



**NARAYANPUR MUNICIPAL BOARD, ASSAM**



**REQUEST FOR QUOTATION (RFQ)**

**FOR**

**ENGAGEMENT OF A CONSULTING FIRM FOR PREPARATION OF CLIMATE  
RESILIENT GIS BASED DRAINAGE MASTER PLAN FOR NARAYANPUR**

**(Two Envelope system)**

*Hank*

Chairman  
Narayanpur Municipal Board  
Narayanpur Municipal Board

Executive Officer  
Narayanpur Municipal Board  
Narayanpur Municipal Board



**OFFICE OF THE NARAYANPUR MUNICIPAL BOARD, ASSAM**

Narayanpur, Assam, Pin-784164

Website: <http://narayanpur.assamurban.in>

Email: [narayanpurtc2002@rediffmail.com](mailto:narayanpurtc2002@rediffmail.com)

RFQ No: NMB/69/2024-25/312

Dated : Narayanpur, the 9<sup>th</sup> March, 2026

**PROCUREMENT NOTICE REQUEST FOR QUOTATION (RFQ)**

Sealed quotations are invited **offline in two parts** (Vol-I: Technical Bid and Vol-II: Financial Bid) from experienced and reputed Agencies for the following work under **15th Finance Commission Tied Grant**, Narayanpur Municipal Board. The detailed Bid document is available in the Office of the **Narayanpur Municipal Board** which can be collected from **11/03/2026 to 25/03/2026** during office hours. Bids are to be submitted offline on or before **5:00 PM on 26/03/2026**.

Sl. No.	Name of Work	Bid Processing Fee (Rs.)	Earnest Money Deposit (EMD) (Rs.)
01	<b>“Engagement of a Consulting Firm for Preparation of climate resilient GIS based Drainage Master Plan for Narayanpur Municipal Board”</b>	Rs. 1,000/- only (non-refundable) by way of DD pledged in favour of <i>Executive Officer, Narayanpur Municipal Board</i>	Rs. 20,000/- only (non-refundable) by way of DD pledged in favour of <i>Executive Officer, Narayanpur Municipal Board</i>

1. The bid document is available offline and online in the website of Narayanpur Municipal Board. Bid should be submitted manually.
1. Period of availability of Bid Document: From 11/03/2026 upto 17:00 hrs. of 25/03/2026
2. Date of Starting of Bid Submission by the Bidder: From 26/03/2026 upto 17:00 hrs.
3. Date & time of closing of Submission of Bid: 17:00 Hrs. of 26/03/2026
4. Date of opening of Technical Bid: 27/03/2026 at 14.00 Hr.
5. Place of opening of Bid: Office of the Narayanpur Municipal Board, Narayanpur - 784164
6. If any specified date falls on a holiday, then the next working day or any other day as fixed by the Office of the Narayanpur Municipal Board, will be considered for the submission and opening the RFQ and the time will remain the same.
7. The Schedule indicated above is tentative and the Office of the Narayanpur Municipal Board (NMB) may change any or the entire schedule.
8. The Narayanpur Municipal Board, Assam reserves the right to reject any /all bids without assigning any reason thereof.
9. Applicable Procurement Guidelines/Regulations Date: Assam Procurement Rules 2020.

  
Chairman  
Narayanpur Municipal Board

  
Executive Officer  
Narayanpur Municipal Board



## DISCLAIMER

1. The information contained in this Request for Quotation document (the "RFQ") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form, by or on behalf of Authority or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFQ and such other terms and conditions subject to which such information is provided.
2. This RFQ is not an agreement and is neither an offer nor invitation by Authority to the prospective Bidders or any other person. The purpose of this RFQ is to provide interested parties with information that may be useful to them in making their key submissions, qualification bid and financial bid pursuant to this RFQ. This RFQ includes statements, which reflect various assumptions and assessments arrived at by Authority in relation to the Project.
3. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFQ may not be appropriate for all persons, and it is not possible for Authority, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFQ. The assumptions, assessments, statements and information contained in this RFQ may not be complete, accurate, adequate or correct: Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in the RFQ and obtain independent advice from appropriate sources.
4. Information provided in this RFQ to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.
5. The Authority, its employees and advisors, make no representation or warranty and shall have no liability to any person, including any Bidder, under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFQ or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFQ and any assessment, assumption, statement or information contained therein or deemed to form part of this RFQ or arising in any way with pre-qualification of Bidders for participation in the Bidding Process.
6. The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever.
7. The Authority may, in its absolute discretion but without being under any obligation to do so, update or amend the information, assessment or assumptions contained in this RFQ.
8. The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the



