using a Load Builder of the Water Gems.				
6	Preparation of the operational zones of the 22 zones as per Tender Document.				
7	Checking of existing service tanks for adequacy of the storage with a emphasis that the tanks shall not remain empty nor overflowing.				
8	Creation of the District Metering Areas (DMA)s				
9	Network simulation and Fixing location of the bulk meters at the entry point of each DMA with sizing of the meters.	800 kms	800 kms Lump sum		
10	Working out quantities required for Cost Estimate				
11	Water Gems Software (loading of part cost)				
12	Fixing location and sizing of Isolation Valve				
13	Fixing location and sizing of Scour Valve				
14	Steady State Analysis design for sizing of proposed pipelines				
15	Design of transmission feeder main connecting MBR to various service tanks				
16	Design of duty points of Required pumps				
17	Preparation of network drawings of the operational zones, DMAs and that of the network models using Water GEMS and Arc GIS and presenting hard copies				
18	Training of the five candidates on Water Gems software and hydraulic model.				
19	Travel costs and Boarding &				
	Lodging Subtotal				
	GST				
	Total Amount (In				
	figure) In words				

3.Sewerage

SN	Design and Network Analysis	Quantity	Unit	Rate (Rs/km)	Amount
1	Preparation of Hydraulic Model for Existing Sewer lines & Analysis				
2	Preparation of Hydraulic Model for Designing New Sewerage system				
3	Preparation of Hydraulic Model for combined existing and New Sewerage system				
4	Data elevations to the nodes using TREX of the Sewer Gems.				
5	Demand to all the nodes using a Load Builder of the Sewer Gems.				
6	Preparation of the operational zones of the zones				
8	Creation of the District Metering Areas (DMA)s				
10	Working out quantities required for Cost Estimate	700 kms	700 kms Lump sum		
11	Sewer Gems Software (loading of part cost)	700 KIIIS			
14	Steady State Analysis design for sizing of proposed pipelines				
15	Design of trunk main connecting to various STPs and SPS				
16	Design of duty points of Required pumps				
17	Preparation of DPR including network drawings of the operational zones, DMAs and that of the network models using Sewer GEMS and Arc GIS and presenting hard copies and soft copy				
18	Training of the five candidates on Sewer Gems software and hydraulic model.				
19	Travel costs and Boarding & Lodging				
	Subtotal				
	GST				
	Total Amount (In figure)				

Total Amount (In figure)

In words

Note:

- (1) For the works of GIS, water supply and sewerage, it is assumed that GST for water supply and sewerage works is not applicable. However, if it is made applicable it will be paid extra.
- (2) The length of distribution is assumed as 800 kms. If the length is increased then cost shall be proportionally paid extra on per km basis

Signature of Applicant:

Name:

Company's seal:

Annexure-E

Criteria of the Evaluation

Criteria	Description	Max Score
1	The company should have a Certificate of Registration from Government of India in case of a Partnership firm / Private Ltd firm/Joint Venture etc.	5
2	The firm should be in consulting business at least for the last 5 years (either as a firm or Joint Venture)	5
3	The firm shall have more than 4 years of experience in preparation of GIS Database and GIS based survey specifically for the water supply and sewerage projects for the Urban Local Bodies / Govt Departments.	10
4	The company should have experience of working on water supply / sewerage projects for at least 3 Urban Local Bodies / Govt Department and should have prepared or contributed in the work of preparation of detailed project report (DPR) using advance Technologies of GIS & Hydraulic Modeling / GIS & Sewer Modeling.	10
5	The company should have prepared GIS data for the DPR of water supply scheme costing not less than INR 50 crore in a single work	5
6	The company should have experience of carrying out Drone Survey, DGPS-RTK Survey, Total Station Survey, GPS Survey, Water Network Survey, Point of Interest Survey for Residential &Non Residential Demand etc for a city with population not less than 2,00,000 and for pipeline network of not less than 150 kilometers in a single work.	10
7	The company should have worked on similar kind of assignment of not less than INR 90 lakh in a single work.	5
8	The company should have experience of working on international standard software of Arc GIS and Bentley Water Gems/Sewer Gems.	5
9	The company should have achieved a financial turnover of at least INR 75 lakh in any one of the last 3 financial years.	10
10	The company should have qualified Project Manager with minimum 30 years of experience in water supply and sewerage projects, GIS Manager with minimum 12 years of experience in GIS field. Civil Engineers, GIS Engineers and Total Station & Consumer Surveyors withminimum3 Years of relevant experience.	30
11	The company should have own relevant machineries, survey instruments, Software etc as required for GIS based survey activities.	5
	Total	100

