Request for Proposal (RFP) is invited from Consultant/ Joint Venture/ Multi-disciplinary Consortia, Government Organization, Public Sector undertaking, Government Educational Institute and I&FC Empanelled agencies, for Project Management Consultancy (PMC) for the work to rejuvenate drain in holistic manners by using ecologically sensitive sustainable technique like creation of stationary and floating wetlands and in-situ aeration & installation of ozonizer in drains which can reduce BOD load, improve dissolved oxygen levels, reduce bad odour and harmful gas emission from the drains. Further to develop the vacant land by landscaping, developing it for recreation activities such as cycling track, jogging track, Illumination of dark spots of drain by installation of street lighting automated with solar energy/wind energy wherever feasible and Installation of solar panels for generation of solar energy where ever feasible in respect of drains falls under the jurisdiction of Civil Division XII, I&FC Department, Govt. of NCT of Delhi.

#### Introduction:-

The quality of waste water of the drains falling under the Jurisdiction of Civil Division XII, I&FC Department here-in-after called as Department, is alarming due to industrial effluent, waste water and septage from the adjoining un-sewered villages/unauthorized Colonies and industrial waste flowing into the drains. BOD of the waste water has been found to be very high at different locations. The fumes of waste water in drains are also contributing to the air pollution and pollute the sub soil of the area along which it flows.

#### BACK GROUND:-

There are 57 major and minor storm water drains under the jurisdiction of Irrigation and Flood Control Department in Delhi. Out of the 57 drains following drains fall under the jurisdiction of Civil Division XII, I&FC Department.

S. No.	Name of Drain	Length in Metre	Catchment area (In Hect.)	Designed Discharge (In Cusecs)	(Avg.) W Drain in Bottom	idth of meter Top	Land Width
1.	KSN Drain	4100	1500 Hect. (Approx)	168.00	427.00 & 5.30	-	Varies From 9.00m to 30.00m
2.	Madanpur Dain	4100	2500 Hect. (Approx)	190.00	4.27	10.00	15.00

#### Brief about Drains.

#### 1<u>. K.S.N Drain</u>

The KSN Drain takes off from Rohini area and outfalls into supplementary drain covering a length of about 7800m and being maintained by two division viz 7800m to 4100m by CD-VIII and from RD 4100m (D/s Rohtak road bridge) to its outfall at RD 0m (into supplementary Drain) under CD-XII after passing through various villages/thickly populated Unauthorized Colonies.

#### 2. Madanpur Drain

The Madanpur drain takes off from village Madanpur and outfall into Mungheshpur drain covering a length about 8200m and is beingbeing maintained by two division viz 7800m to 4100m by CD-VIII and from RD 4100m (D/s Rohtak road bridge) to its outfall at RD 0m (into Mungeshpur Drain) under CD-XII after passing through various villages/thickly populated Unauthorized Colonies.

Department has decided to rejuvenate all above drains in holistic manners by using ecologically sensitive sustainable technique like creation of stationary and floating wetlands and in-situ aeration & installation of ozonizer in drains which can reduce BOD load, improve dissolved oxygen levels, reduce bad odour and harmful gas emission from the drains. Further to develop the vacant land by landscaping, developing it for recreation activities such as cycling track, jogging track, Illumination of dark spots of drain by installation of street lighting automated with solar energy/wind energy wherever feasible and Installation of solar panels for generation of solar energy wherever feasible in respect of drains and therefore is calling this Request For Proposal (RFP) from the agencies having expertise in this field, for Project Management Consultancy (PMC).

