

कार्यालय अधिशासी अभियन्ता सिंचाई खण्ड थराली

पत्रांकः 500/ सिं.ख.श./ बैराज/ थराली ः दिनाँकः <u>18/08</u> /202	० / सिं.ख.थ. / बैराज / थराली ः	दिनाँक :	18 108/2023
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सेवा में,

सहायक महानिरीक्षक (वन), पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार। एकीकृत क्षेत्रीय कार्यालय, देहरादून 25 सुभाष रोड, देहरादून— 248001

विषय:- माननीय मुख्यमंत्री घोषणा संख्या 281/2017 के अन्तर्गत जनपद चमोली के गैरसैंण शहर एंव एडवाईनिग आबादी मे पेयजल आपूर्ति हेतु रामगंगा नदी पर बांध निर्माण कार्य हेतु 4.95 है0 वन भूमि का गैर वानिकी कार्य हेतु सिंचाई विभाग को प्रत्यावर्तन। (Online proposal no FP/UK/Water/144831/2021)

संदर्भः— कार्यालय सहायक महानिरीक्षक (वन), पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, के पत्रांक ८ वीं/यू.सी.पी.09/44/2023/एफ. सी/596 दिनांक 28.07.2023

महोदय,

है—

उपरोक्त विषयक के सम्बन्ध में अवगत कराना है कि उक्त वन भूमि प्रकरण पर लगाई गयी आपत्तियों का बिन्दुवार निराकरण निम्नवत

S.no	Queries	Decantation
1.	In reply to point no 1, state Govt submitted technical justification which was not found correct therefore, state govt. is requested to detail study report of IIT Roorkee or Wadia Institute or any other Govt. organization in this regard.	Construction of Dam/Reservoir at Ramganga River has been proposed for requirement of 7 MLD drinking water supply for Garsain Town and adjoining population .Site selection has been done keeping in view of basic requirements of concrete gravity dam(Such as of water demand, length should be minimum ,foundation should be sound, store maximum amount of water ,section should be economic etc.)A Committee comprising of Forest Department, Revenue Department, Pey-Jal Nirman Nigam and Irrigation Department of the State of Uttarakhand were jointly investigated the various possible sites .After detail Survey ,Geological investigation, hydrological studies, hydraulic design and other chapters , Accordingly Central Water Commission, New Delhi examination of Hydrology and other Chapters of the DPR in Nov., 2019, New Delhi finalized the Water Availability Assessment vide letter dated 01.07.2020 and subsequently, provided the estimated design flood and diversion flood vide letter dated 20.07.2020.(Document attached) finally, proposed a site on Ramganga river in the upstream of Government Polytechnic College, Gairsain for further investigations .A DPR to meet above requirement of concrete gravity dam ,has been prepared by Irrigation design organization, Roorkee, Specialized organization in uttrakhand for design of Dams .Reservoirs are generally planned
I		close to river which are mostly forest area . This

