

**GOVERNMENT OF MEGHALAYA
OFFICE OF THE PROJECT DIRECTOR
STATE INVESTMENT PROJECT MANAGEMENT AND IMPLEMENTATION UNIT
ASIAN DEVELOPMENT BANK- ASSISTED NERCCDIP-PROJECT
URBAN AFFAIRS COMPLEX, DHANKHETI, SHILLONG.
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No. SIPMIU/MEG/4/2016/159,

Dated Shillong, the 16th May, 2016.

**INVITATION FOR EXPRESSION OF INTEREST (EOI)
FOR DESIGN, CONSTRUCTION SUPERVISION AND MANAGEMENT CONSULTANCY
UNDER ASIAN DEVELOPMENT BANK ASSISTED NORTH EASTERN REGION
CAPITAL CITIES DEVELOPMENT INVESTMENT PROGRAMME (NERCCDIP).
ADB LOAN NO 2834-IND**

Package No: SIPMIU/SHG/E1-Extn

Package Name: DSMC-T2-SHG

Government of Meghalaya with financial assistance from Asian Development Bank (ADB) is implementing the North Eastern Region Capital Cities Development Investment Program (NERCCDIP) for development of solid waste management practices in Shillong City, the Capital city of Meghalaya. The Project will involve development of urban infrastructure work, in the sectors of sanitation and solid waste management related to Environment, Social and Community involvement in the project city.

The Project Director, SIPMIU on behalf of Government of Meghalaya, invites Expressions of Interest (EOI) for providing Consultancy services for Design, Construction Supervision and Management Consultancy at the project City from eligible and registered Consultants with experience in handling similar work with Government & Externally Funded Agencies.

The consulting firm shall be selected and engaged in accordance with the Guidelines on Use of Consultants by ADB and its Borrower (2013, as updated from time to time). The employer shall be using the Quality and Cost – Based Selection (QCBS) method.

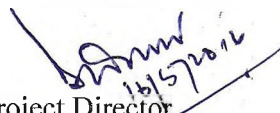
Please note that only on-line submission of Expression of Interest (EOI) in ADB's Consultants Management System (CMS) is allowed. All off-line or manual EOI submission of EOI is not permissible and will not be consider.

Interested consulting firms are invited to submit EOI in ADB CMS on or before 14th June, 2016 through the link below:

https://uxdmz06.adb.org/OA_HTML/adb/xxcrs/jsp/ADBCsrnFwd.jsp?sel=127815

For online submission: Your EOI shall demonstrated technical competence and geographical experience based on project references entered in full registration under your CMS profile. We encourage you to update Project Information under your CMS prior to filing EOI. Please provide relevant project information in Section E of the EOI.

Please see template for Expression of Interest (EOI) that you would need to fill-up in CMS & TOR for your reference from the office website <http://sipmiu.nic.in>; Shillong Municipal Board website <http://smb.nic.in>; CSRN website of ADB or may be obtained from the office of the undersigned during normal working Hours.


Project Director,
SIPMIU, Shillong

TERMS OF REFERENCE FOR CONSULTANTS

DESIGN, CONSTRUCTION SUPERVISION AND MANAGEMENT CONSULTANCY FOR SHILLONG

Package No: SIPMIU/SHG/E1-Extn

Package Name: DSMC-T2-SHG

1. Background

The Government of India is implementing an investment program to improve urban conditions in North Eastern Region capital cities, namely, Agartala, Aizawl, Gangtok, Kohima and Shillong. The expected impact of the Investment Program is improved environment and well-being of urban residents in the five capital cities. The expected outcomes of the Investment Program will be an increased access to better urban services for the people expected to be living in the Investment Program cities. To this end, the Program will (i) improve urban infrastructure and services, (ii) strengthen urban institutions for better service delivery build Program management and implementation capacity.

In Shillong, the Program has been ongoing for the last 6 years and is being extended for a further period of 2 years i.e up to June 2018 and will specifically support the Government in developing solid waste management facilities, including an engineered landfill site, reconstruction of a compost plant and improvements to primary and secondary collection as well as beneficiary awareness and behavioral changes.

2. Objective(s) of the Assignment

The objective of the assignment for the Consultants is to assist the State Government in providing the people living in the city access to better urban services especially in the sanitation and solid waste management sector. To help create citizens awareness and behavioral changes with regards to waste management. It is also expected to help in strengthening urban institutions for better service delivery, management and implementation capacity.

3. Scope of Services, Task (Components) and Expected Deliverables

3.1.1. The **major assignment** in this consultancy shall be construction supervision and contract monitoring and assist the SIPMIU in conducting public awareness campaigns. The work shall also consist, wherever required, (a) conduct necessary surveys, investigations and tests; (b) technical appraisal of subprojects and updating preliminary designs (c) review and prepare detailed engineering designs; (d) preparation of bidding documents and technical support during evaluation and (e) preparation of safeguards (environment & social) reports, etc.

As stated above, the **major assignment** in this consultancy shall be construction supervision and contract monitoring of the solid waste management programs, including an engineered landfill site, reconstruction of a compost plant and improvements to primary and secondary collection as well as beneficiary awareness and behavioral changes. It may be mentioned that most of the designs has been completed for both Tranche 1 & 2, however, may require review during implementation of the works. The summary has been provided in Table 1.