#### Broad Scope of Work:-

- Mapping of all components and appurtenances of Drain land but not limited to indicate inlet drain, bridge/culverts, ditches, swales, concrete curb, gutter, concrete pan and other existing structures and features by drone/latest technology. All positional data must be collected using mapping grade with best available GPS equipment.
- The estimation of pollution discharged from different drains discharging into Drain directly, includes biological/organic, inorganic, chemical/industrial pollution.
- Identify deficiencies in the existing position of drain and maintenance mechanism then recommend and prioritize project improvements to correct deficiencies.
- 4. Mandates for assessing the pollution sources and taking preventive and corrective measures, which includes creation of sewerage infrastructure in order to have a long term sustainable management of sewage pollution
- Soil Bearing Capacity.
- Silt Load Assessment & Management Plan.
- To suggest Ecologically Sensitive sustainable technologies to reduce the pollution load of drain through in-situ and ex-situ treatment technologies as such feasibility of wetland system, installation of aerator, ozonation wherever required.
- 8. Designing of wetland system required based on the water quality of the drain.
- Suggest ways to segregate dirty water and storm water incoming into the drain and ways for treatment of dirty water.
- 10. Evaluating quantum of siltation in the drain, projection of existing capacity of the drain and thereafter suggesting feasible modern techniques/methods to carry desiltation, cleaning of drain from floating materials, hyacinth/floating weeds etc
- Evaluate future flow projections and the impact of future development on flow projections. Make recommendations for extending, expanding, or modifying the drain.
- 12. Providing Landscaping for the dry area around the Drain including forestation, creation of park, walking track, recreation facilities, etc depending upon the availability of dry area.
- Illumination of dark spots of drain by installation of street lighting automated with solar energy/wind energy wherever feasible.
- 14. Installation of solar panels for generation of solar energy where ever feasible.
- Proper integrated mechanism for removal of silt wherever required including use of Geo bags / Geo tubes whichever is feasible i.e. Geo fabrics for trapping floating waste/slit/sewerage.
- Exploring modern and sustainable techniques to dispose-off/consume the desilted materials,
- 17. Assessment of underneath soil Hydrogeology, including sub-soil water level, storage capacity, sub-soil type, present percolation rate, traverse movement rate of ground water, Fresh water Saline water interface, nature of aquifers available underground etc.

- 18. To suggest and explore idea of available water/run-off of drain to recharge sub-soil water by modern techniques/methods including deepening of drain as per sites specific feasibility without contaminating existing ground water.
- Feasibility study quantum and depth of water could be stored in subsoil/aquifer in additional to existing without submergence of nearby residential area or agriculture fields.
- 20. Survey of existing government vacant land adjacent to the drain as such of Forest, Gram Sabha, waterbody, irrigation minors including assessment of ownership and likely hindrances of etc to be used as treatment/recharging point for improving quality/ground water table.
- Assessment and Designing for improving of existing structures/ Bridges/Road and proposing/designing for construction of new bridges & Inspection roads as per traffic intensity.
- Suggestion for land protection of drain and plan to curb unauthorized dumping of C&D
  wastes and malba on the drain land boundary as also identify encroachment.
- 23. Submission of Inception report & feasibility report.
- Submission of DPR with detail estimates based on DSR 2016 for scheduled items and on market rates for non-scheduled items along with rate analysis.
- Supplying working Drawing, Structural Design along with BOQ which shall also include cost of maintenance for five years from the date of commissioning project.
- Assisting I&FC department in tendering process including preparation of NIT, selection
  of pre-qualification criteria for contractors, opening of tenders, checking requisite prequalification criteria etc.
- 27. Assist and supervise the execution of work and ensure the work is being carried out as per detailed drawing & design so the objective of scheme may be achieved including checking of quality and quantity of the work executed.
  - 28. Monitoring the pace of work, submission of fortnightly inspection reports and final completion certificate and successful commissioning of the project.
- 29. During the execution of work the consultant shall bear all costs for collection of samples of construction material, transportation, testing from approved laboratory and submission of test reports for 3rd party quality control.
  - 30. I&FC deptt. at its discretion may appoint DPCC and/or CPCB/Private agency to check the quality of treated water. In case the quality of treated water is not found as per norms it shall be the responsibility of the consultant to suggest rectification measures in the technique without any extra charge.
    - Consultancy during 05 years maintenance period after completion of work for operation and maintenance of the structure/systems.
      - 32. Awareness campaign among different stakeholders as part of the rejuvenation plan.

