

Request for Proposal

Topographic survey, Percolation testing, and Drainage area analysis for Rain Garden Implementation - Green

Issued by: Technology Informatics Design Endeavour (TIDE)

Release date: 12-August-2026

Submission deadline: 22-August-2026

Location: Chennai, Tamil Nadu

Background and Objective

Technology Informatics Design Endeavour (TIDE) is a non-profit organization dedicated to implementing sustainable water management and environmental solutions. As part of the Green Oasis Project, TIDE proposes to implement rain gardens across 10 identified locations in Chennai during 2026–2027.

Rain gardens are nature-based stormwater management systems that improve groundwater recharge, reduce urban flooding, enhance biodiversity, and contribute to climate resilience. To support effective planning and implementation of these rain gardens, TIDE requires detailed site assessments to understand site topography, soil infiltration characteristics, drainage patterns, and hydrological conditions.

The objective of this assignment is to undertake detailed topographic surveys, percolation testing, and drainage area analysis across the identified sites and provide technical recommendations to support the design and implementation of rain gardens.

TIDE invites qualified agencies, consultants, and technical service providers to submit proposals for carrying out the scope of work outlined in this RFP.

Scope of Work

The selected vendor will deliver the following services across 10 sites:

1. Topographic survey

- Conduct detailed topographic surveys using advanced equipment (Total Station, Drone, or LiDAR).
- Capture and document: Existing site levels/contours, Slope/elevation variations, physical site features including roads, structures, trees, utilities and other relevant infrastructure.
- Provide high-accuracy digital data and maps on site contours, slopes, drainage patterns, and other relevant parameters in formats compatible with CAD/GIS software.

2. Percolation Testing

- Perform soil infiltration tests at each site to determine the soil infiltration capacity.
- Provide test reports indicating soil suitability for rain garden implementation.
- Recommend soil amendments where necessary.

3. Drainage Area Calculations

- Analyze existing surface runoff/drainage patterns and calculate contributing catchment areas for each site.
- Estimate runoff volume and drainage characteristics.
- Capture and document existing drainage pathways, potential storm water inflow and outflow locations.
- Propose recommendations for optimal rain garden sizing based on drainage and soil infiltration tests.

The vendor should adhere to all applicable environmental and safety standards during survey and testing phases. Coordinate site visits in consultation with TIDE.

Expected Outputs

1. Topographic survey: Contour maps, slope analysis, and digital files (CAD/GIS format).

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2. Percolating testing: Test results and a detailed report with soil suitability and amendment recommendations.
3. Drainage area analysis: Runoff calculations, Catchment delineation maps, and drainage pattern analysis with recommendations for rain garden sizing dimensions.
4. Consolidated Technical report: Site – wise assessment findings, documentation of constraints and opportunities, technical recommendation for rain garden implementation and photographic documentation.

Qualification Requirements

Interested vendors must demonstrate:

- Proven experience in topographic surveying, hydrological assessments, drainage studies, or related infrastructure projects.
- Availability of qualified technical personnel and surveying equipment.
- Experience in GIS, CAD, and hydrological analysis.
- Ability to deliver assignments within stipulated timelines.
- Compliance with statutory and regulatory requirements.

Proposal Requirements

1. Technical Proposal

- Detailed methodology and approach for each project task.
- Work plan and timeline for completion.
- Equipments and tools to be deployed.
- Profile of the organization, including relevant experience.
- Profiles of the project team and key personnel.
- References and past project examples, including contact details of clients.

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2. Financial Proposal

- Comprehensive cost breakdown for each component of the scope of work
- Any applicable taxes or additional charges.
- Contingency plan addressing potential unforeseen costs.

3. Other details

- Business registration certificates.
- Proof of office address (if required).

Evaluation Criteria

Proposals will be evaluated based on:

Criteria	Weightage
Technical approach and Methodology	30%
Relevant Experience & Past Performance	20%
Team qualification & Capability	15%
Financial Proposal	25%
Delivery timeline	10%

Deliverables & Timeline

On issuance of work order or finalisation of the site list from TIDE team the detailed assessment for each site needs to be completed within 10 days.

Payment terms

- Stage 1 - 20% on submission of report and relevant documents for 2 selected sites
- Stage 2 - 20% on submission of report and relevant documents for 2 selected sites
- Stage 3 - 20% on submission of report and relevant documents for 2 selected sites
- Stage 4 - 20% on submission of report and relevant documents for 2 selected sites
- Stage 5 - 20% on submission of report and relevant documents for remaining 2 sites

Payment will be made through bank transfer to the vendor's registered bank account. Any advance payment requested will be provided upon submission of a bank guarantee or a security cheque for the equivalent amount.

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Proposal submission method

All proposals must be submitted electronically to:

procurement@tide-india.org

Subject line: "Proposal for <Site assessments for implementation of rain garden >"

Late submissions will not be accepted.

Deadline for Submission

All proposals must be received on or before: 22.08.2026

Queries & Clarifications

All clarification requests must be emailed to: info@tide-india.org

Deadline for queries: DD.MM.YYYY

Rights of TIDE

TIDE reserves the right to:

- Accept or reject any proposal without assigning any reason
- Request additional information from vendors
- Modify the scope of work based on project needs
- Cancel or terminate the RFP process at any stage