Authority or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

Chairman  
Narayanpur Municipal Board

Executive Officer  
Narayanpur Municipal Board



(A)

**Key Dates**

Sl. No	Description	Details
1	Issuing Authority of the Bid and Address	Executive Officer, Office of the Narayanpur Municipal Board, Narayanpur, Assam - 784164
2	Issuer	Executive Officer, Office of the Narayanpur Municipal Board, Narayanpur, Assam - 784164
3	Date of issue/publication	11/03/2026
4	Last date of submission of pre-bid queries and email id	25/03/2026 till 5:00 PM at the following email ID – narayanpurtc2006@rediffmail.com
5	Start date of Bid Proposal Submission	26/03/2026
6	Date and time of submission of the bid proposal and opening of the Technical Bid	Last date & time of submission: Submission of hardcopy - 26/03/2026 till 5:00 PM in the office of the Narayanpur Municipal Board Opening of Technical Bid: 27/03/2026 at 2:00PM Venue: Office of the Narayanpur Municipal Board, Narayanpur, Assam - 784164
	Bid to be submitted:	
	Technical Bid	Hard Copy
	Financial Bid	Hard only
7	Date of opening of the Financial Bid	To be intimated later to the technically qualified bidders. Venue: Office of the Narayanpur Municipal Board, Narayanpur, Assam - 784164
8	Address for submission of the bid	Office of the Narayanpur Municipal Board, Narayanpur, Assam - 784164
9	Cost of Bid Document	Rs. 1000.00 (Rupees One Thousand) only
10	Earnest Money Deposit (EMD)	Rs. 20,000.00 (Rupees Twenty Thousand )Only

All the correspondence should be in written and may be sent through email or letter. All the communication and the bid submission should be addressed to the undersigned on the address below:

The Executive Officer  
Narayanpur Municipal Board, Narayanpur,  
Dist. Lakhimpur, P.O. Dikrong, PIN - 784164  
Email: narayanpurtc2006@rediffmail.com



## CHECK LIST FOR DOCUMENTS TO ACCOMPANY WITH THE TENDER

(TO BE SUBMITTED IN THE TECHNICAL BID SUBMISSION ENVELOPE)

Sr. No.	Brief details documents required	Whether enclosed or/ not
1	Bid Processing Fee	Yes/No
2	Earnest money Deposit	Yes/No
3	Form Tech 1: Letter of Proposal submission	Yes/No
4	Form Tech 2: Bidder's Organization	Yes/No
5	Form Tech 3: Bidder's experience in Preparation of DPR/ Master Plan urban infrastructure projects (roads, waste management, housing, integrated urban development plan etc with state government or urban local bodies	Yes/No
6	Form Tech 4: Team Composition & Task Assignment	Yes/No
7	Form Tech 5: Declaration for non-blacklisting	Yes/No



**CHECK LIST FOR DOCUMENTS  
(FINANCIAL ENVELOPE)**

Sr. No.	Brief details documents required	Whether enclosed or not
1	Submission of Cost FININANCIAL BID FORMAT	Yes/No



**SECTION – II**  
**INSTRUCTION TO CONSULTANTS**  
**PART-1**

The office of the Narayanpur Municipal Board intends to use 15<sup>th</sup> finance commission grant to rejuvenate a water body along with riverfront development work for beautification and for public use within Narayanpur Municipal Board.

To facilitate this, the Narayanpur Municipal Board intends to issue a Request for Quotation (RFQ) to appoint a consultancy firm for “**Preparation of climate resilient GIS based drainage master plan for Narayanpur**”.