# 2. INSTRUCTION FOR BIDDERS

## A. GENERAL

# 2.1. General terms of Bidding

- 2.1.1 No Bidder shall submit more than one Bid for the Project. A Bidder bidding individually or as a member of a Consortium/JV shall not be entitled to submit another bid either individually or as a member of any Consortium/JV, as the case may be.
  - 2.1.2 (a) The Bid should be furnished in the format at Appendix-1 [Technical Bid] and Appendix-II [Financial Bid]. \*Note:- Bid not submitted in prescribed format i.e. Appendix I and Appendix-II will liable to be rejected without going through merits.

- 2.1.2 (b) The Financial bid submitted in the Appendix-II should clearly indicate the Bid amount quoted in both figures and words against each of the drain separately and signed by the Bidder's authorized signatory. In the event of any difference between figures and words, the amount indicated in words shall be taken into account.
- 2.1.3 The Bidder shall deposit a Bid Security (EMD) of Rs. 1,00,000/- (Rupees One Lakh Only) in the shape of Demand Draft drawn in favour of Executive Engineer Civil Division XII, I&FC and payable at Delhi to participate in RFP. Government Organization, Semi-Government Organization, PSU, Government Educational Institutes are exempted from deposition of Bid Security amount of Rs. 1,00,000/-
- 2.1.4 In case the Bidder is a Consortium/JV, the members thereof should furnish a Power of Attorney in favour of the Lead Member.

#### 2.2 Site visit and verification of information

2.2.1 Bidders are encouraged to submit their respective Bids after visiting the Project site and ascertaining for themselves the site condition, traffic, location, surrounding, climate, availability of power, water and other utilities.

#### 2.2.2 It shall be deemed that by submitting a Bid, the Bidder has:

- (a) Made a complete and careful examination of the Bidding Documents;
- (b) Received all relevant information requested from the Department;
- (c) Accepted the risk of inadequacy, error or mistake in the information Provided in the Bidding Documents or furnished by or on behalf of the Department relating to any of the matters.
- (d) Satisfied itself about all the matters, things and information for submission of bid and performance of all of its obligations there- under;
- 2.2.3 The Department shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to RFP, the Bidding Documents or the Bidding Process, including any error or mistake therein or in any information or data given by the Department.

#### 2.3 <u>Verification and Disqualification</u>

- 2.3.1 The Department reserves the right to verify all statements, information and documents submitted by the Bidder in response to the RFP or the Bidding Documents and the Bidder shall, when so required by the Agency, make available all such information, evidence and documents as may be necessary for such verification.
- 2.3.2 The Department reserves the right to reject any Bid and appropriate the Bid Security if:
  - (a) At any time, a material misrepresentation is made or uncovered, or
  - (b) The Bidder does not provide, within the time specified by the Department the supplemental information sought by the Department for evaluation of the Bid.

Such misrepresentation/ improper response shall lead to the disqualification of the Bidder. If the Bidder is a Consortium, then the entire Consortium and each Member may be disqualified / rejected.

#### 2.4 Clarifications

2.4.1 Bidders requiring any clarification on the RFP may contact either through e-mail, ifccdxii@gmail.com or personally in the Office of Executive Engineer-CD XII, I&FC Department, Govt. of NCT of Delhi, Basai Darapur, Office Complex, Delhi-110007 at least 7 days before the closing date of submission of bid.

#### 2.5 Amendment of RFP

- 2.5.1 At any time prior to the Bid Due Date, the department may, for any reason, whether at its own initiative or in response to clarification requested by a Bidder, modify the RFP by the issuance of Addendum/Corrigendum.
- 2.5.2 Any Addendum/Corrigendum issued hereunder will be in writing and shall be sent to all the Bidders.

In order to afford the Bidder a reasonable time for taking an Addendum into account, or for any other reason, the Department may, in its sole discretion to extend the Bid Due Date.

Bidder has to submit bid document in two envelope marked as "Technical" and "Financial" and putting these two envelope in one sealed cover envelope clearly marking as "Bid documents for RFP-Drains" and submit the same in the office of Executive Engineer CD-XII, I&FC Department, Basai Darapur Office Complex, Delhi-110027 on or before 13.06.2019 upto 3.00PM.