Table 1 – Proposed contract responsibilities and resource structure

Activity	Design Review (if necessary)	Construction Supervision
Solid Waste Management		
Development of landfill site at existing site.	YES	YES
Provision of primary collection equipment	YES	YES
Provision of secondary collection equipment	YES	YES
Provision of transfer points	YES	YES
Construction of compost plant	YES	YES
Procurement of machinery for the above	YES	YES

Activity	Management
Environmental Studies, Land acquisition and Resettlement	
Solid Waste Management	YES
Community Awareness Program	
Solid Waste Management	YES
Compost Studies	YES
Program Performance Monitoring System	
MIS/M&E program	YES
Operational Manuals	
Solid Waste Management	YES

The scope of work shall include and not limited to the following activities:

Review of Design, Preparation of Bidding Documents and Support to Bid Evaluation, wherever required

- (i) sanitary landfill site, compost plant, routing plans and transfer points;
- (ii) evaluation of requirements for primary and secondary equipment improvements;

Construction Supervision (major assignment)

- (i) implementation of sanitary landfill site;
- (ii) implementation of primary and secondary waste collection improvement process;
- (iii) implementation of compost plant.

Management

- (i) preparation of environmental and social safeguards (IEEs, EMPs, EIAS, RPs, IPDPs) documentation, as necessary;
- (ii) preparation and follow up on the ongoing community awareness campaign (with special focus on solid waste management, cost recovery and charges);
preparation of management and monitoring systems and baselines.

3.1.2. Overview of the Design and Supervision Engineering Services

General tasks of the team include:

- (i) assist the Program director with the day-to-day implementation of contracts and Program activities;
- (ii) coordinate planning, control, and management of the work of a multidisciplinary team;
- (iii) develop implementation schedules and resource requirements;
- (iv) monitor progress, evaluate results, and identify and resolve constraints;
- (v) provide long-term input to the development of Program methodologies;
- (vi) evaluate demand and establish criteria to meet demand;
- (vii) identify appropriate technologies and the need for standardization of equipment and materials;
- (viii) assist the Program director in carrying out detail investigation and engineering surveys (geotechnical, topographical, bathymetric etc), wherever necessary;
- (ix) assist the Program team designing and undertaking construction supervision of solid waste management schemes;
- (x) assist the Program director in presenting of the designs to all stakeholders (including local government and communities), addressing their concerns where necessary;
- (xi) assist the Program director in developing bidding documents, including bill of quantities and specifications following ADB's guidelines and assist in evaluation of bids;
- (xii) update costs and economic and financial information (including rates of return), when needed;
- (xiii) prepare and update implementation schedule and resource requirements (preferably in Microsoft Project Management);
- (xiv) define quality control mechanisms and parameters for subprojects/components;
- (xv) assist the Program director in supervising all construction activities under the Program, including liaison with the other teams under the Project and other donor financed projects, and community development team;
- (xvi) develop and implement a quality assurance program for all works, securing compliance with design/standards;
- (xvii) assist the Program directors in supervising day-to-day construction management;
- (xviii) develop O&M manuals for future maintenance;
- (xix) prepare asset registry for all assets built under the Program;
- (xx) establish a contract tracking systems, including implementation schedules and milestones achievable;
- (xxi) assist the SIPMIU in issuing contract completion certificates, settlement of contractor's claims;
- (xxii) assist the SIPMIU during Program missions;
- (xxiii) assist the SIPMIU in the preparation of Program guidelines;
- (xxiv) Prepare training programmes for effective implementation and O&M including Training Module, Training Plans and organize and conduct same through consultant's staff and other service delivery institutions

The DSMC will be specifically concerned with assisting (i) the review of available designs, as well as any other DPRs or related detailed engineering designs; (ii) the preparation detailed engineering designs and providing construction supervision for all sanitation and solid waste management scheme components; (iii) the review of designs to be prepared by Bidders; (iv) construction supervision to ensure the necessary standards are

duly met. These schemes and the scope of work falling under the Supervising Engineers responsibility have been presented under Table 1 above.

The consultants will develop and implement a computer-based Program covering implementation plan, critical paths, resource maps. All reports required will be produced based on these systems. The consultants will coordinate with other consultants under the Program and with other similar other donor and government assisted projects.

Designs and Tender Process: The consultant will review the existing designs and DPRs with SIPMIU staff and prepare an Inception Report which should include the related works and details of the program of works which the consultant proposes to implement. Overall scope of works will include:

- (i) Review the existing designs and subsequent detailed project reports together with SIPMIU staff.
- (ii) Assist SIPMIU in the review of the design, wherever required, for proposed sanitation and solid waste management including all necessary designs, drawings and schedules, as well as indicative bills of quantities, specifications including commissioning specifications and on-site training for plant operation maintenance by contractors.
- (iii) Assist SIPMIU staff carrying out wherever required detailed investigations and engineering surveys including sanitation/solid waste testing and engineering surveys (soils, topography etc), wherever required.
- (iv) Confirm the scope of provision of equipment for plant and equipment and review proposed specifications for the plant and equipment for all subsectors.
- (v) Assist SIPMIU staff conducting wherever required detailed engineering designs as per Table 1, including landfill and other solid waste management facilities.
- (vi) The Consultant shall facilitate the dialogue with Central and State Government and ULB agencies.
- (vii) The Consultant shall support the SIPMIU in obtaining required EIAs, compliance with resettlement requirements and any other regulatory or permits.
- (viii) Assist SIPMIU staff reviewing designs prepared by bidders, including those that relate to primary and secondary distribution.
- (ix) Check that the contractors' proposals are in agreement with all environmental and social safeguards requirements.
- (x) Assist the SIPMIU staff to develop, wherever required, bidding documents and preparation of bills of quantities and specifications and drawings.
- (xi) Assist in bid evaluation, wherever required.
- (xii) Assist wherever required in the preparation of contracts for signature.