**1. Eligibility Criteria for Consultants**

- 1.1 The Consultant can either be a company, a partnership firm, or a proprietorship firm. The following are the Minimum eligibility criteria -
- a) The bidder must be a registered company/ registered partnership firm proprietorship firm under appropriate authority as per Indian Law with registered office in India
  - b) Joint Venture is not allowed
  - c) The bidder should have minimum 10 years of experience in providing consultancy services, preparation of DPR, master plan, architecture plan etc.
  - d) The bidder should have professionals listed as per the terms of reference to carry out the assignment
  - e) The bidder should have minimum 4 project experience in North- East for preparation of master plan, development plan using GIS technology.
  - f) The bidder must have atleast one project for preparation of hydraulic modelling and drainage plan in NE region.
  - g) The applicant must have a minimum average annual turnover of **Rs. 10,00,000/- (Ten Lakhs only)** over the last three years (i.e. 2022-23, 2023-24 and 2024-25). Copy of CA certificate to be submitted along with copy of balance sheet/ profit loss statement.
  - h) The Bidder should not have been blacklisted by any Government Departments/Agency/ Ministries or PSUs. In this regard a Notary attested affidavit is to be submitted.

**2. Key Submissions**

- 2.1 The Bids comprises of Key Technical Submissions and shall contain the documents as follows
- a. Covering letter in the format set out in Form Tech 1,
  - b. Details of Bidder as set out in Form Tech 2
  - c. Specific Experience in preparation of master plan/ development plan Form Tech 3A
  - d. Specific Experience in preparation of drainage plan in NE region Form tech 3B
  - e. Team composition and Task Assignment as per Form Tech 4
  - f. Self -Declaration (Non-Blacklisting) set out in Form Tech 5,



g. Financial Bid Format as per Financial Bid Format

## 2.2 Documents to be submitted along with Key Submission:

- Company/Firm Registration certificate in case of Registered Company/Firm, partnership deed in case of a partnership firm or proof of proprietorship firm.
- PAN Card of the Bidder.
- Copy of the GST registration Certificate
- CA certificate for Last three-year turnover (i.e. 2022-23, 2023-24, 2024-25).
- A declaration as mentioned in para 1.1(g)

## 3. Proposal

3.1 Consultants may only submit one proposal. If a Consultant submits or participates in more than one proposal, such proposals shall be disqualified.

## 4. Proposal Validity

4.1 The proposal will be valid for a period of 90 days with further extension with written request from the client.

## 5. Taxes

The Consultant shall fully familiarize themselves about the applicable to Domestic taxes (such as: value added or sales tax, GST or income taxes, duties, fees, levies) on amounts payable by the Employer under the Contract. All such taxes must be included by the consultant in the financial proposal.

## 6. Currency

Consultants shall express the price of their Assignment/job in India Rupees.

## 7. Earnest Money Deposit (EMD) and Bid processing Fees

### 7.1 Earnest Money Deposit

- Rs.10,000/- only (refundable) by way of DD pledged in favor Executive Officer Narayanpur Municipal Board payable in Narayanpur.
- Proposals not accompanied by EMD shall be rejected as non-responsive.
- No interest shall be payable by the Employer for the sum deposited as earnest money deposit.
- No bank guarantee will be accepted in lieu of the earnest money deposit.
- EMD of unsuccessful bidders shall be returned on closure of the bid.

### 7.2 The EMD shall be forfeited by the Employer in the following events:

- If Proposal is withdrawn during the validity period or any extension agreed by the consultant thereof.
- If the Proposal is varied or modified in a manner not acceptable to the Employer after opening of Proposal during the validity period or any extension thereof.
- If the consultant tries to influence the evaluation process.



- (IV) If the First ranked consultant withdraws his proposal during negotiations (failure to arrive at consensus by both the parties shall not be construed as withdrawal of proposal by the consultant.

#### **8. Bid Processing Fees/Cost of Tender documents**

- 8.1 Rs.500/- only (non-refundable) by online in favour of Executive Officer, Narayanpur Municipal Board payable in Narayanpur. The Bid Processing Fee is Non-Refundable. Please note that the Proposal, which does not include the bid processing fees, would be rejected as non-responsive.