The evaluation of RFP has two stages (i) Technical and (ii) Financial. The agency has to qualify both the stages for award of work. Financial bid shall be opened only for those bidders who so ever are qualified technically. L-1 bidder shall be awarded with the work of the respective drain for which it has come out to be L-1. Empanelled Consultant/agencies for PMC of I&FC Department need to submit only Financial bid and they are exempted from submitting the Technical Bid. However, Empanelled Consultant/agencies need to submit Bid Security (EMD) amounting to Rs. 1,00.000/-(Rs One Lakh) along with Financial bid.

#### A Bidder requires/ submit following to qualify in technical bid.

- 1. Self attested copy of Firm registration, registered in India as per law.
- Rs. 1,00,000/- (Rupees One Lakh Only) in the form of DD drawn in favour of Executive Engineer CD-XII, I&FC, GNCTD payable at Delhi as EMD. Not applicable to Govt. Organizations, institutes, Public Sector Undertaking.
- Solvency certificate amounting to Rs. 25 lakh issued by a Bank for current Financial year (Not applicable to Govt. Organizations, Semi Government Organization, PSU, Government Educational Institutes and Empanelled Consultant/agencies).
- 4. The applicant must be a profit making organization with an average annual turnover of at least Rs. 40 lakh in last three years (Not applicable to Govt. Organizations, Semi Government Organization, PSU, Government Educational Institutes and Empanelled Consultant/agencies). In case of a Joint Venture or Consortía, the lead member alone will have to meet this condition (Turn Over Certificate should be signed by Chartered Accountant).
- 5. Self-attested copies of TAN/PAN, GST.

#### Criteria for technical qualification

{Please note:- The experience certificate should be signed by (i) in case of Govt Organization-Not Less Than the Executive Engineer (ii) in case of Private Organization-Not Less Than the Manager.}

Total	(A)	50		
4.	Project done for establishing solar energy or wind energy plants (Solar energy plant-2.5 marks and Wind energy plant-2.5 marks).			
3.	Project of landscaping of water bodies, parks, drains, river front etc. (10 marks for each project maximum of 20 marks).	2x10=20 2.5x2=5		
2.	Having experience of Topographic/ hydrological survey of storm water drain, water body, river etc. (1x2.5 marks for topography survey and 1x2.5 marks for hydrological survey)			
1.	Having experience waste water treatment, project using eco-friendly sustainable technology such as Wet Land, pythorid technology. Experience certificate should be issued on the letter of the department/client and signed by authorized signatory. (10marks for each project executed and maximum of 20 marks)	10x2=20 2x2.5=5		

#### Requirement of Technical Expertise

Requirement	Qualification	Experience	Marks
of Technical			
Expertise			
S. No.		f Vacro	15
1.	B.E, B.Tech., M. Tech. Environmental or any graduate of science having experience in designing in Eco-Friendly sustainable Technology (Wet land, Phythorid on other similar Technology)	5 Years	13
2.	M. Arch. Specialization in land escaping	5 Years	10
3.	M. Tech. Hydrology or equivalent degree	5 Years	10
4.	B.E./B. Tech. Civil Engineering 2 Nos (2 x 5)	5 Years	5
5.	M. Tech Structural Engineering	5 Year	5
6.	B.E./B. Tech. Mechanical/Electrical Engineering 1 Nos.	5 Year	5
	Total (B)		50

Bidder has to score at least 65 Marks (A+B) to qualify in the Technical Stage.

A Bidder requires to submit quote in Rupees against each drain mentioned in Annexure-I with RFP document. The Financial bid will be opened for those bidders who qualify in Technical Stage. The Financial evaluation will be done for each drain and bidder who has quoted the lowest rate will be awarded the work of PMC for that drain.

#### The Selected Agency/ Organization is subject to following conditions:

- The amount quoted is valid upto the completion of maintenance period of 5 years from the date of signing of the agreement. The same can be extended at the discretion of I&FC Deptt.
- The Selected agency has to sign a MOU with the Executive Engineer In-charge before start of work and submit PG amounting to 5% of the quoted amount in the form of FDR.

