

Terms of Reference (ToR)

1. Background of the Project:

Jalalabad gas T & D System Ltd. is engaged to continuous supply and marketing of natural gas to the four district of Sylhet Division. It has short range store in Basement floor of its head office, at Kumargoan of regional distribution office, Sylhet-West and at Kutchi, Sylhet to preserve the company's gas material & goods. The Company is using inner side of regional distribution office complexes of Sylhet-west, Sreemongol and Shahjibazar office complex to stake pipes of it's at present.

At present Preserving to the basement of the company head office, valuable gas materials like pipe fittings, meter, valves, regulators, stationary and printing materials, electrical goods etc quality of materials reducing In lack of Central store of the company. Time and operation cost of company increasing day by day due to s Collection of different stored materials from different places.

A committee formed by Petrobangla in 2019 to verify the accuracy of fixed asset of JGTDSL with its latest showing balance sheet and inventory report. According to committee report to prevent damage to the stored material in basement and outside and to keep proper quality of materials, suggested to construct a Central store of company to a sweetable place.

In overall consideration in all respect proper preservation of company goods, saving time and money by quick delivery of materials and to serve the customer the company has acquired 5.50 acre land at Dhakshin surma of Sylhet city to construct a central store complex.

2. Objective of the Project:

- Proper preservation and distribution of JGTDSL Purchased/imported/collected materials or goods.
- Saving time and money by quick delivery of materials and to serve the customer.
- To secured materials and reduces wastage by central security system.
- To construct one four stored office building, One three stored store building, One two stored store building, One one stored Ansar building, fourteen number pipe yard, one scrap yard and other ancillary works.

3. Source of fund : JGTDSL own fund.

4. Location of the Service : Tatli, Dhakshin Surma, Sylhet.

5. Scope of Consulting firm:

a. To prepare master plan:

To prepare a master plan with 3D view of central store complex for storing gas material at 5.50 acre of land at Tetli Dakshin Surma upozilla by approving the JGTDSL authority.

b. To prepare detail design and estimate:

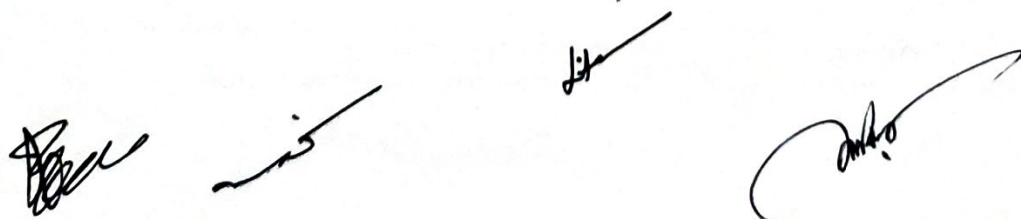
To prepared Detail Design according to Bangladesh National Building Code (BNBC) and detail Item wise estimate according to PWD rate Schedule.

c. To prepare tender document and detail specification:

Prepare and submit Tender document according to PPR 2008 and submit detail engineering drawing.

d. To Supervise the construction, prepare and submit report:

Top Supervision of all construction according to design and drawing and submit weekly, monthly and other required report to project authority.



❖ **Details description of assignment of the firm:**

The work of the consulting firm is to provide consultancy services for preparing master plan, detail design, drawing, preparation of tender document, top supervision work for construction of one 4 stored Office Building, one three 3 stored Store Building, one two stored store Building, a one stored Ansar residential building, two guard post, 14 number of Pipe stake yard, one Scrap Yard, 2240 feet RCC road, RCC covered drain, Box culvert, Set up of deep tube well, one main gate, fencing of boundary wall with fare facing, set up of Generator and related Electrical work, plumbing, sanitary work, area lighting with solar panel, fire protection arrangement, landscaping and ancillary works, also with providing related report for JGTDSL Central Store complex. The services are following but not limited to:

- Preparation of detail master plan and Layout plan with 3D view: Preliminary architectural conceptual drawing i.e detail master plan, floor plan, elevation, section, perspective view for the proposed building/project with necessary arrangement of environmental and structural safety.
- After approval of preliminary architectural drawing from the JGTDSL authority, consultant will prepare detail/final master plan, architectural & structural drawing which includes floor plan, elevation, section, perspective view etc.
- Structural drawing & design should have the detail calculation including electrical, plumbing and sanitary drawings with proper safety consideration and maintain building code of BNBC & Building construction rules.
- Preparation of detail working drawings with fire-fighting system including provision of modern facilities like security alarm system, internal electrification, external electrification i.e. all facilities that are required for modern store, Office and residential building.
- Preparation of complete master plan & detail drawing with 3D view of proposed project area/compounds showing Store, office residential building, Pipe stake yard, Scrap yard, Box culvert, boundary wall, internal road, walkway, drainage, main gate, green space, park, pump house, UWGR as required and detail working drawing and detailed estimates of the same.
- The consulting firm will be responsible for detail architectural & Structural design-drawing to follow the BNBC code for earthquake and natural calamity resistance and environmental safety.
- Supply 5 set of drawing & design & others all documents.
- The consulting firm will prepare and submit detail estimate of individual structure & objects and also total estimate of the project according to latest PWD rate schedule.
- The Consulting firm will prepare and submit all tender document with specification according to latest Public procurement Rules (PPR) and act of Bangladesh government.
- The Consulting firm will top supervise to all construction according to design and drawing.
- The Consulting firm will submit monthly and time to time report to different stage of construction to the project authority according to project office demand.

The Consulting Services by the firm for the above project shall be carried out, but not limited to, in accordance with the following major scope of works:

Architectural Part:	Electrical, electronic and mechanical design & drawing
• 3D Master Plan (computer generated) with 05pc hard copy	• Electrical fan, light layout plan of different structure.
• Site plan with surrounding area details	• Electrical outlet, 3pin & 2 pin socket layout plan of different structure.
• Layout plan of different structure.	• Telephone, intercom, TV & internet connection plan of different structure.
• Basement plan & related other floor plan of different structure.	• Electrical load calculation of different structure.
• Architectural Design & Details drawing:	• Generator load calculation
• Architectural floor plan (all floor) in/c roof of different structure.	• Electrical circuit design of different structure.

• Architectural working floor plan (all floor) of different structure.	• C.C. TV camera design
• Architectural floor furniture plan (all floor) all plans of different structure.	• Electrical load calculation report
• Architectural door & window plan (all floor) of different structure.	• Details of lightening arrestor arrangement.
• Architectural lintel & false slab plan (all floor) of different structure.	• Details of Generator set-up and arrangement.
• 4 side section of different structure.	• Details of Area lighting details with plan, elevation & Section with necessary solar arrangement.
• 4 side elevation of different structure.	• Plumbing design & drawing:
• Boundary wall details	• Plumbing fitting & fixture layout plan (all floor)
• Door, window & grill details of different structure.	• Garbage disposal design
• Details architectural grid analysis of different structure.	• Water supply layout plan (all floor)
• Floor finish plan of different structure.	• Top slab solar plan, water supply & rain water, machine room & others
• Building sections of different structure.	• Ground floor water sanitation line plan.
• Wall sections of different structure.	• Firefighting design & drawing
• Stair details of different structure.	• Fire detection design & drawing
• Toilets details of different structure.	• Fire protection design & drawing
• Kitchen details.	• Fire analysis report.
• Slab out line plan of different structure.	• 3D view:
• Landscaping: 1) Plan 2.) Surface finishing with details	• 2 side 3d view
• Pipe yard details design with plan, elevation & Section.	• Top floor view
• Scrap yard details design with plan, elevation & Section.	• Pipe yard and scrap 3d view.
• Drain layout with details	• Details Master plan 3d view with land escaping.
• Detail elevations	• Detail plan of Generator set-up.
• Total & construction area	

Top supervision and Checking as required & demand of Project authority during construction period on different sector & stage wise like as Layout, Fabrication of rod, casting of different structure and civil, electrical, mechanical, sanitary, water supply works & others.

After work completion of the work four set of Civil, structural, plumbing, sanitary, fire and others related as built drawing should be handover to Project authority.

Task A : Services for Pre-construction Stage

Preparing master plan: Prepare a detail and effective master plan for a modern Central store complex with necessary arrangement of Office building, storing gas materials, pipe stake yard, scrap yard and others as per requirement of project authority with its 3D view (including 3D presentation) in 5.50 acre land at Tetli Dakshin Surma upozilla with the help of project authority and approved by the JGTDSL authority.

1. Structural Part:

Structural design & details drawing with available data gathered by land survey and soil investigation report and others data:

- Pile foundation, pile cap, underground water tank, septic tank design
- Column, grade beam, floor beam, ground floor beam slab design
- Typical floor flat plate, lintel, false slab, drop wall design

- d. Generator room, stair case slab, over had tank design
- e. All component load calculation.
- f. Service entry
- g. Design of a fantastic showing gate one or more.
- h. Land escaping design
- i. Design of pipe yard
- j. Design of scrap yard.
- k. Others related design.