Proposal for Improvement and Revamping of the Existing Water Supply System for 24x7 System and Underground Sewerage System of Dehradun City

OFFICE OF THE SUPERINTENDING ENGINEER, CONSTRUCTION CIRCLE,UTTARAKHAND PEYJAL SANSADHAN VIKAS EVAM NIRMAN NIGAMStreet No.-11 Rajendra Nagar,Dehradun–248001 (Uttarakhand)



Prebid Document

Contents

1.Points of Ceinsys	2
2.Points raised by Mr Dinesh Misra	5
3.Points raised by Mr Abhaya Krishna Agarwal	6
4.Points raised by EY	7
5.Points raised by Others during Prebid meeting	8
6.Points raised by YCSPL during Prebid meeting	11
7. Feedback Infra Private Limited	12
8. Bar Chart	15
9. Criteria of the Evaluation	16

Compliance of Points

1. Points of Ceinsys

SN	Reference	Point raised	Compliance
1	Page No10, Section-3, Objectives and Scope of Services, Ref. NoA,GIS based survey for Dehradun city Sub Ref No1.Drone Survey	Permission for flying from concerned authorities for Drone Survey will be provided from MCD, please confirm	Permission shall be given by the Department
2	Page No10, Section-3, Objectives and Scope of Services, Ref. NoA,GIS based survey for Dehradun city Sub Ref No3, Scanning and geo-referencing of existing maps for water supply and sewerage system	Does GIS maps of existing maps for water supply system with all details and GIS based DP map with ward boundaries are available with the MCD in soft copy, please confirm. if yes then which format data will be provided, please clarify	GIS data not available. Bidder shall generate this data by collecting information which is available from the <i>as-it-is</i> condition. To generate this data, required survey shall be carried out by the bidder.
3	Page No11, Section-3, Objectives and Scope of Services, Ref. NoA,GIS based survey for Dehradun city Sub Ref No 7&8,Conditional assessment of the existing water and sewer network system	(a)Does MCD will provide excavation permission from concerned authority for Trial pits. Please clarify. (b)Is there any information available with MCD regarding age of pipe Please clarify. (c)Does maintenance record and repair history is available with MCD, please confirm	(a)Necessary permission for excavation shall be given by the concerned authority. (b) Such data is not available, bidder shall generate it through <i>Condition Assessment</i> survey. (c) For getting any data the bidder should visit the office and get acquainted with the available data. Data which is not available but required shall be generated by the bidder through his survey work.
4	Page No12,13, Section-3, Objectives and Scope of Services, Ref. NoB, GIS based Hydraulic Modelling and DPR for Water Supply Projects	We understand scope of the project is up to the preparation of the DPR and further approval from state/central government is not scope of the consultant, please	Scope is limited up to the stage of completion and subsequent sanctioning of the DPR. Post DPR approvals is not in the scope of the