Construction Supervision and Commissioning: This will be the **major assignment** and the consultant shall assist the SIPMIU staff carry out all the duties normally associated with supervision of construction. This will include but is not limited to checking contractors' insurances/ guarantees/ bonds; the review of contractors' process and M&E designs and any necessary modifications to the construction drawings; attending and reporting on factory tests and inspections; agreeing commissioning procedures and supervising commissioning. The consultant shall establish any necessary field laboratories for quality control or arrange for such services to be provided by acceptable Institutions.

- The consultant shall
- (i) Assist the SIPMIU staff supervising and assure quality of implementation of the projects.
 - (ii) Assist the SIPMIU staff supervising all construction activities under the Program and the implementation of the environmental management plan as required.
 - (iii) Co-ordinate interfaces between contractors and clients.
 - (iv) Support SIPMIU with contract management and recommendation for payments.
 - (v) Develop and implement a quality assurance program for all works.
 - (vi) Agree and prepare contractor's certificates; resolve any disputes and provide all necessary support for claims resolution and arbitration proceedings.

3.1.3. Overall Scope of Management Services

Overall scope of work can be defined as follows:

- (i) Set up systems and procedures for Program management, implementation and monitoring of the progress,
- (ii) Assist SIPMIU in preparing annual work plans, staffing schedules, job descriptions, and, as necessary, budgets including equipment budgets, and detailed implementation schedule
- (iii) Assist SIPMIU in preparing an overall Investment Program Performance Monitoring System (IPPMS) for the Program and ensure that the necessary independent inputs are in place when and where required;
- (iv) Assist SIPMIU in operating the IPPMS and in monitoring the physical progress with urban infrastructure components as well as the progress with the implementation of the Urban Governance, Finance, and Service Delivery Improvement Action Plan and the loan covenants; and with the SIPMIU, ensure the effective and timely delivery of the program outputs as well as the Urban Governance, Finance, and Service Delivery Improvement Action Plan and the loan covenants.
- (v) Prepare on behalf of SIPMIU required Investment Program and Program progress reports, and submit timely reports to the Government and ADB on physical progress, financial progress, and progress on implementing Urban Governance, Finance, and Service Delivery Improvement Action Plan and the loan covenants, highlighting impediments to the quality and progress of the works and remedial actions,
- (vi) Develop procedures and prepare guidelines for procurement including pre-qualification and post-qualification of contractors, evaluation of bids, recommendation of awards of contracts etc;
- (vii) Prepare and/or amend, existing procedures and guidelines for site supervision and quality control to include guidelines and detailed job descriptions for engineers and site supervisors.
- (viii) Assist the SIPMIU in supervising, coordinating and monitoring the work of the IPCC and the IDCs;
- (ix) Support the SIPMIU in technical matters such as preparing work orders for the sub-consultants; reviewing and approving surveys, studies and master plans; sub-program final designs, construction drawings and estimates; pre/post-qualification of contractors; approving contractors' works; ensuring sound supervision and quality control of sub-program construction and any other technical matters arising;

- (x) Assist the SIPMU with all aspects of procurement including pre / post-qualification of contractors, tender document review and bid evaluation;
- (xi) Review construction supervision including quality, cost and time controls;
- (xii) Assist the SIPMIU in other tasks as assigned to it by the EA.
- (xiii) Support Empowered Committee in the preparation of (i) municipalization situational assessments; (ii) municipal board and capacity development and resource programs plans and (iii) time-bound action plans for devolving functions to the municipalities in a phased manner.

3.1.4. Specific Tasks:

Team Leader & Resident Civil Engineer

The Team Leader & Resident Civil Engineer shall be solely responsible for the design review and construction supervision of the urban sanitation and solid waste management schemes. He/she shall also be responsible for overseeing the implementation of due diligence aspects into contractual agreements under the Program. He will report directly to the SIPMIU Project Director.

The specific tasks include:

- i. Assist the Project Director and other staff in the day-to-day management of Program activities.
- ii. Assist the Project Director and other staff in planning, control and management of the teams' work.
- iii. Assist in developing implementation schedules and resource requirements.
- iv. Assist in monitoring progress, evaluating results and identification and resolution of constraints.
- v. Coordinate activities with various implementing agencies and stakeholders, including communities and NGOs.
- vi. Assist the Urban Affairs Department, Government of Meghalaya in conducting any studies as necessary for the program.
- vii. Prepare, organize and conduct training programme for (a) contractors and (b) construction supervision staff and O&M staff in respect of ADB's procedures and guidelines.
- viii. Assist the EA in preparing necessary documentation to get approvals/permits from all concerned authorities such as local authority, PWD, CPCB/MSPCB, SEIAA, SEAC or any institutions for development and construction of landfills and other relevant solid waste management structures;
- ix. Assist the SIPMIU incorporating IT-based systems in the offices, including means and methods to conduct cost accounting and tracking expenditure.
- x. Prepare reports including inception, design review and weekly, monthly, quarterly, commissioning and final reports.
- xi. Review existing studies / documents and other resources available and formulate a Best implementation approach including programmatic project schedule;
- xii. Prepare cash flows;
- xiii. Assist design preparation and review teams;
- xiv. Assist the investigation and design team for solid waste management in preparing bidding documents, wherever required;
- xv. Assist in ensuring that all bidding documents are complete in every respect, wherever required;