2. Prepare Project estimate and tender documents:

- a. Prepare details estimate with specification according to latest PWD rate schedule & as necessary others concern department's rate schedule. The estimate will be details and for every section & sub-section and also for hole project according to drawing & design. Prepared estimate will be realistic. As necessity will be discussing with concern approval authority. Environmental & social safe guard costing should add in estimate.
- b. Prepare BOQ of project as per estimate.
- c. Prepare slandered tender documents of project according to PPR-2008, PPA-2006 & its amendment

Task B: Services for Construction Stage

Top supervision and checking as required & demand of Project authority during construction period on different sector & stage wise like as Layout, Fabrication of rod, casting of different structure and civil, electrical, mechanical, sanitary, water supply works & others. Time to time progress report and report on demand of project authority and others concern government authority will be prepared.

Task C: Services for Post-Construction Stage

The Consultant shall inspect, advice and assist JGTDSL to issue work completion report to the Contractor (s) for effective and efficient completion of the Project and preparation of all reports including Project Completion Reports.

-Any other works (if required) for effective and efficient completion of the Project.

❖ Detail work will be done according to the following schedule :

Preparation of master plan:

- ❖ Preparation and submission of the final detail master plan and architectural drawing along with 3D views (duly accepted by the project authority) by Team leader within one month with the help of 15 days effort of Team leader, Architect and Drafts man.

Design and drawing preparation:

- ❖ Preparation and submission of the draft detail design-drawing of structural-Foundation and others electro mechanical, Sanitary and plumping works of the structures duly accepted by the client by One month effort of Team leader, Architect, Drafts man, 7 days effort of Electrical engineer and sanitary & plumbing expert.

❖ Preparation of Estimate and Tender document:

- ❖ Preparation and submission of all kinds final design-drawing along with soft copies of all the deliverables detailed revised estimate and final BOQ for all type of works duly accepted by the client by 15 days effort of Team leader, Architect, Drafts man, 7 days effort of Electrical engineer, sanitary and plumbing expert.

❖ **Construction management, monitoring and Supervision:**

- ❖ Construction management, monitoring and Supervision from construction period to Completion of construction of package-1 i.e construction of one three storied store building, 14 number of pipe yard, one deep tube well, water pipeline network, connection of electricity with sub-station, Installation of generator, lightening arrestor, area lighting, CC camera, main gate, fare facing, grill fencing top of boundary wall, Fire fighting equipment (along with fire hydrant) and land escaping and related other ancillary work will be completed by 15 days effort of Team leader, Architect, Drafts man, ¼ month effort of Electrical engineer and sanitary and plumbing expert.
- ❖ Construction management, monitoring and Supervision from construction period to Completion of construction of package-2 i.e. construction of one four storied office building, one two storied store building, 1 one storied Ansar building, Drainage system, box culvert, RCC connecting road, One Scrape shade and two nos. of guard post and related other ancillary work will be done 15 days effort of Team leader, Architect, Drafts man, ¼ month effort of Electrical engineer and sanitary and plumbing expert.

❖ **Phase of Service provide by the consultant and its key personnel:**

Project Phase	Preparation of master plan	Design & Drawing preparation	Preparation of estimate and tender document	Construction management, monitoring and supervision for Phase1&2.	Total man month
Duration of each phase (Months)	1 m	1 m	1 m	25 m	
Consultant Key Peresonel					
Team Leader	½ month	1 month	½ month	1 month	3.0 months
Architect	½ month	1 month	½ month	1 month	3.0 months
Electrical engineer	—	¼ month	¼ month	½month	1.0 month
Drafts man	½ month	1 month	½ month	1 month	3.0 months
Sanitary and plumbing expert	—	¼ month	¼ month	½month	1.0 month
Total =					11 man-month

Rate should be given including IT, VAT all communication expense like as papers and stationary cost, site visiting, consult with Project authority and other departments, attending on orientation etc.

6. Qualification of Consulting Firm:

- A. The Interested national Civil & Architectural Consulting Firm must prove that they have solid technical background and operational strength to undertake and take this work forward without any hindrances. Consulting Firm must also have adequate technical ability, resources, human resources and processes. The Civil & Architectural Consulting Firms from all over Bangladesh eligible to submit EOI. The firm must have following minimum eligible criteria:
 - i. The interested consulting firm shall have a general experience of Consultancy in the related field within the last 10(Ten) years, i.e the Firm shall have a general experience of consultancy services such as Civil, Architectural & structural design-drawing, Preparing master plan, preparing tender document, report presentation, estimation, project management, Government procurement assistance, engineering and supervision of constructions and preparing report for the construction of civil structure i.e building, road, culvert etc. within last 10(ten) years.
 - ii. The consulting firm shall have proven experience of Consultancy of at least one successfully completion of construction project which include of a minimum 3(Three) Storied building, with preparation of design, drawing, tender document and top supervision of construction work of any govt./semi govt. or autonomous body or multinational company in Bangladesh within the last 10(ten) years.