#### **9. Submission of proposal**

- 9.1 The original proposal, both technical and Financial Proposals shall contain no interlineations or overwriting, except as necessary to correct errors made by the Consultants themselves. The person who signed the proposal must initial such corrections. The technical formats and the financial formats to be submitted in two separate envelopes. The submission to be made only in hard copy. The final envelope containing both technical formats and financial formats in separate envelope should be titled with the name of the project / assignment.

#### **10. Proposal Evaluation**

- 10.1 The employer has constituted a Consultant Selection Committee (CSC) which will carry out the entire evaluation process. Evaluation of Technical Proposals: CSC while evaluating the Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded and the competent authority accepts the recommendation.
- 10.2 The CSC shall evaluate the Technical Proposals on the basis of their responsiveness to the eligibility criteria and the key submissions as per section 2 of the RFQ. Evaluation of the technical proposal will start first and at this stage the financial bid (proposal) will remain unopened.
- 10.3 Public opening & evaluation of the Financial Proposals: Financial proposals of only those firms who are technically qualified shall be opened publicly on the date & time specified the Data sheet, in the presence of the Consultants' representatives who choose to attend. The name of the Consultants, their technical score (if required) and their financial proposal shall be read aloud.
- 10.4 After opening of financial proposals, the lowest quotation in terms of Indian Rupees (Inclusive of taxes) shall be declared winner and be eligible for award of the contract. This selected consultant will then be invited for negotiations, if considered necessary and then the employer will issue letter of Intent / sign contract etc

#### **11. Security Deposit**

- 11.1 Successful Tenderer shall have to pay security deposit amounting to 5% of work order amount in form of Demand Draft/ in the form of Bank guarantee valid for entire duration of the project period from the date of issue of LOI from any nationalized Scheduled Bank. This security deposit will remain with NMB interest free.



**SECTION- 3**  
**TECHNICAL PROPOSAL – STANDARD FORMS**



## FORM TECH 1: LETTER OF PROPOSAL SUBMISSION

Location (date)

To

[Name of the employer and address]

Dear sir

We, the undersigned, offer to provide the consulting Assignment/job [insert title of the assignment/job] in accordance with your Request for Proposal dated [dated] and our proposal. We are hereby submitting our Proposal, which includes the Technical Proposal, and a Financial Proposal sealed under a separate envelope and requisite EMD and the Bid Processing Fees.

We are submitting our proposal in association with [insert name of the associated consultant]

We hereby declare that all the information and statements made in this proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the proposal, i.e. before the date indicated in the Section 9, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

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

We remain

Yours sincerely

Authorizes signature [in full and initials]

Name and title of signatory

Name of Firm

Address



## FORM TECH - 2: BIDDERS' ORGANIZATION

<b>Name of the Bidder</b>	
<b>Address of Registered Office of the Bidder</b>	
<b>Year of Establishment:</b>	
<b>Contact Person with Contact Details:</b>	
<b>Annual Turnover* in last three years ( in Rs. Crores)</b> FY 2022-23: FY 2023-24: FY 2024-25: <b>Average Annual Turnover for above three Financial Years:</b> <b>*Financial Statements to be enclosed</b>	
<b>PAN Number</b>	
<b>GST Number</b>	
<b>Any Other Relevant Details:</b>	

**(Signature of Authorized Person)**

Date:

Seal:



**FORM TECH-3A: BIDDER'S EXPERIENCE IN PREPARATION OF MASTER PLAN/ DEVELOPMENT PLAN INVOLVING ROADS, STORM WATER DRAINAGE, LANDSLIP PROTECTION, WASTE MANAGEMENT, HOUSING, INTEGRATED URBAN DEVELOPMENT PLAN ETC WITH STATE GOVERNMENT OR URBAN LOCAL BODIES**

[List projects (not more than 10) executed in last 10 years.]

[The following information should be provided in the format below for each reference assignment for which your firm, either individually as a corporate entity or as one of the major companies within a consortium, was legally contracted by the Employer stated below.]