- xvi. Assist in bid evaluation, wherever required;
- xvii. Contractual management;
- xviii. Develop and implement quality assurance programme;
- xix. Recommend payments;
- xx. Assist the SIPMIU staff preparing detailed engineering designs and review tender documents in coordination with other specialists.
- xxi. To manage the local consultant team;
- xxii. Establish contract tracking systems, including implementation schedules and milestones.
- xxiii. Develop manuals and ensuring project quality assurance and quality control.
- xxiv. Check that the contractors' proposals are in agreement with all environmental and social safeguards requirements.
- xxv. Review methodology, designs and organization proposals of the contractor;
- xxvi. Assist SIPMIU staff supervising the site activities of the contractor;
- xxvii. Coordinate with local authorities and other institutions as required for the Program delivery;
- xxviii. Ensure that co-ordination and public awareness is maintained at all times.
- xxix. Assist the SIPMIU staff to supervise construction of all solid waste management subcomponents;
- xxx. Assist the SIPMIU staff to prepare specifications, outline designs for program subcomponents.
- xxxi. Support the Program work in evaluations of Design & Build contracts, if required.
- xxxii. Conduct training program for O&M staff during commissioning of the schemes.
- xxxiii. Preparation of O&M manuals
- xxxiv. Review and approve the construction methodology and schedule submitted by the contractor;
- xxxv. Implement a construction management system for the works;
- xxxvi. Directly supervise and monitor the contractors activity to ensure satisfactorily standards, quality assurance, control of workmanship and progress;
- xxxvii. Check contractors' setting out.
- xxxviii. Taking measurements for the purpose of certifying payments and claims;
- xxxix. Quality and quantity control of the materials and works;
- xl. Coordination with the relevant authorities on site during construction;
- xli. Keep daily records of all aspects of their supervision works;
- xl.ii. Approve the materials and equipment brought by the contractor;
- xl.iii. Prepare and implement any minor adjustment required to the drawings and plans;
- xl.iii. Monitor the environmental impact during construction and coordinate with the environmental specialist in the Program offices;
- xl.iii. Check monthly measurement of work and certify payment;
- xl.iii. Coordinate with other specialists such as environment, resettlement, community development, public awareness and training;
- xl.iii. Ensure co-ordination between contracts and contractors, that the authorities and the public are continually informed and consulted on the works programme;
- xl.iii. Ensure that complaints from the public and other stakeholders are attended to expeditiously and take the necessary action to resolve any conflicts arising;
- xl.iii. Ensure that any dispute arising with day to day work is resolved at site level;
- l. Advise Program offices on claims, disputes and completions and defect corrections certification;
- li. Report progress, trends which are likely outcome of contracts and other information required to the Team Leader;

- lii. Ensure that comprehensive records of the construction works and testing are maintained; and
- liiii. Supervise commissioning on completion and that as built records and that appropriate operation and maintenance manuals are prepared.
- liv. Any other duties assigned by SIPMIU, relevant to the investment Program.

Solid Waste Management Specialist

The Solid Waste Management Specialist task shall be:

- (i) Review the current and projected quantity and quality of solid waste from households;
- (ii) If required, plan and organize a solid sampling and composition, to determine the amount of biodegradables and recyclables present and prepare recovery projections accordingly;
- (iii) If required, identify major non-municipal waste and wastewater producers and pollution sources that may require careful attention and separation from municipal waste. Recommend appropriate actions required;
- (iv) If required, review detailed designs including calculations, BOQs, specifications and drawings for (a) landfill site (short term and long-term) and (b) transfer points, primary and secondary collection and vehicles;
- (v) If required, based on bill of quantities, prepare detailed engineering cost estimates for the scheme;
- (vi) If required, Ensure adequate site investigations are carried out for the design of the solid waste management works;
- (vii) If required, Assist in bid evaluation;
- (viii) Assist the Resident Engineers as required;
- (ix) Review contractor's proposals for the most suitable, economic and easy to operate and maintain system;
- (x) Provide overall guidance and advice to the SPMIU in matters pertaining to solid waste management policies and their application;
- (xi) Review the detailed designs prepared for Shillong solid waste management and provide advice to the SIPMIU;
- (xii) If required, review an overall strategy for solid waste management in Shillong with a time bound action plan for implementation;
- (xiii) Review vehicle and staff schedules for optimization of collection and transportation to solid waste management sites;
- (xiv) Conduct a compost marketing study for Shillong;
- (xv) Review, support and manage with the community participation specialist the implementation of a comprehensive solid waste management plan including segregation and community awareness campaign;
- (xvi) Prepare a manual and operational plan to optimize operation and maintenance of the site and thus maximize the life of the sanitary landfill site.

Community Awareness and Participation Specialist

The Community Awareness and Participation Specialist task shall include and not limited to:

- (i) Assist the SIPMIU in the design, preparation, planning and management of the community participation and awareness program;

- (ii) Prepare an inventory and review recent and current community-based initiatives in Shillong; organizations involved, mechanisms used, successes achieved;
- (iii) Assist the SIPMIU with the invitation and selection of NGOs to be involved in the community participation programs; prepare TORs and job descriptions; interview and brief organizations on Program objectives and discuss proposed role of NGOs;
- (iv) Plan and deliver initial briefing, training and orientation of SIPMIU in community participation and awareness programs;
- (v) Assist and advise the SIPMIU on how to manage and co-ordinate the implementation of the environmental public health and sanitation awareness programs;
- (vi) Provide continuous guidance on suitable mechanisms for participatory interaction with and training of local government and CBOs;
- (vii) Develop and implement specific measures to ensure participation of vulnerable groups, including women and the poor.
- (viii) Monitor performance and impact of the community participation in the field and on the towns, if needed make adjustments to the program; review field reports; and advise SIPMIU on actions required; prepare annual reports on performance and impact of community participation and development activities.
- (ix) Plan and organize regular training events, including workshops and seminars for the duration of the Program;
- (x) Prepare Information, Education and Communication (IEC) materials and media campaigns, advertisement clippings, Web pages, etc of the Investment Program and first tranche.
- (xi) Promote Investment Program's Urban Governance, Finance, and Service Delivery Improvement Action Plan.
- (xii) Prepare Awareness campaign on (a) the need for and application of user charges for improved urban services, (b) optimization and conservation program, (c) environmental and social issues, such as, and (d) resettlement entitlements through various media means.
- (xiii) Disseminate information about the Investment Program to the target groups especially women. Build stakeholders' awareness on the long-term benefits and short-term inconvenience of the Program in order to gain full support to the beneficiaries towards the Program.
- (xiv) Make the beneficiaries aware of preventive care to avoid any health related hazards.
- (xv) Make the beneficiaries aware of their responsibilities, including issues such as user charges and property tax reform etc for achieving the goal of the program.
- (xvi) Make the beneficiaries aware of the existing health care facilities and how to make optimal use of these.
- (xvii) Invite feedback from beneficiaries on aspects of the program and sub-programs and advise the SIPMIU of how these might influence future program and sub-programs design.