N.B. Years shall be counting backward from the date of closing the EOI. The interested firm shall submit all experienced certificate, key position, logistic support list with quotation schedule.

[Handwritten signatures and marks]

B. The consultancy services to be provided by the firm shall include the following expertise:

S/I no.	Category of Person/Experts	No of Person	Nationality	Man-Month
01.	Team Leader(Structural Engineer Expert)	01	Bangladeshi	03
02.	Architect	01	Bangladeshi	03
03.	Electrical Engineer	01	Bangladeshi	01
04.	Sanitary and plumbing Expert	01	Bangladeshi	01
05.	Drafts Man	01	Bangladeshi	03
Total =				11

C. Qualification of Key Personnel:

1. Team Leader (Structural Engineer Expert)

Position Requirements

- A qualified civil/structural engineer having minimum B.Sc in related engineering field from a reputed university with membership of institution of Engineers, Bangladesh (IEB). Vast Knowledge and experienced in design and supervision of civil structure like Building, roads, pipe yard, electrification and others related work.
- Experienced in design and construction of different civil structure in government or autonomous or semi government sector in Bangladesh.
- At least 10 years of experience in planning, design, supervision and maintenance of building, roads and others civil related structure as a Project manager/Team leader/Project coordinator.
- Having experience as a Project manager/Team leader/Project coordinator of Store building, Pipe yard, scrap yard project etc, will be preferred.

Job Description & Responsibilities

Working closely in collaboration with and reporting to the Project authority. Team Leader will be responsible for the overall management, coordination and reporting of the consulting services, for the efficient and effective delivery of the services to meet the defined objectives, and for liaison with Project authority for Project matters. Team Leader will also be expected to apply significant experience to guiding and supporting all technical and social aspects of the consultant assistance. Specifically Team Leader will:

- 1) Leading, coordinating & managing the technical, managerial activities of the team.
- 2) Provide overall management and supervision of the consultant staff, quality assurance of all consultant outputs and coordinate closely with Project authority, advice and support them on all aspects of the implementation.
- 3) Provide Project authority to ensure that all requirements related to the implementation to be effectively met.
- 4) Provide Project authority in Project reporting to PD, and be directly responsible for reporting on the progress of the consulting services regarding project activities.
- 5) Generally support Project authority in achieving the project objectives, including problem-solving and responding to unexpected events or developments that may impact on project implementation.
- 6) Provide Project authority in planning, preparation and implementation of all Project works, tendering, and procurement of Central store complex construction project of JGTDSL.
- 7) The team leader will fully liable for design, estimate, preparation of tender document and construction monitoring of every structure as well as whole project.
- 8) Assist Project authority in implementing and resolving the issues (if any) between the contractor and Project authority for construction project structure.
- 9) Any other jobs related with Project assigned by Project authority.

2. Architect***Position Requirements***

- Graduation in Architect or Equivalent from any affiliated institution.
- Minimum 05 years of working experience in Architectural work for construction of building, roads and others civil structure.
- Having experience in architectural work of Store building, Pipe yard, scrap yard etc. will be preferred.

Job Description & Responsibilities

- Under the direction of the Team Leader and in collaboration with other members of the consultant team, support Project authority in design, tendering and construction as architect.
- Support Project authority in the preparation, supervision, progress monitoring of the project, reporting of the project progress and the solution of issue. Specifically the design and construction stage.
- Assist Team Leader of the consultant team in carrying out their assigned activities.
- Assist Project authority in design and implementation of all Project works.
- Any other jobs assigned by team leader and or Project authority.

3. Electrical engineer***Position Requirements***

- Graduation in Electrical & Electronics Engineering or Equivalent from any affiliated institution.
- Minimum 05 years of working experience in design, estimation, construction and monitoring works of building and its electrical wiring, substation set-up, generator works, roads and area lighting etc.
- Having experience in electrical works of Store building, Pipe yard, scrap yard etc will be preferred.

Job Description & Responsibilities

- Under the direction of the Team Leader and in collaboration with other members of the consultant team, support Project authority in design, tendering and construction as an electrical Engineer.
- Support Project authority in the preparation, supervision, progress monitoring of the project, reporting of the project progress and the solution of issue. Specifically the design and construction stage.
- Assist Team Leader of the consultant team in carrying out their assigned activities.
- Assist Project authority in design and implementation of all Project works.
- Any other jobs assigned by team leader and or Project authority.