4. 1920 - 1		reservoir project is located in this similar terrain and
		topography in Chamoli District. To minimize the
	·	requirement of forest land, layout of the proposed
		reservoir project has been optimized to the
		maximum possible extent and only unavoidable,
		minimum forest land is being proposed for the
•		diversion for the project, IIT roorkee Will vett
		drawing & Design of Dam before construction.
		(Document attached)
2.	In reply to point no 2,State govt submitted the	As per File No.FC-11/155/2020-FG i) Para 1.15: w.r.t.
	benefits of proposal instead of submitting the	guideline Dated 24.01.2022 :-"Diversion of forest
	reply w.r.t. guideline Dated 24.01.2022 state	land for non-site-specific projects: Utilization of
	govt. is requested to submit necessary comments	
	as per minstery guidelines Dated 24.01.2022	forest area for establishing industries, construction
		of residential colonies, institutes, disposal of fly ash,
	regarding non site specific activity.	rehabilitation of displaced persons, etc. are non-site
		specific activities and cannot be considered on fores
		land as a rule. For that matter, no non-sitespecific
		proposal can be entertained for considering approva
		under the FCA 1980. In' exceptional circumstances,
		residential projects upto one ha, can be considered
		for approval under FCA 1980 by the MoEF&CC,
		subject to appropriate justification and
		recommendation by the concerned State
		Government and the Regional Officer of the IRO of
		MoEFCC". Construction of Gairsain Dam is under
		mandatory services Proposed necessary need of
		Drinking water for summer capital of uttrakhand,As
		per proposed project is not for the establishment of
		industries, construction of residential colonies,
		institutes, disposal of fly ash, rehabilitation of
		displaced persons but only construction of reservoir
		for storage of drinking water. Hence, it is humbly
		requested to the ministry to accept this proposal for
		forest land transfer under the provision of forest
		conservation Act 1980.
3.	In reply to point no 5, the clarification found	Corrected Component wise breakup attached
	correct but the details now removed from	accordingly.
	component wise breakup.	
	In reply to point no 6, submitted that second	Distribution of drinking water will conduct after
	phase of the proposal will be submitted by the jal	completion of phase I which is construction of
	nigam for uplifting and supply mechanism of	reservoir, A separate Scheme proposed in Phase 2
	water. The state Govt. is requested to submit the	compiled by Jal Nigam uttrakband for distribution of
		compiled by Jal Nigam uttrakhand for distribution of drinking water. Irrigation Department is Succidiand
	complete proposal.	drinking water. Irrigation Department is Specialized
	•	in construction of reservoirs, Barrage Dams etc.
		while uttrakhand jal nigam is authorized agencies
		for pumping & drinking water works. Jal Nigam
		uttrakhand also applied for forest conservation by
		proposal no. FP/UK/WATER/41901/2019.
	In reply to point no 7, only undertaking found	The NPV latest prevailing Rates, Document
	In reply to point no 7, only undertaking found upload in part I and II.state govt. is requested to	The NPV latest prevailing Rates, Document uploaded accordingly.
5.	upload in part I and II.state govt. is requested to	The NPV latest prevailing Rates, Document uploaded accordingly.
	upload in part I and II.state govt. is requested to upload the NPV sheets as per new rate of the	The NPV latest prevailing Rates, Document uploaded accordingly.
	upload in part I and II.state govt. is requested to upload the NPV sheets as per new rate of the office.	uploaded accordingly.
	upload in part I and II.state govt. is requested to upload the NPV sheets as per new rate of the	The NPV latest prevailing Rates, Document uploaded accordingly. Site selection done after exploring all possibilities of alternative suitable sites as per requirement of

	suitable site to save the large no. of trees.	no trees may affected after selecting site no 2 ,while 955 no of trees are affected by the proposal.(document attached accordingly)
7.	In the reply of Point no 9, that wildlife mitigation plan upload online but same not found uploaded, the state govt. is requested to upload the wildlife mitigation plan duly approved by CWLW in accordance with ministry's guideline in online portal.	Pertain to DFO
8-	In the reply to point no 10,state govt.submitted reply to only 9 points and the same has not even mentioned in theirs letters. Hence state govt. is requested to provide the comments regarding the CA area is suitable for planting oak plants in reply to point no 10 Vide this office EDS letter dt. 28.04.2023.	CA Area Finalized after perspective for plantation of Oak & all others trees, certified by forest deparmnet, Related Document Uploaded Accordingly.
9-	The present proposal is only for construction of the reservoir, where as the proposed for distribution of the drinking water will be submitted by another agency hence the state govt. requested to provide information on the distribution system as well and the extend of forest area likely to be affected.	Jal Nigam uttrakhand is compiling a spread DPR of pumping scheme for distribution system, layout plan attached. Jal nigam also applied for forest conservation regarding by proposal no. FP/UK/WATER/41901/2019, (1.1463 hec. Forest land).

अधिशासी अभियन्ता सिंचाई खण्ड थराली

पत्रांक

<u>/सिं.ख.थ./बैराज/थराली /तद्दिनांक :</u> प्रभागीय वनाधिकारी केदारनाथ वन्यजीव प्रभाग, गोपेश्वर को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित। <u>प्रतिलिपि</u>–

अधिशासी अभियन्ता सिंचाई खण्ड थराली

परियोजना का नाम :-- माननीय मुख्यमंत्री जी की घोषणा संख्या 281/2017 के अन्तर्गत जनपद चमोली के गैरसैंण शहर एवं एडज्वाइनिंग आबादी में पेयजल आपूर्ति हेतु रामगंगा नदी पर बाँध निर्माण कार्य के लिए 4.95 हे0 वन भूमि का सिंचाई विभाग को हस्तान्तरण प्रस्ताव।