Electrical/Mechanical Engineers

The specific tasks shall include:

- (i) Review the design the electrical and mechanical plant equipment including specification and schedules;
- (ii) Assist SIPMIU staff approving O&M manuals prepared by contractors for electrical and mechanical equipment for future maintenance; and
- (iii) Assist SIPMIU staff inspecting and witness testing of electrical and mechanical equipment and commissioning.

- (iv) Assist in bid evaluation;
- (v) Assist SIPMIU staff in the approval of specification of electromechanical goods to be supplied by the contractor;
- (vi) Assist in the preparation of documentation and supervision of the refurbishment of the power supply systems in the waste treatment plant;
- (vii) Review the contractor's assessment of the power requirements and establish power availability and assist SIPMIU staff designing adequate systems;
- (viii) Assist SIPMIU staff approving O&M manuals prepared by contractors for electrical and mechanical equipment for future maintenance; and
- (ix) Assist SIPMIU staff inspecting and witness testing of electrical and mechanical equipment and commissioning.
- (xi) Assist in approving the submittals for equipments and inspection
- (xii) Provide necessary trainings to O&M staff.

Structural Engineer

The duties of Structural Engineer are:

- (i) to review soil investigations;
- (ii) to review all structural designs and necessary structural drawings and specifications, including components relating to construction/rehabilitation, solid waste components and building construction;
- (iii) ensure compliance with applicable building rules of the State, with a specific focus on compliance on seismic resistant requirements.
- (iv) assist in bid evaluation, wherever necessary.

Contract Management and Procurement Specialist

The Contract Management and Procurement Specialist specific tasks will be:

- (i) Contractual management;
- (ii) Prepare training programme for (a) contractors and (b) construction supervision staff and O&M staff and organize and conduct the training.
- (iii) Assist in developing implementation schedules and resource requirements. Assist in monitoring progress, evaluating results and identification and resolution of constraints.
- (iv) Review existing documents and other resources available and formulate a best implementation approach including programmatic project schedule
- (v) Assist in project quality assurance and quality control;
- (vi) To review outline and detailed engineering designs and help in the preparation;
- (vii) Support the SIPMIU in the preparation of pre-qualification requirements and evaluation, wherever required;
- (viii) Prepare bidding documents compliant with ADB's latest standard bidding documents, wherever required;
- (ix) Design post-qualification criteria which are compliant with ADB's guidelines, wherever required.
- (x) Assist SIPMIU staff to in contract packaging and preparing procurement time schedules for each contract package in consultation with Program staff.
- (xi) Assist SIPMIU in resolving procurement related issues amongst contractual parties.

Environmental Specialist

The expert's specific tasks include:

- (i) Assist the SIPMIU in the preparation of the necessary environmental impact assessments in accordance with ADB, GoI and GoMe standards for environmental assessment of Investment Program tranches and subprojects.
- (ii) Assist the SIPMIU in reviewing, preparing and updating initial environmental examinations and environmental management plan for the Program;
- (iii) Ensure the implementation of IEEs and EIAs are consistent with Government and ADB policies, and the EARF agreed upon by the Government and ADB for Shillong's sub-projects.
- (iv) Provide advice and support to ensure SIPMIU obtain necessary Government approvals.
- (v) Provide necessary guidance in the classification, and development of all environmental safeguards documents to IPIUs, including the provision of training in the development and implementation of IEEs and EIAs.
- (vi) Review all classifications and environmental assessment (IEE and EIAs) developed by SIPMIU and ensure comments from SPCB and ADB are integrated in finalized documents.
- (vii) Assist the SIPMIU in the review and approval of IEEs. The ADB will review and approve IEE/EIA reports of: (i) all Category A and Category B-sensitive subprojects; (ii) subprojects with a capital cost of more than \$ 10 million in the towns, (iii) subprojects with solid waste landfill and sewerage /treatment components. The EA (through the SIPMIU) will review and approve IEE reports not falling under the above categories. Approval of the IEE/EIAs is a condition to the award of contracts. IEEs/EIAs will be consistent with Government and ADB's Environment Policy and the EARF for NERCCDIP.
- (viii) Provide advice on environmental impacts and review the contractor's mitigation measures for all proposed construction works including reservoir construction/rehabilitation, solid waste and sewerage schemes;
- (ix) Assist the SIPMIU in consolidating monthly reports and submit quarterly reports to ADB for review.
- (x) Prepare consolidated monthly environmental monitoring reports and monthly reports on the implementation of mitigation measures by contractors, through the review of monthly progress reports from the SIPMIU.
- (xi) Provide advice on regulatory requirements and standards;
- (xii) Assist in obtaining other related permits;
- (xiii) Ensure environmental monitoring consistent with the environmental monitoring plans in the IEEs and EIAs and consistent with the EARF agreed between the Government and ADB.
- (xiv) Assist the SIPMIU in coordinating all environmental monitoring and ensuring that all sub-projects comply with Government and ADB environmental safeguards.
- (xv) Train contractors' staff in the implementation of environmental mitigation measures during construction and prepare environmental monitoring checklists to be completed by SIPMIU environmental officers during the periods of design and construction;
- (xvi) Monitor disclosure and public consultation