SN	Reference	Point raised	Compliance
	C. GIS based Sewerage Modelling and DPR for Sewerage Projects Sub Ref No 2. Detailed Project Report (DPR) as required for	confirm	bidder.
5	General	What is estimated time of the completion of the project, please clarify	Time of completion is <u>one year</u> only. A detailed bar chart of time of completion is enclosed herewith.
6	Page No10-11, Section-3, Objectives and Scope of Services, Ref. NoA,GIS based survey for Dehradun city Sr. No.4 Verified and updated GIS maps for existing water supply system GIS data as required for hydraulic Modeling and Analysis	Is this existing data is available with concern department like MOC of pipe, invert level sewerage network, capacity of pipe, percentage full information, other miscellaneous structure, as build drawing of existing structure and structural audit report of the same.	Some data is available with department. A bidder should visit the office and get acquainted with the available data. Data which is not available but required shall be generated by the bidder through his survey work.
7	Page No10-11, Section-3, Objectives and Scope of Services, Ref. NoA,GIS based survey for Dehradun city Sr. No.4 Verified and updated GIS maps for existing water supply system GIS data as required for hydraulic Modeling and Analysis	Is this existing data available with concern department like MOC of pipe,invert level distribution and collection system, dia of pipe, as build drawing of existing structure and structural audit report of the same.	Data which is not available but required data shall be generated by the bidder through his survey work including that of the Condition Assessment of existing infrastructure.
8	Page No15, 5- Financial Proposal (Costing)	Rate and Quantity mentioned is fixed for the costing of Project please clarify.	Quantity and rates are tentative. Bidder should submit his financial offer based on his study.
9	Page No18, Criteria of the Evaluation The company should have qualified Project manager with minimum 30 years of experience in water supply projects not below the ranking of Superintendent Engineer/ Chief Engineer in water	Is there any provision of relaxation of eligibility criteria for Project Manager with minimum 30 years of experience in water supply projects not below the ranking of Superintendent Engineer/Chief Engineer	As per RFP

SN	Reference	Point raised	Compliance
	supply dept, GIS Manager with minimum 12 years of		
	experience in GIS field. Civil Engineers, GIS		
	Engineers and Total Station & Consumer Surveyors		
	with minimum 3 years of relevant experience.		

2.Points raised by Mr Dinesh Misra

SN	Point raised	Compliance
	Following points are not clear	
1	EMD	No EMD is required at the time of submission of proposals.
2	SD	Total 4% of the accepted cost (2% shall be through bank guarantee and
		rest 2% shall be deducted from each R.A. bill).
3	PG	Nil
4	Evaluation criteri for selection whether it shall be	It is on QCBS method.
	on L1 basis or QCBS	Criteria of the Evaluation is enclosed herewith. Bidder who scores
		minimum of 80 marks shall only be considered for financial offer. L1 of
		such bidders' marks shall be selected as a successful bidder.
5	Time period for completion	One year (bar chart enclosed)
6	Terms of payment	Payment terms-
		(a)On submission: 60%
		(b)On compliance of points: 20%
		(c)On getting approval from competent authority:20%
7	Deductions from payments	Deductions from payments
		(a) TDS as per GoI rules
		(b) SD from R.A. bills
8	Preference to MSME regd. contractors	No preference shall be given

3.Points raised by Mr Abhaya Krishna Agarwal

SN	Reference	Point raised	Compliance
1	Pre- Qualification	The company should have achieved a financial	As per NIT/RFP
	Criteria, Qualification	turn over at least INR 75 lakhs in any one of the	
	Condition point.8 page	last three financial years.	
	14		
2	Last date of submission	The last submission date is 31st Oct.2018	As per NIT/RFP
3	Scope of work	The present scope of work covers only one	Revamping of distribution and sewerage is already
		aspect of water supply and sewerage	incorporated in NIT.
		network.	Other parameters shall be As per NIT/RFP
		We believe that the Authority should	
		undertake a comprehensive planning for	
		improvement and revamping of the existing	
		water supply and sewerage network of	
		Dehradun city	
		We would request you to please also include	
		following aspects also:	
		1. Meter accuracy, no. of connections	
		etc.	
		2. Tariff proposal	
		3. Investment program and phasing	
		4. Asset valuation and indicative	
		balance sheet	
		5. Project implementation strategy	
		6. Preparation of bid documents	
		7. Assistance in bidding process	
		8. Contract management hand holding	