लैन्ड शेड्यूल

(सिविल एवं सोयम, वन पंचायत एवं नाप भूमि हेतु राजस्व विभाग द्वारा दिया जाना है।)

भूमि की श्रेणी	जिला	तहसील	ब्लाक	ग्राम		परियोजना की लम्बाई (मीटर में)	चौड़ाई (मीटर में)	आवेदित क्षेत्रफल (हे0)
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	4				संपर्क मार्ग	1100	7	0.77
and prices		12	the party	- take	डम्पिंग जोन	100	22	0.22
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कुल योग	de la							4.95

अधिश अभियन्ता सिंचाई खण्ड थराली

वमोल

सहायक अभियन्ता सिंचाई उपखण्ड गैरसैंण

सीलदन

दुर्गा प्रसाद 94 रा०उ०निरीक्षय तहसाल. जनपद चमो

कनिष्ठ अभियन्ता सिंचाई उपखण्ड गैरसैंण

वन क्षेत्राधिकारी लोहवा वन क्षेत्र गैरसैण

प्रभागीय वनाधिकारी

केदारनाथ वन्य जीव प्रभाग गोपेश्वर।

प्रारुप-43

परियोजना का नाम :-- माननीय मुख्यमंत्री जी की घोषणा संख्या 281 / 2017 के अन्तर्गत जनपद चमोली के गैरसैंण शहर एवं एडज्वाइनिंग आबादी में पेयजल आपूर्ति हेतु रामगंगा नदी पर बाँध निर्माण कार्य के लिए 4.95 हे0 वन भूमि का सिंचाई विभाग को हस्तान्तरण प्रस्ताव।

क्षतिपूरक वृक्षारोपण स्थल उपयुक्तता प्रमाण–पत्र

प्रमाणित किया जाता है कि क्षतिपूरक वृक्षारोपण हेतु चिन्हित स्थल ग्राम...नेरा वृक्षारोपण हेतु सर्वदा उपयुक्त है।

वन संत्राधिकारी लोहवा वन क्षेत्र मेरसेंण

पूर्वी पिण्हर रेज देवाल द्वीनाथ कन प्रभाग गोपेश्वर

प्रभागीय वनाधिकारी प्रभागीय वनाधिकारी षदीनम्ब का प्रभाग गोपेखर (धमोली) -



Government of India / シ/ 23 - 84-Ministry of Jal Shaktí Department of Water Resources, RD & GR (Flood Management Wing)

> Block-11, 8th Floor, CGO Complex, Lodhi Road, New Delhi-110003

Sub: Clearance of "Gairsain Drinking Water Project", Chamoli, Uttarakhand- from International/ JRC Angle-reg.

Ref: CWC ID No.T-28045/2/2020-PA(N) Dte. dated 04-11-2020

Kind reference is invited to PA(N) Dte. CWC letter dated 04-11-2020 vide which the 'Check List' in respect of "Gairsain Drinking Water Project, Chamoli, Uttarakhand" has been furnished, duly vetted, by Central Water Commission for clearance of the project from International / JRC angle..

It is observed from the 'Check List' that the project is purely a drinking water project to harness 7 MLD for Gairsain town, summer capital of the state Uttarakhand. CWC has observed that the total outflow in the downstream is equal to or greater than inflow after considering return flow during the lean period (January to May). Thus, this project will have 'no' adverse impact on the inflow in lean season on Farakka".

In view of above, the undersigned is directed to convey the 'No Objection" to "Gairsain Drinking Water Project" Uttarakhand for clearance from International / JRC angle in respect of Ganga Water Sharing Treaty – 1996 subject to the following conditions:-

- 1. Government of Uttarakhand shall ensure that storage provided in the reservoir of this Dam is sufficient to meet the envisaged drinking water requirement from the project during lean season (1st January to 31st May).
- Necessary provisions will be made by Government of Uttarakhand/ Project Authority during and post execution of this project to ensure continuous unaffected lean season flow (1st January to 31st May) in Ramganga river.
- 3. Allocation of water for the proposed project will have to be counted against the share of Uttarakhand as and when any Inter-state agreement on sharing of waters from Ganga/ Ganga basin is reached among co-basin states.
- 4. All conditions as imposed by National Mission for Clean Ganga shall be duly complied with by the Project Authority as the project lies in Gnaga Basin