Social Safeguards Specialist

The specialist shall provide advice on any resettlement issues and assist the SIPMIU and other bodies in the processing and resolution of resettlement claims. He/she shall provide advice on the correct procedures to be followed and prepare a schedule of when actions should be taken relevant to the design and construction program. The action plan shall comply with the relevant policies of the Government of India and ADB's Handbook on Resettlement. Specific responsibilities and actions include:

- (i) Review, update and/or prepare new resettlement plans (RPs) and IPDPs for tranche under implementation in Shillong, consistent with the Resettlement Framework;
- (ii) Assist the SIPMIU in coordinating all social issues and ensuring that all sub-projects comply with Government and ADB social safeguards. Assist the SIPMIU in preparing and updating Resettlement Plans (RPs) and new RPs and Indigenous People Development Plans (IPDPs).
- (iii) Provide necessary guidance in the classification, and development of all social safeguards documents to SIPMIU, including the provision of training in the development and implementation of RPs.
- (iv) Coordinate valuation by the valuation committees and finalization of compensation packages.
- (v) Review all classifications and social safeguards documents (RPs and IPDPs) developed by SIPMIU and ensure that comments from the ADB are integrated in finalized documents.
- (vi) Supervise and monitor implementation of the Resettlement Plans and IPDPs (to be undertaken through an implementing NGO);
- (vii) Monitor the work related to dealing with complaints and grievances, and provide updates to the RP as required to address any recurring problems or complaints;
- (viii) Establish procedures and systems for monitoring progress in resettlement implementation and recognizing and addressing any problem areas--the Specialist will also undertake internal monitoring;
- (ix) Assist in the organization and implementation of public consultation and disclosure activities (including preparation of materials and delivery of presentations where necessary) to be undertaken by the implementing NGO);
- (x) Train Program staff on resettlement-related matters. Conduct internal seminars and training programs to raise the awareness of Program implementation staff on resettlement issues;
- (xi) Support the SIPMIU in recruiting NGO resettlement staff and oversee their work;
- (xii) Conduct/supervise detailed measurement surveys, business income surveys, surveys to determine market values and review result;
- (xiii) Coordinate and report grievance resolution committee activities;
- (xiv) Manage aspects relating to communications and disclosure of resettlement aspects under the Program.
- (xv) Report each month to the Program Director regarding the progress of resettlement issues.

3.2 There is no possibility of any downstream work.

3.3 As part of the community awareness programs, there is a need to organize regular training events, including workshops and seminars for the duration of the Program

4. Team Composition & Qualification Requirements for the Key Experts

The team will comprise of 49 person months key experts national consultants, as well as 32 person months of non key experts time. Detail breakdown of the type of consultants, and individual inputs is given in Table 2. Specific qualifications of the sub-teams and expertise required are given in the following paragraphs. The overall responsibility will be with the Team Leader. The supervisory level engineering staffs should be available on a daily basis. The indicative schedule of inputs is as follows:

Table 2 –Design, Construction Supervision and Management Consultancy

No	Position	Indicative Person Months
		2017-18
Key Experts National Consultants		
01	Team Leader and Resident Civil Engineer	16
01	Solid Waste Management Specialist	5
01	Electrical Engineer	1
01	Mechanical Engineer	1
01	Structural Engineer	1
01	Contract Management and Procurement Specialist	4
01	Community Awareness and Participation Specialist	16
01	Social Safeguards Specialist	2
01	Environmental Specialist	3
Non Key Experts		
No	Position	Minimum Time Input
02	Engineering Assistants (n=2)	32
	Total	81

It is envisaged that the consultant will provide adequate support staff such as secretarial staff, etc, as considered necessary for carrying out consultancy service. All expenditure required for recruitment of Support Staff shall be included under Reimbursable/Out of Pocket Head of Expenses. Since Client will not provide Office space, Consultant should quote the requirement in its Financial Proposal as part of Office Operation Cost. All experts would be PERMANENTLY based in Shillong. The consultant will be the **Engineer's Representative** in administering the contracts.

Specific Qualifications:

Key Experts

Team Leader & Resident Civil Engineer

The Team Leader & Resident Civil Engineer shall preferably be a Graduate Civil Engineer with 12 years experience in (i) designing (ii) project management and supervision (iii) contract management of projects in the field of Urban Sector. Preferably the Team Leader should be competent in planning, designing, contractual management, budgeting and

financial control, progress monitoring, resolving problems, preparing quality assurance and quality control manual assist in supervising the site activities of the contractor and ensure quality is maintained, assist to supervise construction of all solid waste management subcomponents. As a Resident Civil Engineer, an Engineer preferably with ten years of experience in supervising civil construction works relating to plants, preferably, waste treatment plants, RCC retaining structures, etc. Experience in ADB or other similar externally funded projects is an added advantage.

Solid Waste Management Specialist

The Solid Waste Management Specialist shall preferably be a Graduate in civil engineering / medical sciences or in related field preferably with 10 years experience of solid waste management field who can prepare the master plan of the city for solid waste management and prepare detailed design specification and drawings for compost plant, waste treatment plants, landfill site, primary and secondary collection processes, etc. Experience in ADB or other externally funded projects will be preferred.

Community Awareness and Participation Specialist

The Community Awareness and Participation Specialist shall preferably be a Graduate in Social Sciences preferably with 8 years experience and knowledge of community development, resettlement issues, assessing social impact due to different nature of urban development projects, monitoring of the social parameters and mitigating measures. Experience in similar development projects and particularly on ADB or other externally funded projects is an added advantage.