<b>Name of the Project:</b>	<b>Approx. value of the contract (in current `):</b>
<b>Country:</b>	<b>Duration of contract (months):</b>
<b>Location within country:</b>	
<b>Name of Client:</b>	
<b>Address:</b>	
<b>Start date (month/year):</b> <b>Completion date (month/year):</b>	
<b>Name of joint venture partner or associated partner if any:</b>	
<b>Name of senior regular full-time employees of the firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):</b>	
<b>Narrative description of Project:</b>	
<b>Description of actual services* provided in the Contract:</b>	

*\*Copy of Work order /completion certificate/ Contract to be submitted*

Firm's Name: \_\_

Signature of Authorized Representative:



**FORM TECH-3B: BIDDER'S EXPERIENCE IN PREPARATION OF GIS BASED DRAINAGE PLAN AND HYDRAULIC MODELLING**

[List projects (not more than 10) executed in last 10 years.]

[The following information should be provided in the format below for each reference assignment for which your firm, either individually as a corporate entity or as one of the major companies within a consortium, was legally contracted by the Employer stated below.]

<b>Name of the Project:</b>	<b>Approx. value of the contract (in current `):</b>
<b>Country:</b>	<b>Duration of contract (months):</b>
<b>Location within country:</b>	
<b>Name of Client:</b>	
<b>Address:</b>	
<b>Start date (month/year):</b> <b>Completion date (month/year):</b>	
<b>Name of joint venture partner or associated partner if any:</b>	
<b>Name of senior regular full-time employees of the firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):</b>	
<b>Narrative description of Project:</b>	
<b>Description of actual services* provided in the Contract:</b>	

*\*Copy of Work order /completion certificate/ Contract to be submitted*

**Firm's Name:** \_\_

**Signature of Authorized Representative:**



## FORM TECH 4: TEAM COMPOSITION

Professional Staff (Key Professional)

Sl no	Expert Position	Qualification	Name of the Firm	Brief Experience
1	Team Leader cum Drainage Expert			
2	Geographic Information System Specialist			
3	Hydrologist			
4	Urban Planner and Socio-economic Specialist			
5	Structural Engineering Specialist			
6	Support Engineer			
7	Quantity Surveyor			

**(Signature of Authorized Person)**

Date:

Seal:



**FORM TECH 5 : NON BLACKLISTING**

**Self- Declaration - Non-Blacklisting**  
*(To be submitted as Notary attested Affidavit)*

To

[Name of the Employer and Address]

Sir

In response to the RFQ reference no..... dated..... for [mention title of the assignment], I/We hereby declare that our agency has never been black listed either indefinitely or for a particular period of time by any State/Central Government Department or Agency/PSU.

I/ We also declare that we fully understand that if this declaration is found to be incorrect then my/our bid may be summarily rejected without prejudice.

Thanking You

Name of the Bidder  
**(Signature of Authorized Person)**

Date:



#### **SECTION- 4**

### **FINANCIAL PROPOSAL – STANDARD FORMS**



## FINANCIAL BID FORMAT

Project: "Engagement of a consulting Firm for preparation of climate resilient GIS based drainage master plan for Narayanpur".

Client Narayanpur Municipal Board

### SUMMARY OF COSTS

Sl. No.	Expense Heads	Amount in INR	Amount in Words
1	Total Lum sum Fee	0	
	<b>Total Cost</b>	<b>0</b>	
	GST@18%	0	
	<b>Grand Total Cost</b>	<b>0</b>	

Authorizes signature [in full and initials]

Name and title of signatory

Designation:

Name of Firm

Address



**TERMS OF REFERENCE – “Engagement of a consulting Firm for preparation of climate resilient GIS based drainage master plan for Narayanpur”.**

**I. TERMS OF REFERENCE**

**A. SCOPE OF WORK**

1. The proposed project has been taken up for improvement of storm water drainage management of Narayanpur MB. The scope will cover preparation of a storm water drainage master plan for Narayanpur MB to identify the existing conditions of flooding, especially, applying the scientific approach including hydraulic modeling.

**MASTER PLAN PREPARATION**

**Task 1: Mobilization**

2. The Team Leader of the Consultant will initially mobilize with some key members of the project team following notice to proceed to set up of project office including furnishing and then will mobilize further manpower, equipment & peripherals.