(R.R. Sambharia) Sr. Joint Commissioner-I (FM) e-mail: sjcer1-mowr@nic.in

Director, PA(N), Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi File No.Z-23011/1/2019-O/o SJC-I (FM)/2/84-85 / Dated 25-11-2.20 Copy for information to:

Chief Engineer (PAO), Central Water Commission, Sewa Bhawan, R.K. Puram,

जल शाक्त मंत्रालय जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग केंद्रीय जल आयोग जल विज्ञान (उत्तर) निदेशालय



विषय Sub : Techno-economic clearance of Gairsain Drinking Water Project, Chamoli, Uttarakhand Water availability study at Gairsain Dam site reg.

संदर्भ Ref : e-mail dated 05.06.2020

Please refer to this office letter No. 1/Uttar/12/2019/ज.वि.(3.)/407-408 dated 30.12.2019 vide which observations on hydrological aspects of Gairsain Drinking Water Project, Chamoli, Uttarakhand were conveyed. Now, vide e-mail dated 05.06.2020, the Superintending Engineer, Research Circle, IRI, Roorkee, Govt. of Uttrakhand has submitted reply to the issues raised by this office vide letter referred above. The aforesaid reply has been examined and water availability series at proposed Gairsain Dam site has been finalized. A copy of Water Availability Study Report of Gairsain Dam, Chamoli (Uttarakhand) is enclosed herewith as Annexure 1 and dependabilities of this series are given in Annexure 2. The minimum annual yield at proposed Gairsain Dam site is assessed as 11.35 MCM. The water availability study has been carried out without any site specific discharge data and needs revision as soon as sufficient site specific discharge / rainfall data of good quality are made available.

This issues with the approval of Chief Engineer (HSO), CWC, New Delhi.

Encl : As above

Signature Not Verified Digitally signed by OVERDHAN PRASAD Date: 2020.07.01-10:57:13 IST

(गोवर्धन प्रसाद Goverdhan Prasad) निदेशक Director

Director, Project Appraisal (N), CWC, Sewa Bhawan, New Delhi

Copy to :

The Engineer-in-Chief, Irrigation Department, Govt. of Uttarakhand, Dehradun.

C.E. (Shringer)/SSO(P) Hirthm Ustra stiller 11

ATTE STILL

सातवाँ तल(दक्षिण), सेवा भवन राम कृष्ण पुरम, नई दिल्ली -110066 दूरभाष: 011-2958-3508 ई मेल: hydnorth@nic.in ∳जल सरक्षण-सुरक्षित भविष्य∑



7th Floor(South), Sewa Bhawan, R.K. Puram, New Delhi-110066 Tel: 011-2958-3508 E-mail: hydnorth@nic.in ♦Conserve Water- Save Life♦

File No.TE-11015/3/2020-O/o AD(RD Tech) NMCG-NATIONAL MISSION FOR CLEAN GANGA



राष्ट्रीय स्वच्छ गंगा मिशन National Mission for Clean Ganga Dated: /06/2021

F.No. TE- 11015/03/2020/NMCG.

Τo,

Engineer-in- Chief, Uttarakhand Irrigation Dept., Yamuna Colony, Dehradun- 248001

Ref: (i) DO no C-44/EinC/I.D/camp dated 30.07.2020 (ii) DO no. C-51/EinC/I.D/camp dated 03.09.2020

Sub: Issuance of NoC for Gairsain Drinking water project -reg.

A request for issuance of NoC in respect of e -flow for Gairsain Drinking Water Project, Chamoli, Uttarakhand was made vide letter under reference (i) and further replies/compliance was provided vide letter under reference (ii) against observation of this office.

2. The matter was examined based on the information provided and I am to convey that competent authority has granted NoC under para 42 of Authorities notification of October' 2016 for the proposed Gairsain Drinking water project as project is for purpose of drinking water requirements subject to following conditions:

- i. Project authority shall ensure that e-flow regime mandated under notification dated 9th Oct 2018 of Department of Water Resources, Rriver Development and Ganga rejuvenation is followed as mentioned under Reservoir Simulation Table 4.12 (Copy enclosed) of DPR which provides for calculations for flow for 90% dependable year for each month.
- for 90% dependable year for each month.
 Water from river is being stored for two months of October & November while storage is being utilised for drinking water requirements for five months of Jan- May. For rest of months, direct inflows are being diverted for drinking water requirements. These provision should be strictly adhered.
- iii. In order to safeguard aquatic diversity and life form, project authorities must ensure that mechanism for longitudinal connectivity in form of fish passage etc are provided and technical guidance from WII or CIFRI for this aspect

iv. Project authority shall ensure that diverted water, after meeting drinking water consumptive utilization, being returned to river @ 80% diverted flows, should be treated to extant standard before it is released and such intervention should be in place by State prior to implementation of project itself. Obviously, such interventions for creation of assets for treatment of waste water should be funded by State from their own budget and funding from Namami Gange may not be one of precondition of State for delays, if any.

may not be one of preconduction of order of calls of each property in the property of proponent shall make necessary arrangements for treatment of sewage waste being generated by staff and similar sources working at station.

Tech) NMCG-NATIONAL MISSION FOR CLEAN GANGA

राष्टीय स्वच्छ गंगा मिशन National Mission for Clean Ganga

other organizations shall be strictly abided by. any of the conditions, NMCG reserves the right to

py of salient feature of the project py of Table 4.12 of DPR

Signature Not Verified Digitally signed b D.P.MATHURIA Date: 2021.00.09 20:24:46 IST

(D.P.Mathuria) Executive Director (Tech.)

Copy w.

1

1. Project Director, SPMG Group, 117 Indira Nagar, Dehradun Uttarakhand 248001- with request for monitoring of project and ensure compliance of conditions of NMCG.

District Collector, Chamoli, Uttrakhand

2.

Copy for information:

1. PS to Secretary, D/o Water Resources, River Development & Ganga Rejuvenation, Sharam Shakti Bhawan, New Delhi.

- 2. PS to Director General, NMCG, New Delhi.
- 3. ED(P/F), NMCG, New Delhi.

केर्यिलिय प्रभागीय वनाधिकारी केदारनाथ वन्यजीव प्रभाग, गोपेश्वर। Office of Divisional Forest Officer Kedarnath Wildlife Division, Gopeshwar.

1035 गोपेश्वर, सेवा में 12-1 दिनांक 27-08-2022

> अधिशासी अभियन्ता, सिंचाई खण्ड थराली।

विषयः—

मा. मुख्यमंत्री जी की घोषणा संख्या 281/2017 के अन्तर्गत जनपद चमोली के गैरसेंण शहर एवं एडज्वाइनि आबादी में पेयजल आपूर्ति हेतु रामगंगा नदी पर बाँध निर्माण हेतु 4.95 है0 वन भूमि हस्तान्तरण प्रस्ताव।

संदर्भ:--

आपका पत्रांक 506/सि0ख0थ0 /वैराज/ थराली दिनांक 03-08-2022।

महोदय,

उपरोक्त विषय के कम में अवगत करना है कि आपके द्वारा पार्टा में क्षतिपूरक वृक्षारोपण योजना को वर्ष 2022-23 की दरों की अनुसार एवं एन०पी०वी० की दरों में वृद्धि होने के कारण पुर्ननिर्धारित एन०पी०वी० के आगणन की प्रति आनलाईन आपलोड की जानी है। क्षतिपूरक वृक्षारोपण स्थल बद्रीनाथ वन प्रभाग से सम्बन्धित होने के कारण क्षतिपूरक वृक्षारोपण योजना की प्रति बद्रीनाथ वन प्रभाग गोपेश्वर से प्राप्त की जानी है। एन०पी०वी० के आगणन की प्रति संलग्न कर प्रेषित की जा रही है।

अतः क्षतिपूरक वृक्षारोपण योजना की प्रति बद्रनाथ वन प्रभाग से प्राप्त कर एन०पी०वी० के आगणन तथा क्षतिपूरक वृक्षारोपण योजना की प्रति पार्टा में आनलाईन अपलोड करने का कष्ट करें। संलग्नः-यथोपरि।