### C. The scheduled dates for pre-bid meeting and bid submission are as under:

Sl.No	Note: Pre bid meeting will be held in the chamber of Executive Engineer-XII, I&FC Deptt., Govt of NCT of Delhi, Basai Darapur Office Complex, Delhi-110027 at 12:00 A.M. on 10.06.2019
2.	Applicants may submit their bid in sealed cover, so as to reach to office of I&FC, on or before 13.06.2019 upto 03.00 P.M. at the following address: Executive Engineer-XII, I&FC Deptt., Govt of NCT of Delhi, Basai Darapur Office Complex, Delhi-110027

PUNEET DUDEJA EXECUTIVE ENGINEER,CD-XII 9958890112

### FORMET FOR SUBMISSION OF TECHNICAL BID :- Annexure-1 Name of Applicant Firm:-

S. No.	Description	Page No.
1.	Name of Lead Member along with details of members forming Consortia/JV	of
2.	Affidavit clearly stating name of Lead Members by the other members of JV/Consortia	er
3.	Details of Bid Security: DD No, Bank, dat and amount	e
4.	Self attested copy of Firm registration registered in India as per law.	1,
5.	Solvency Certificate amounting to Rs. 25 lakh issued by a Bank for Current Financial Year.	S
6.	Average annual turnover of at least 40 lakhs certificate issued by the Chartered Accountant.	5,
7.	Self-attested copies of TAN/PAN, GST.	
9.	Experience certificate issued on letter of department/client and signed by authorized signatory for project executed for waste water treatment, using eco-friendly sustainable technology such as Wet Land, pythorid technology.	
10	certificate issued on letter of department/client and signed by authorized signatory for execution of Topographic/ hydrological survey of storm water drain, water body, river etc.	
11	certificate issued on letter of department/client and signed by authorized signatory for execution of Project of landscaping of water bodies, parks, drains, river front etc.	
12	B.E, B.Tech., M. Tech. Environmental or any graduate of science having experience in designing in Eco-Friendly Sustainable Technology (Wet land, Phythorid on other similar Technology)	Qualification Certificate and
13	M. Arch. Specialization in land-scaping	
14	M. Tech. Hydrology	Educational Qualification Certificate and experience Certificate
15	B.E./B. Tech. Civil Engineering 2 Nos.	Educational Qualification Certificate and experience Certificate
16	M. Tech Structural	Educational Qualification Certificate and experience Certificate

<sup>\*</sup>Note: Authorized Signatory for experience certificate:

<sup>1.</sup> Issued by Govt. Agencies: Not less than Executive Engineer.

<sup>2.</sup> Pvt. Client, PSU etc: Not less than Manager/Project Manager

#### FORMAT FOR SUBMISSION OF FINANCIAL BID:- Annexure-II

Annexure	Name of work	Quoted amount for PMC (In Rs.)
1	PMC for the work of "Rejuvenation of Kirari Suleman Nagar drain from RD 0 to RD 4100 m in Distt. West Delhi in accordance with the scope of work mentioned on RFP.	(,,,,,)
2	PMC for the work of "Rejuvenation of Madanpur Drain RD 0 to RD 4100 m in Distt. West Delhi in accordance with the scope of work mentioned on RFP	