Electrical/Mechanical Engineers

The specialists shall preferably be graduate engineer in the field of electrical and/or mechanical engineering having an experience of preferably ten years and competent in the design of solid waste management systems, waste treatment plants or similar projects.

Structural Engineer

The Structural Engineer shall preferably be a Graduate Engineer (Civil) with relevant postgraduate experience in structural engineering. A person having preferably eight years experience out of which five years shall be in structural design of concrete frame / retaining structures will be preferred.

Contract Management and Procurement Specialist

The Contract Management and Procurement Specialist shall preferably be a Graduate and experience in contract/procurement management in the public/private sector. The specialist should preferably have 10 years experience and capable of planning, designing, project & contractual management preferably in urban development projects, resolving problems, quality maintenance, budgeting and financial control, progress monitoring, procurement procedure and documentation. The specialist should also be experience of ADB procurement procedures, cost estimation of different nature of solid waste management

subprojects, general civil works, knowledge of preparation BOQ of item rate/ turnkey bid documents, preparation of bid documents, evaluation of bids, evaluation reports etc will be preferred. Experience of EAP projects is an added advantage.

Environmental Specialist

The Environmental Specialist shall preferably be a Graduate in Environmental Science/ Engineering. An expert having preferably eight years experience and knowledge of EIA / EMP studies, particularly with reference to solid waste or sanitation projects, impact of construction works, assessing environmental impact, monitoring of the environmental parameters, mitigating measures and experience in ADB or similar externally funded development projects will be preferred.

Social Safeguards Specialist

The Social Safeguard Specialist shall preferably have a degree in a relevant subject (sociology, anthropology or related subject) with preferably 8 years experience and knowledge of community development, resettlement issues, assessing social impact due to different nature of urban development projects, monitoring of the social parameters and mitigating measures will be preferred. Experience in similar development projects and particularly on ADB or other externally funded projects is an added advantage.

Non-Key Experts:

Engineering Assistant

The Engineering Assistant shall preferably be Diploma Civil Engineer with three years of experience in supervising civil construction works; Auto Cad, drafting, etc. will be preferred.

5. Reporting Requirements and Time Schedule for Deliverables

The consultant is required to submit, for each tranche, the following reports to the SIPMIU Director in English. All reports should be submitted as required below and in an electronic and hard copy format.

- (i) Inception report in 5 copies plus a soft copy, one month after the issue of letter of commencement of work. This report should include the related works and details of programme of works, which the consultant proposes to implement.
- (ii) Preliminary design review report, wherever necessary, in 5 copies plus a soft copy three months after the commencement of work, which will give the opinion on design criteria, concepts, outline and implementation arrangements;
- (iii) Final design review report, inclusive of all bidding documents, wherever necessary, in 5 copies plus a soft copy;
- (iv) Commissioning report in 5 copies plus a soft copy;
- (v) Report on completion in 5 copies plus a soft copy;
- (vi) Progress Reports in 5 copies plus a soft copy at monthly intervals, summarizing financial situation of all work and contracts, progress achieved, difficulties encountered and issue to be resolved.
- (vii) O&M manuals 5 copies plus a soft copy.
- (viii) Final Report in 5 copies with soft copy.

Taking any action under a civil works contract designating the Consultant as "Engineer", for which action, pursuant to civil works contract, the written approval of the Client as "Employer" is required.

6. Client's Input and Counterpart Personnel

- a. Services, facilities and property to be made available to the Consultant by the Client:

The Consultant shall be responsible for arranging office space. Although the Consultant is solely responsible for the provision of all office equipment, supplies and communications and transport that he/she may require for the project, resources already available with SIPMIU, namely: **Desktop computers, Printers, Plotters, LCD Projectors, PA system, Handy Cam, Total Station Survey Equipment, Workstation Tables, Chairs, etc.** will be made available for the consultancy work. Any additional office equipment and furniture that may be required shall be reimbursed by SIPMIU.

After completion of Program the items purchased under Program or provided by the SIPMIU shall be handed over to SIPMIU.

Consultant to make arrangements to carry out relevant topographical surveys and soil investigation, as well as any other studies/tests deemed to be necessary.

- b. Professional and support counterpart personnel to be assigned by the Client to the Consultant's team: The concern Officers/Engineers and support staff of SIPMIU shall co-ordinate with the Consultant's team. The counterpart personnel are the Project Director, Additional Project Director, Accounts & Disbursement Officer, Solid Waste Management Specialist, Social Safeguards Specialist, Assistant Engineer, Assistant Environment Specialist, Junior Engineers, Account Assistant, 4 Community Support Staffs, GIS Assistant, Admin Assistant, etc.

7. Client will provide the following inputs, project data and reports to facilitate preparation of the proposals:

If sought for the, Client shall provide any DPR's of projects under implementation available with SIPMIU to the Consultant to enable them to understand the job better and facilitate preparation of the proposals.

APPENDIX TO TOR:

The consultant should provide any other **Support Staff** which its feels required for carrying out consultancy service. All estimated expenditure required for recruitment of Support Staff may be included under Reimbursable /Out of Pocket Head of Expenses.

The Consultants should price them under Expenses in FIN-4; otherwise the Client may adjust the proposed price.

Expression of Interest (EOI) Consulting Firms

Project Number	
Project Name	
Project Country	

I. Consulting Firm Information

CMS No. ¹ / date:	Country of Incorporation: ²
Consultant Name:	Acronym:
EOI Submission Authorized by:	Position

Associations (Joint Venture or Sub-consultancy)

CMS No. ¹	Consultant	Acronym	Country of Incorporation ²	Joint Venture (JV) or Sub-consultant	EOI Submission Authorized By	Position

Present the rationale for and benefits of working in association (JV or Sub-consultant) with others rather than undertaking the assignment independently (as appropriate). Describe the proposed management and coordination approach of the association and the role of each firm.