**Task 2: Submission of Inception Report**

3. The Consultants will, after initial interactions with NMB and concerned agencies, review all reports / data available to identify the data gap and will finally draw and present an action plan for collection of all such data / information. The Consultants at this stage will prepare & present a draft Inception Report and will finalize the same in discussion with the NMB.

**Task 3: Situational Analysis & Collection of Data:**

- i. The Consultants will carry out topographical surveys and investigations to develop GIS base maps for analysis with overlay of utilities information for sewerage, water supply, drainage systems, electric cables and telephone cables etc. During such survey following minimum investigations will be carried out along with other investigations:
  - Marking of onsite ground control points to correlate the site topography with remote sensing satellite data
  - Drainage condition assessment
  - Historical data and information about flooding (area and depth)
- ii. Collect data related to hydrometeorology (elevations, river levels, river flow, rainfall, cyclone frequency and intensity, storm surges, river and urban flooding, temperature, groundwater extraction, etc.) and the outputs of various modeling results from the existing documents and analyses in the target area. Utilize reliable secondary data as much as possible and, where such data are not available, take the direct measurements necessary to develop and calibrate models. In addition to the topographical maps, satellite or airborne data will be used for elevation data, if available, considering the hydraulic modeling requirement. The consultant will have to prepare a plan for purchasing satellite or airborne data in a cost-effective way.
- iii. Review and analyze climate change projections based on existing literature including Assam State Action Plan on Climate Change and general circulation and regional climate model outputs and assess the associated risks. Define the climate scenario to be considered in the project design with due consideration of the planning horizon.



- iv. Collect available data and review the status of existing drainage structures and future plans for extending and/or upgrading drainage structures. Data to be collected can include the type, location, and capacity of drainage assets; water service coverage; and coverage of sewage disposal and sanitation systems.
- v. Collect available socioeconomic and physical data. Socioeconomic data to be collected include population density; population trends; the location of slums; flooding caused by past extreme weather events; and those related to public health, such as the incidence of disease related to extreme weather events, such as waterborne diseases. Data to be collected on physical characteristics include topography, land use, and land subsidence. Collect historical and projected data and, where data are insufficient, take actual measurements as needed.
- vi. Review urban land-use plans and policies and current local practices for coping with flooding variability and extreme weather events, such as early warning systems and evacuation planning.
- vii. Simulate the hydrology of urban watersheds and determine flooding, and other impacts using flooding scenarios identified above. Run the flood model under different return period of rainfall intensity with and without climate change to estimate economic losses due to flood and avoided losses with the project. Adjust project designs to embed structural and nonstructural climate change adaptation measures. Based on the modeling results regarding extent of flooding, assess social and economic impacts on drainage systems, both qualitatively and quantitatively, including their public health implications and impacts on the poor. The results of model estimations for the calibration period will be cross checked with past data to justify and document the robustness of the models.
- viii. Prepare a digital map of the assessment results using geographic information system (GIS) technology. The GIS-based digital map will show flooded areas and duration, and other impacts of flooding under various model results.

**Task 4: Submission of Survey / Investigation Report**

4. The Consultant will prepare and submit a survey / investigation report to review and for future reference.

**Task 5: Preparation and presentation of Draft Master Plans**

5. The Draft Master Plan will broadly deal the following aspects:
  - Highlight the existing conveyance and disposal system for waste water & surface runoff.
  - The topography and development pattern of the project area
  - The existing population growth as per census and anticipated growth pattern till end of the design period
  - Consultants should conduct hydraulic analysis using satellite and airborne data with innovative approaches as much as possible.
  - Analysis of past rainfall data and development of intensity-duration curve to assess the likely storm runoff from different built-up areas of the town
  - Study of existing water body like pond, lake etc. and its broad rejuvenation plan to integrate with water drainage management plan.