4.Points raised by EY

SN	Reference	Point raised	Compliance
1	Pre- Qualification Criteria, point.3 page 14.	Consultant are not allowed to associate with other consultant or from a Joint Venture to enhance their qualification	As per NIT/RFP
2	Pre- Qualification Criteria, Qualification Condition point.5 page 14.	The company should have prepared GIS Data for the DPR of Water Supply scheme not less than INR 60 Corers in single work	As per NIT/RFP
3	Pre- Qualification Criteria, Qualification Condition point.6 page 14	The company should have experience of carrying out Drone Survey, DGPS RTK Survey, Total Station Survey, GPS Survey, Water Network Survey, Point of Interest Survey for Residential and Non- Residential demand etc. for a city with population not less than 2 lakhs and for pipe line network not less than 150 Kilometre in a single work.	As per NIT/RFP
4	Pre- Qualification Criteria, Qualification Condition point.7 page 14	The company should have worked on similar kind of assignment not less than INR 90 lakhs in a single work	As per NIT/RFP

5. Points raised by Others during Prebid meeting

SN	Reference	Existing Provision	Query / Suggestion	Final Compliance
1	Pre-qualification criteria Page 14 S. No.3	The firm shall have more than 4 years' experience in preparation of GIS Data Base and GIS based survey specially water supply and Sewerage projects for urban local bodies / Govt. Department	We request you to kindly modify / change the criteria as: the firm shall have more than 4 years' experience in preparation of GIS database and GIS based survey for urban local bodies / Govt. Department.	As per NIT/RFP
2	Pre-qualification criteria Page 14 S. No.4	The company should have experience of working on water supply / sewerage project for at least three urban bodies / Govt. Departments should have prepared or contributed in the work of preparation of the detailed project report (DPR) using advance technologies of GIS and Hydraulic Modelling / GIS and Sewer Modelling	We request you to kindly modify / change the criteria as- The company should have experience of working on water supply/ sewerage projects for at least three urban bodies / Govt. departments and should have prepared or contributed in the work of preparation of the Detailed Project Report (DPR) and Hydraulic Modelling / Sewer Modelling	As per NIT/RFP
3	Pre-qualification criteria Page 14 S. No.5	The company should have prepared GIS data for the DPR water supply scheme costing not less than INR 60 Crores in a single work	We request you to kindly modify / change the criteria as- The company should have prepared the DPR of Water Supply Scheme costing not less than INR 60 Corer in a single work.	As per NIT/RFP
4	Pre-qualification criteria Page 14 S. No.6	The company should have experience of carrying out drone survey, DGPS RTK Survey, Total Station Survey, GPS Survey, Water	We request you to kindly modify / change the criteria as- The company should have	As per RFP

		Network Survey, Point of Interest Survey for Residential or Non Residential demand etc. for a city with population not less than 2 lakh and for pipe line and for pipe line pipeline network not less than 150 kms in single work.	experience of carrying out DGS survey, Total Station Survey, GPS Survey, Point of interest survey and Water Network Survey.	
5	Pre-Qualification Criteria P. No. 14 S. No.7	The Company should have work on similar kind of assignment of the not less than INR 90 lakhs in a single work.	We request you to kindly modify / change the criteria as The company should have worked on similar kind of assignment of not less that INR 40 lakhs in a single work.	As per NIT/RFP
6	Pre Qualification Criteria P. No. 14 S. No.7	The company should have achieved a financial turn over at least INR 75 Lakh is any one of the last three financial years	We request you to kindly modify / change the criteria as Turn over should have equal or greater than estimated project budget for better quality and competitive bidding.	As per NIT/RFP
7	Bid Submission	Submission date 31/10/2018 up to 3 pm	As project involved lot of technical and commercial inputs to prepared a quality and competitive bid. We request you to kindly extend the proposal submission date at least three weeks after the pre bid replies.	As per NIT/RFP
8	Method of Selection	Minimum qualifying marks will be 80%	You are requested to kindly modify/ change the selection criteria as qualify cum cost base system (QCBS) 80:20 Technical = 80 and Financial =20 flor better quality and competitive bidding.	It is on QCBS method. Criteria of the Evaluation is enclosed herewith. Bidder who scores minimum of 80 marks shall only be considered for financial offer. L1 of such bidders' marks shall be selected as a successful bidder.