I confirm that:

- Documentation regarding our corporate structure including beneficial ownership has been attached.
- Documentation regarding our Board of Directors has been attached.
- A written agreement to associate for the purpose of this Expression of Interest has been signed between the consortium partners and has been attached.

¹ If already registered on ADB's Consultant Management System (CMS). CMS registration is not mandated under EA-administered selection.

² The lead consultant must submit a copy of the Certificate of Incorporation of itself and of each JV member and sub-consultant through VII. EOI Attachments.

Once your team is shortlisted and invited for submission of the Proposal, it is not permissible to transfer the invitation to any other firm, such as Consultant's parent companies, subsidiaries and affiliates. The Client will reject a Proposal if the Consultant drops a JV member without the Client's prior consent, which is given only in exceptional circumstances, such as debarment of the JV partner or occurrence of Force Majeure.³

II. Assignment Specific Qualifications and Experience

For online submission: Your EOI shall demonstrate technical competence and geographical experience based on project references entered in full registration under your CMS profile. We encourage you to update Project Information under your CMS prior to filling EOI.

A. Technical Competence

Cross-referencing from your profile projects in Section E. Project References, highlight the technical qualifications of your entity/consortium in undertaking similar assignments. Provide details of past experiences working with similar project authorities.

B. Geographical Experience

Cross-referencing from your profile projects in Section E. Project References, present experiences in similar geographic areas.

C. Management Competence (Please answer each question in one paragraph of 3-5 sentences)

1. Describe standard policies, procedures, and practices that your entity has to assure quality interaction with clients and outputs. Please state if your company is ISO certified.

³ Paras. 3 and 7, Section 1 of the Standard Request for Proposal (SRFP), ADB website.

2. How will your firm/consortium handle complaints concerning the performance of experts or quality of the reports submitted for this assignment? What internal controls are in place to address and resolve complaints?

3. How will you ensure the quality of your firm's/consortium's performance over the life of this assignment?

4. Describe standard policies, procedures and practices that your firm has put in place to avoid changes/replacements of personnel and to ensure the continuity of professional services once contracted.

5. Describe what social protection practices you have in place to safeguard the well-being of your proposed experts? Specifically describe arrangements you have in place for medical, accident, and life insurance coverage during the assignment.

D. Other Information (maximum of 500 words)

E. Project References

Please select most relevant projects to demonstrate the firm's technical qualifications and geographical experience (maximum 10 projects).

SN	Project	Period	Client	Country	Firm
1					
2					
3					
4					

5					
6					
7					
8					
9					
10					

Project Summary

SN 1	
Project Title	
Country / Region	
Start Date	
Completion Date	
Continuous / Intermittent	
Client	
Funding Source	
Description	(indicate your role and input in person-months)

SN 2	
Project Title	
Country / Region	
Start Date	
Completion Date	
Continuous / Intermittent	
Client	
Funding Source	
Description	(indicate your role and input in person-months)

(Please insert more tables as necessary)

III. Comments on Terms of Reference

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IV. Comments on Budget Adequacy

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V. Key Considerations in approaching this assignment (no more than 9,000 characters summarizing approach and methodology)

VI. EOI Attachments

SN	Description
1	Certificate of Incorporation of the lead member
2	Certificate of Incorporation of the JV member (for each member)
3	Certificate of Incorporation of the Sub-Consultant (for each sub-consultant)
4	Letter of Association
5	

(Please insert more rows as necessary)

VII. Eligibility Declaration⁴

We, the undersigned, certify to the best of our knowledge and belief:

- We have read the advertisement, including the terms of reference (TOR), for this assignment.
- Neither the consulting firm nor its JV member or sub-consultant or any of its experts prepared the TOR for this activity.
- We confirm that the project references submitted as part of this EOI accurately reflect the experience of the specified firm/consortium.

- We further confirm that, if any of our experts is engaged to prepare the TOR for any ensuing assignment resulting from our work product under this assignment, our firm, JV member or sub-consultant, and the expert(s) will be disqualified from short-listing and participation in the assignment.
- All consulting entities and experts proposed in this EOI are eligible to participate in ADB-funded, -supported and -administered activities.

⁴ Eligibility refers to ADB's Guidelines on the Use of Consultants by Asian Development Bank and its Borrowers, Clause 1.13 together with Clauses 1.10-1.11 and 1.23-1.25 on integrity and anti-corruption policies.

- The lead entity and JV member or sub-consultant are NOT currently sanctioned by ADB or other MDBs. Neither the consulting firm nor the JV member or sub-consultant has ever been convicted of an integrity-related offense or crime related to theft, corruption, fraud, collusion or coercion.
- We understand that it is our obligation to notify ADB should any member of the consortium become ineligible to work with ADB or other MDBs or be convicted of an integrity-related offense or crime as described above.
- JV member or sub-consultant, including all proposed experts named in this EOI, confirmed their interest in this activity in writing.
- JV member or sub-consultant, including all proposed experts named in this EOI, authorized us in writing to represent them in expressing interest in this activity.
- None of the proposed consortiums are subsidiaries of and/or dependent on the Executing Agency or the Implementing Agency or individuals related to them.
- We understand that any misrepresentations that knowingly or recklessly mislead, or attempt to mislead may lead to the automatic rejection of the proposal or cancellation of the contract, if awarded, and may result in further remedial action, in accordance with ADB's Anticorruption Policy.