- Reducing capital and recurrent costs such as using existing drains to the greatest extent possible for no retention of water at all or use natural gradient for designing of the drain.
- Description of planning & design norms / criteria for designing drainage and associated facilities including pumps and retention basins, and nonstructural measures including early warning system, evacuation and emergency plans, flood risk mapping, and land use regulations.
- Review the present institutional mechanism of operation and maintenance and suggestion on any structural changes if required.
- To develop draft master plans for drainage facilities and suggest various project components to accommodate for the shortfall in drainage facilities to meet the future demand. Also, study and identify the drainage facilities needing rehabilitation, upgrading etc.
- To develop various conceptual options, preliminary project cost estimates,
- Preliminary whole life cycle cost analysis. To carry out financial analysis and development of decision matrix to select the optimal conceptual solutions.
- Identification and prioritization of sub-projects / components to achieve flood mitigation objective.
- Effect of climate change on the Intensity-Duration-Frequency (IDF) curve and the possible impact on the drainage design has to be considered.
- O&M requirements: Present practices of operation and maintenance including type of tools and equipment available shall be analyzed and necessary alternate options including infrastructure required for effective O&M shall be suggested including institutional arrangements for strengthening the O&M system.
- Draft Master Plan report shall be prepared for the horizon year 2045 and Master plan report shall include project formulation, phasing of works and cost estimation, up to year 2045 including reorganization of existing drainage zones. Identification of project components and phasing of works shall be discussed before finalization of Master Plan.

**Task 6: Finalization of Master Plan**

6. After such review & interaction the Consultants will then finalize and submit final Master Plan for Drainage systems. Once finalized the recommendations in the Master Plan will be divided into priority sub project components based on an evaluation from social, economic, environment and technical aspects.

**B. Consultants' Requirement**

7. **Experts:** as per the table below:

National Experts		Qualification & Experience
1	Team Leader cum Drainage Expert	The team leader cum Drainage expert should have a postgraduate in Civil Engineering or equivalent and master's degree in environmental/public health or equivalent with minimum 15-year experience in designing of large integrated drainage projects, pumping stations etc.
2	Geographic Information System Specialist	The GIS expert should have a degree in science/ any engineering discipline



National Experts		Qualification & Experience
		preferably with a master in GIS. In addition, he/she should have at least 10 years' experience in GIS development in water network/urban planning, base map preparation etc.
3	Hydrologist	The hydrologist should have a minimum master's degree in water resources engineering/ Hydro informatics/Hydrogeology or similar. S/He should have at least 10 years' working experience in drainage development projects. Should have experience in hydraulic modelling
4	Urban Planner and Socio-economic Specialist	The specialist should have a post graduate degree in the field of urban planning, social sciences/ economics or related field. Experience in landuse planning, urban development plan. At least 5 years of work experience in relevant field.
5	Structural Engineering Specialist	The structural engineer should be a graduate in Civil Engineering with at least 10 years' experience. He/She must have experience in drainage system design with modern technologies.
6	Support Engineer	Degree in Civil Engineering with 5 years' relevant experience in design and construction supervision
7	Quantity Surveyor	Degree in Civil Engineering with 5 years' experience quantity surveying

### c. Reporting Requirements and Deliverables and payment stage

8. The consultants will submit the following reports. The team leader and the consultant firm will ensure high quality of these reports incorporating the comments to be NMB

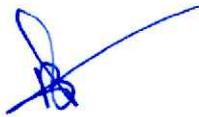
No.	Report Requirements	Timeline for delivery	Payment stage
1	Inception Report indicating methodology of collecting data, conducting models, detailed work plan, and implementation schedule.	Within 1 month of the date of formal go-ahead	20% of contract value
2	Submission of survey report in GIS report including outputs including situation assessment	Within 2 months of the date of formal go-ahead	30% of contract value
3	Draft master plan including all outputs	Within 5 months of the date of formal go-ahead	30% of the contract value
4	Final master plan including all outputs after incorporation of observation from client	Within 5 months of the date of formal go-ahead	20% of the contract value



#### **D. Working Arrangements**

- (i) Client will assist in providing related data, maps and plans, drawings and other information available with Government / ULBs for the project town.
- (ii) Office Space, equipment, software and facilities related to the performance of services under the contract shall be arranged by the Consultant at his cost.
- (iii) All surveys, tests, investigations, studies, mappings required for satisfactory performance of the service for all project components shall be carried out by Consultant at his own cost.
- (iv) The consultant shall take out and maintain adequate insurance of all equipment and reports etc. at his own cost.

  
Chairman  
Narayanpur Municipal Board

  
Executive Officer  
Narayanpur Municipal Board