		Kindly consider	
9	RFP Cost Earnest	We request you to please clarify whether there is any cost required in	Cost of RFP is Rs 1000
	Money Deposit	respect of RFP cost and EMD cost	

6.Points raised by YCSPL during Prebid meeting

S. No.	Existing Clause	Observation	Compliance
	The firm should be in consultation business at least for the last six years (either or a firm or	It is contrary to the condition mention in the clause of PQ criteria wherein	As per NIT/RFP
	Joint venture)	consultant is not allowed to associate with	
	Joint Venture)	other consultant or from a Joint Venture	
		enhance their qualification kindly clarify.	
	The company should have experience of Water	Experience of similar work for Government	As per NIT/RFP
	Supply / Sewerage Project for at least three	of India undertaking should also be	ros por contract
	urban local bodies / Government department	considered in order to increase the	
	and should have prepared or	completion.	
	The company should have experience of Water	These clauses numbered apparently may	As per NIT/RFP
	Supply / Sewerage Project for at least three	be treated as one clause. There seems to	1
	urban local bodies / Government department	be some typographical errors may please	
	and should have prepared or Contributed in	clarify.	
	the work of preparation of certain Details		
	Project Report (DPR) using		
	advancetechnologies of GIS andhydraulic		
	modelling/ GIS sewerage modelling.		
	Point of interest survey for Residential and	These clauses numbered apparently may	As per NIT/RFP
	Non-Residential demand etc. for city with	be treated as one clause. There seems to	
	population not less than 2 lakhs and for pipe	be some Geographical errors may please	
	line network of 150 kilometer in a single work	clarify.	
	The company should have qualified Civil	These clauses numbered apparently may	As per NIT/RFP
	Engineers, GIS Engineer and Total Station and	be treated as one clause. There seems to	
	consumer surveyor with minimum three years	be some Typographical errors may please	
	relevant experience. The company should have	clarify.	
	own relevant machineries, survey instruments		
	software etc. as required for GIS based survey		
	activities	Circuit and a Circuit live and a live	A NUT /D ED
	The company should have achieved a	Since the work of consultancy involved in	As per NIT/RFP
	financialtrun over of at least INR 75 Lakhs in	different types of work i.e. preparation of	

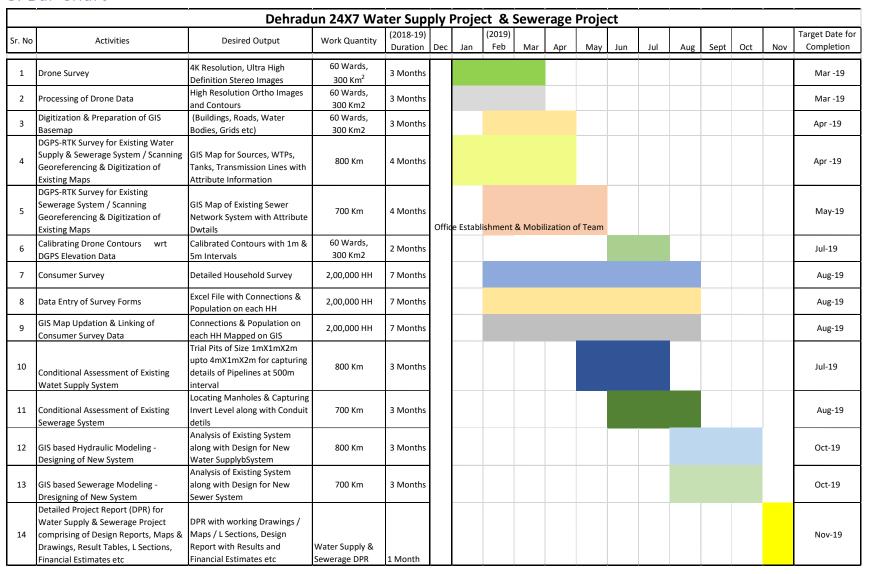
any one of the la	st three financial years	DPR for water supply sewerage work and	
		GIS based survey using advance technology	
		i.e. Drone Survey to Map the different	
		House Hold the financial requirement to	
		implement the work shall be	