Signature & Stamp of Applicant

			Constitution of the		Product Cotonon	8	Tanda-Valua in
ų.							
						Ä	Independent External
					Please refer Tender documents.	Please	Pre Qualification Details
by using	olistic manners i	ate drains h	for the work to rejuven	y (PMC) for the technique of the techniq	Project Management Consultancy (PMC) for the work to rejuvenate drains hollstic manners by using ecologically senstative sustainable technique.	Projec	Work Description
					Rejuvenation of Drain.	Rejuv	Title
							Work /Item(s)
		Delhi		_			
At New Delhi	EMD Payable At	EE,CD-XII, I and FC Deptt.,	EMD Payable To	т			
ige NA	EMD Percentage	fixed	EMD Fee Type			No	
on No	EMD Exemption Allowed	1,00,000	0	┙	Fee Payable At Nil	0.00	Tender Fee in 0
			] IS	Ц	Tender Fee Details, [Total Fee in $\square * - 0.00$ ]	s, [To	Tender Fee Detail
ָ קַּיָּ		.pud.					
האם האם		3					
Scanned copy of ESI and EPF Registration documents.		.pdf					
Copy of PAN Card.		.pdf					
Copy of GST Registration No		Finance .pdf	Fee/PreQual/Technical/Finance	1 F		heque	2 FDR 3 Bankers Cheque
Description	Document Type	Do	Cover	Cover	e	nt Typ	1 Demand Draft
		overs - 1	Cover Details, No. Of Covers	Cover		ents	Payment Instruments
		No	Allow Two Stage Bidding	Allow		No	Is Multi Currency Allowed For Fee
		d For No	Is Multi Currency Allowed For BOQ	BOQ BOQ	ō	Offline	Payment Mode
		No	ItemWise Technical Evaluation Allowed	Item Evalu		S	General Technical Evaluation Allowed
		1	No. of Covers	No. o	ces	Services	Tender Category
	Piece-work	Piece	Form of contract	Form		EOI	Tender Type
					2019_IFC_172568_1	2019	Tender ID
					EE/CD-XII/19-20/ReJuvanation	EE/C	Tender Keterence Number
		sion-XII	lood Circle-II  Civil Divi	ONE-II][FI	Irrigation and Flood Control  ZONE-II  Flood Circle-II  Civil Division-XII EE/CD-XII/19-20/ReJuvanation	Irriga EE/CI	Organisation Chain Tender Reference Number
		sion-XII	lood Circle-II  Civil Divi	ONE-II  F	ation and Flood Control  ZC	Irriga EE/Ci	Basic Details Organisation Chain Tender Reference Number
<b>₫</b> Print		slon-XII	lood Circle-II  Civil Divi	ONE-II][F	ation and Flood Control  ZC	Irriga EE/Cı	Basic Details Organisation Chain Tender Reference Number
019 02:46 PM	Date : 23-May-2019 02:46 PM	slon-XII	lood Circle-II  Ciwi  Divi	ONE-II] FI	Stion and Flood Control  ZC	Irriga	Basic Details Organisation Chain Tender Reference Number
019 02:46 PM	Date : 23-May-21	sion-XII	Tender Details  NE-II  Flood Circle-II  CIVI  DIVI	Tender ONE-II  F	Stion and Flood Control  ZC	Tenders  lenders	Basic Details Organisation Chain Tender Reference Number

Contract Type	Empanelment	Bid Validity(Days)	60	Period Of Work(Days)	NA
Location	delhi	Pincode	110041	Pre Bid Meeting Place	O/o EE,CD-XII Basai Darapur
Pre Bid Meeting Address	O/o EE,CD-XII Basai Darapur	Pre Bid Meeting Date	10-Jun-2019 12:00 PM		O/o EE,CD-XII Basai Darapur
Should Allow NDA Tender	No	Prequalification Approval Date	NA	Allow Preferential Bidder	No

<u>Critical Dates</u>			
Publish Date	24-May-2019 10:00 AM	Bid Opening Date	13-Jun-2019 03:30 PM
Document Download / Sale Start Date	24-May-2019 10:00 AM	Document Download / Sale End Date	13-Jun-2019 03:00 PM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	24-May-2019 10:15 AM	Bid Submission End Date	13-Jun-2019 03:00 PM

Tender Do	cume	ent <u>s</u>				
NIT Document	S.No Document Name			Description		Document Size (in KB)
	1	Tendernotice_1.pdf		NIT		101.48
Work Item Documents	S.No	Document Type	Documen	it Name	Description	Document Size (in KB)
	1	Tender Documents	RFP.pdf		NIT	87.81
					A 3 2	*

Bid Ope	eners List		
S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name
1.	vinodkumar8816@gmail.com	VINOD KUMAR	VINOD KUMAR
2.	puneet.civil@gmail.com	PUNEET DUDEJA	PUNEET DUDEJA

Tender Invitir	ng Authority
Name	EE,CD-XII, I and FC Deptt., GNCT of Delhi
Address	O/o EE,CD-XII Basal Darapur

Tender Creator Details	
Created By	PUNEET DUDEJA
Designation	EXECUTIVE ENGINEER
Created Date	23-May-2019 01:57 PM