4. Sanitary and plumbing expert.***Position Requirements***

- Diploma in civil Engineering degree or Equivalent from any affiliated institution.
- Minimum 05 years of working experience in sanitary and plumbing work for construction of building, roads and others civil structure.

Job Description & Responsibilities

- Under the direction of the Team Leader and in collaboration with other members of the consultant team, support Project authority in design, tendering and construction as a sanitary and plumbing expert.



- Support Project authority to provide any kinds project related plumbing and sanitary works in the design, supervision, progress monitoring of the project, reporting of the project progress and the solution of issue. Specifically the design and construction stage.
- Assist Team Leader of the consultant team in carrying out their assigned activities.
- Assist Project authority in design and implementation of all Project works.
- Any other jobs assigned by team leader and or Project authority.

5. Drafts Man

Position Requirements

- Diploma in civil Engineering degree or minimum 2(Two) years Draftsmanship degree and or a relevant qualification.
- Minimum 05 years of working experience in Draftsmanship work for construction of building, roads and others civil structure.
- Having experience in excellent drawing and good oral communication will be preferred.

Job Description & Responsibilities

- Under the direction of the Team Leader and in collaboration with other members of the consultant team, support Project authority in design, tendering and construction as a Drafts Man.
- Support Project authority to provide any kinds project related drawing and sketch in the design, supervision, progress monitoring of the project, reporting of the project progress and the solution of issue. Specifically the design and construction stage.
- Assist Team Leader of the consultant team in carrying out their assigned activities.
- Assist Project authority in design and implementation of all Project works.
- Any other jobs assigned by team leader and or Project authority.

d. Others requirements of the firm :

The interested consulting firms are requested to submit the following supporting document against the above mentioned criteria:

- Application for Expression of Interest;
- The Consulting firm shall have registration with appropriate government authority along with up to date and valid BIN and TIN.
- Brochures of the Firms containing relevant experience, staffing & logistic facilities and areas of expertise, etc. Information in sufficient detail including description of experience with related documents in similar assignments, summaries of firms technical and managerial capabilities, availability of appropriate skills among key staffs with short biographies, availability of resources etc.
- Valid Trade license of the firm.
- Constitutional documents of the Firm.
- Bank Solvency Certificate along with Bank statement from last 03 (Three) month
- A list of Key professionals and Experience in similar working conditions should be submitted along with signed CV (including photograph).
- The Consulting firm shall have minimum annual turnover of Tk 30,00,000 (Thirty lakh) during the last 03(Three) years.
- Similar service experience record list (including employer name, location of the service, scope of service, contract value, date of commencement, date of completion (along with award of contract and completion certificate) etc.

❖ The EOIs would be reviewed on the basis of the following:

- Experience of the firm in similar works.



- Professional Strength (Staffing & Logistic) of the firm.
- Financial Soundness of the firm.

Association with other firm is not allowed. The interested firm (s) who has records of litigation and delaying the works strongly discouraged to apply for the Expression of Interest. The Client will conduct the short-listing of interested consultant firms for the above mentioned consultancy services. Request for Proposal (RFP) documents and relevant papers will be issued to the shortlisted firms only.

The interested Consulting Firm should sign and stamp the all pages of TOR and submit the same along with EOI. The EOI shall be submitted in two set (one original & another copy) on or before specific date and time to the office of Project Coordinator, Construction of Central Store Complex for JGTDSL Project, Gas Bhaban (6th Floor), JGTDSL, Sylhet. The proposal will be opened on the Date: XX-XX-2022, Time: 12.45 PM in presence of representatives of the EOI applicants (if any). The EOI shall be submitted in sealed envelope and clearly marked with named of the assignment to the office of inviting officials.

Any submission received after the submission date & time will not be accepted. This EOI would be processed following PPA-2006 & PPR-2008 in Bangladesh.

7. REPORTS & DOCUMENTS:

The consultant shall prepare and submit to JGTDSL the following documents reports. All reports and documents shall be 01 original with signature of team leader and 01 copies and softcopy in format of PDF in English. Timing of submission will be decided and notified to the Consultant by the Client reasonably.

- 1) Inception report (including schedule)
- 2) Engineering report (including basic design report)
- 3) Construction schedule and cost estimate
- 4) Draft of pre-qualification documents
- 5) Draft of bid documents
- 6) Draft of evaluation criteria and method of pre-qualification
- 7) Draft of evaluation report of pre-qualification
- 8) Draft of evaluation criteria and method of national competitive biddings
- 9) Draft of evaluation report of national competitive biddings.
- 10) Monthly progress report
- 11) Quarterly progress report
- 12) Project completion report