7. Feedback Infra Private Limited

S. No.	As per RFP	Clarifications sought	Compliance
1.	Project Duration	Please confirm the project duration.	Time of completion is <u>one year</u> only. A detailed bar chart of time of completion is enclosed herewith.
2.	Payment terms	Please provide the payment terms/ schedule for the consultant.	Payment terms- (a)On submission: 60% (b)On compliance of points: 20% (c)On getting approval from competent authority:20%
3.	Evaluation Criteria	Please clarify the evaluation criteria (least cost/ QCBS)	It is on QCBS method. Criteria of the Evaluation is enclosed herewith. Bidder who scores minimum of 80 marks shall only be considered for financial offer. L1 of such bidders' marks shall be selected as a successful bidder.
4.	Draft Consultancy Agreement	We request you to please provide the draft consultancy agreement with RFP document.	Draft consultancy agreement shall be made with successful bidder
5.	Draft Consultancy Agreement / Liability of the consultant	We request to add the 'Liability of the consultant' Clause in consultancy agreement, which is in line with the general bidding practices in India: "Notwithstanding anything contained in this Contract, RFP or any other document, the maximum amount of aggregate liability and indemnity of Consultant in any event shall not be more than the fee received by the Consultant till that date".	Agreed. This Clause will be incorporated in the agreement with successful bidder.
6.	Draft Consultancy Agreement / Arbitration Clause	As per general bidding practices, we request add the following clause in consultancy agreement: "The sole arbitrator shall be appointed by each party and both the appointed arbitrators may appoint a third arbitrator. The arbitration proceedings shall be carried as	Agreed. This Clause will be incorporated in the agreement with successful bidder.

		per the provisions of the Arbitration and Conciliation Act, 1996".	
7.	Submission of Performance Bank Guarantee & Advance Bank Guarantee	In Case, the consultants participate in bidding process in Joint Venture, we request to accept performance bank guarantee & advance bank guarantee from each JV partner of their respective share. Also allow to JV partner to submit invoice directly to client after getting verify from Lead partner of his share to reduce the extra TDS burden on Lead Partner. Please confirm.	
8.	Extension of bid	Request you to provide atleast 15 days for bid submission post release of bid	As per NIT/RFP

8. Bar Chart



9. Criteria of the Evaluation

Criteria	Description	Max		
1	The company should have a Certificate of Registration from Government of India in case of a Partnership firm / Private Ltd firm/Joint Venture etc.	5		
2	The firm should be in consulting business at least for the last 5 years (either as a firm or Joint Venture)	5		
3	The firm shall have more than 4 years of experience in preparation of GIS Database and GIS based survey specifically for the water supply and sewerage projects for the Urban Local Bodies / Govt Departments.			
4	The company should have experience of working on water supply / sewerage projects for at least 3 Urban Local Bodies / Govt Department and should have prepared or contributed in the work of preparation of detailed project report (DPR) using advance technologies of GIS & Hydraulic Modeling / GIS & Sewer Modeling.	10		
5	The company should have prepared GIS data for the DPR of water supply scheme costing not less than INR 50 crore in a single work	5		
6	The company should have experience of carrying out Drone Survey, DGPS-RTK Survey, Total Station Survey, GPS Survey, Water Network Survey, Point of Interest Survey for Residential &Non Residential Demand etc for a city with population not less than 2,00,000 and for pipeline network of not less than 150 kilometers in a single work.	10		
7	The company should have worked on similar kind of assignment of not less than INR 90 lakh in a single work.	5		
8	The company should have experience of working on international standard software of ArcGIS and Bentley Water Gems/Sewer Gems.	5		
9	The company should have achieved a financial turnover of atleast INR 75 lakh in any one of the last 3 financial years.	10		
10	The company should have qualified Project Manager with minimum 30 years of experience in water supply projects not below the ranking of Superintendent Engineer / Chief Engineer in water supply dept, GIS Manager with minimum 12 years of experience in GIS field. Civil Engineers, GIS Engineersand Total Station & Consumer Surveyors withminimum3 years of relevant experience.	30		

11	The company should have own relevant machineries, survey instruments, softwaresetc as required for GIS based survey	
	activities.	

Minimum qualifying marks will be 80%.