भवदीय

(इन्द्र सिंह नेगी) प्रभागीय वनाधिकारी. केदारजाश कन्यजीव प्रभाग, गोपेश्वर।

संख्या 1035 / 1२-1 दिनाँकित

प्रतिलिपिः– प्रभागीय वनाधिकारी, बद्रीनाथ वन प्रभाग गोपेश्वर को इस आशय से प्रेषित कि क्षतिपूरक वृक्षारोपण योजना आपके प्रभाग के अन्तर्गत ग्राम केरा सिविल में चयनित की गई है। अतः वर्ष 2022–23 की दरों के अनुसार क्षतिपूरक वृक्षारोपण योजना की प्रति अधिशासी अभियन्ता, सिंचाई खण्ड थराली को उपलब्ध कराते हुए एक प्रति इस कार्यालय को भी उपलब्ध कराने का कष्ट करें।

> (इन्द्र सिंह नेगी) प्रभागीय वनाधिकारी, केद्रारनाथ वन्यजीव प्रभाग, गोपेश्वर।

-010

नो का नाम :—मा. मुख्यमंत्री जी की घोषणा संख्या 281/2017 के अन्तर्गत जनपद चमोली के गैरसेंण शहर एवं एडज्वाइन्हिंग आबादी में पेयजल आपूर्ति हेतु रामगंगा नदी पर बाँध निर्माण हेतु 4.95 है0 वन भूमि हस्तान्तरण प्रस्ताव। ।

एन०पी०वी० की धनराशि का आंकलन।

1– इको–क्लास की श्रेणी–

2– हरियाली का धनत्व–

3-- एन०पी०वी० की दर --

रू० 14,36,670.00 प्रति है०

4—आवेदित वन भूमि का क्षेत्रफल—

5—कुल देय एन०पी०वी०—

4.95 है0 रू0 71,11,516.00

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(इन्द्र सिंह नेगी) प्रभागीय वनाधिकारी, केदारूनाथ वन्यजीव प्रभाग, गोपेश्वर।

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भारतीय प्रौद्योगिकी संस्थान, रुड़की जल एवं नवीकरणीय ऊर्जा विभाग (पूर्व वैकल्पिक जल ऊर्जा केन्द्र) रुड़की–247 667 (उत्तराखण्ड), भारत INDIAN INSTITUTE OF TECHNOLOGY ROORKEE DEPARTMENT OF HYDRO AND RENEWABLE ENERGY Roorkee - 247 667 (Uttarakhand), India T: +91 – 1332 – 285213, 5319 F: +91 – 1332 – 273517 E: mksinghal1962@gmail.com, msinghal92@gmail.com

> No. HRED/C-56-M/64 Dated: June 06, 2023

Executive Engineer Irrigation Divison Tharali, Chamoli – 246 482 E-mail : exnidtharali@gmail.com

Sub: Detailed Engineering Design of Dam and Vetting of Drawings & Design for radial Gate at Gairsain in District Chamoli (Uttarakhand)

Ref: Your Letter 185/ Gairsain Dam dated May 31, 2023

Dear Sir,

This is with reference to your letter referred above regarding Detailed Engineering Design of Dam and Vetting of drawings & Design for radial Gate at Gairsain in District Chamoli (Uttarakhand). We shall be happy to provide our technical services for above project.

Our terms and conditions for undertaking the consultancy services for the said assignment are as follows:

1. SCOPE OF WORK (Preparation of construction Drawing)

- a) Detailed engineering design and preparation of drawings of civil works.
- b) Vetting of detailed engineering design and drawing of Hydro-mechanical works.

2. BASIC DATA REQUIRED

The following basic data is required.

- a) Detailed project report
- b) Topographic survey of area at 1:1000 scale covering 250 m U/S of submerged location and up to 250 m D/S of Dam axis with 1 m contour interval upto at least 5 m above dam top level.
- c) Topographical survey of dam area at 1:250 scale and with 1 m contour interval from 50 m U/S to 100 m D/S of dam toe and upto 5 m above the top of dam.
- d) Longitudinal section of the river from 500 m upstream to 500 m downstream of dam axis by observing water levels in the river on a particular day.
- e) Topographical and geological section of the river at proposed dam axis and at 50 m and 100 m downstream of the dam axis.
- f) Allowable bearing capacity and C & ϕ values of the dam foundation strata.
- g) Permeability and groutability of the dam foundation strata.
- h) Proposed width of road way on the top of dam.
- i) If under sluice is required at river bed level to flush out silt.
- j) C& values of back fill material.
- k) If some provision is required in the dam body for river diversion during construction.

3. **PRESENTATION**

- a) Two set of draft drawings.
- b) Six set of final drawings.

4. FINANCIAL IMPLICATIONS

Following charges shall be payable by the sponsor

Sl. No	Items	Amount (Rs. Lakh)
1.	Detailed Engineering Design of Dam and Vetting	48.00
	of drawings & Design for radial Gate at Gairsain.	
2	GST @18%at present	8.64
	Total	56.64

The above offer includes the man power charges for two site visit (excluding boarding, lodging and travel arrangements) of HRED team comprising of two experts. For additional site visit, a sum of Rs. 15,000/- + GST per man per day for the period of absence from Roorkee shall be payable by you. For all site visits, all the travel arrangement from Roorkee to project site and back and boarding and lodging arrangements during site visit shall be taken care directly by you.

5. TERMS OF PAYMENT

- \blacktriangleright 50% advance along with assignment.
- Balance 50% after submission of 50% drawings or one year after placement of order whichever is earlier.
- The payment to be made by direct bank transfer with details as follows (GST number of IIT Roorkee is 05AAALI0033R1Z5)

Name of the Bank	Punjab National Bank
Branch Office	IIT Campus, Roorkee-247667, U.K. India
Account Name	Industrial Consultancy, IIT Roorkee
Account no.	4044000100031597
IFSC Code	PUNB0404400
Branch No.	4044
MICR Code	247024103
PAN No.	AAALI0033R
GST No.	05AAALI0033R1Z5

6. TIME PERIOD

We shall attempt to complete the work early. The draft drawings of Dam structure shall be submitted within two months after receipt of advance and required data and site visit by HRED team.

7. VALIDITY OF OFFER

These rates are valid up to three months. Our association/involvement shall be limited to one year from the date of assignment to us.

8. TEAM

On the receipt of data and DPR the team of senior members having rich experience in the field of such review of different disciplines shall be working for the assignment.

9. FORCE MAJEURE

For the purpose of and within the scope of the contract by way of indication and not of limitation, the term 'Force Majeure' shall mean acts of nature, strikes, Lockouts, or other industrial disturbances, act of public/enemy, wars, blockades, insurrection, riots, epidemics, landslides, earthquakes, storms, lightening, flood, washouts, civil disturbances, explosions and any other similar event not within the control of either party and which by exercises of due care and diligence neither party is able to prevent or overcome.

Should the occurrence of force majeure last more than 15 days, both the parties have the right to cancel the contract. In such a case, the consultant will be paid for all the work completed or which has been carried out or performed up to the time of occurrence of such event.

10. LIABILITY

In case any legal dispute arises between the HRED and the sponsor such that the Investigator(s)/HRED are in any way, held responsible to make good the losses incurred by the sponsor, such liability will be restricted to a maximum limit which will be calculated as follows:

Maximum Liability: The total amount charged for the project – the expenditure / liabilities on the project. It is in the interest of the Investigators to bring this fact to the notice of the sponsors. The expenditure / liabilities as determined by the Institute will be calculated as the expenditure / liability till such date on which the sponsors inform the Investigator in writing to stop work on the project for ongoing projects, or till the end of the project for completed projects. This amount does not include the remuneration paid to the Investigator(s) and staff of the Institute.

11. PUBLICATION OF RESULTS

PI/HRED will have the right to publish the work carried out by him/her and in such cases the draft paper before publication will be submitted to sponsors and if no objections are raised within one month of the submission of the proposal to publish the result, it will be assumed that the sponsors have no objection to the publication

12. ARBITRATION

In the event of any dispute or difference at any time arising between the parties relating to Consultancy project or any other clause(s) or any content of the right and liabilities of the parties or other matters specified therein or with reference to anything arising out of the Consultancy or otherwise in relation to the terms, whether during the Consultancy or thereafter, such disputes or differences shall be endeavored be resolved by mutual negotiations. If, however, such negotiations are infructuous, the dispute should be finally settled through Arbitration and Conciliation Act, 1996 by three arbitrators appointed in accordance with the said Act. The arbitrators shall give reasoned and speaking award.

Yours faithfully,

Anar TriElm (M.K. SINGHAL)

C.C

1. Chief Engineer (Level-2) Irrigation Département Srinagar- 246174 (Garhwal) E-mail : ceirrigationsrinagar@gmail.com 2. Superintending Engineer Irrigation Work Circle, Rudraprayag -246171(Garhwal) E-mail : eemanojksingh@gmail.com