



Bihar Urban Infrastructure Development Corporation Limited
A Government of Bihar Undertaking

TENDER DOCUMENT FOR

FOR

**SETTING UP SOLID WASTE PROCESSING
FACILITY AND LANDFILL FACILITY FOR
BHAGALPUR & MUNGER MUNICIPAL
CORPORATIONS AND ITS OPERATION AND
MAINTENANCE FOR 10 YEARS**

VOLUME-1: Instruction to Bidder

**Bihar Urban Infrastructure Development Corporation
Ltd (BUIDCO)**

SECTION-I

(Notice Inviting Tender)

Notice Inviting Tender (NIT)

SUB: Tender Bid Documents for Setting Up Solid Waste Processing Facility and Landfill Facility for Bhagalpur & Munger Municipal Corporations And Its Operation And Maintenance For 10 Years

Tender Bid Documents may be downloaded from Website www.eproc.bihar.gov.in. Tender fee & EMD shall be paid along with submission of tender documents. All the relevant documents of tenders / offers shall be submitted physically by Registered Post A.D. or Speed Post or Courier or Hand Delivery addressed to:

The Chief Engineer,
Design, Planning & Monitoring,
Urban Development & Housing Department,
Bihar Urban Infrastructure Development Corporation,
Near RajapurPul, West Boring,
Canal Road, Patna-800001, Bihar.

Superscript the envelope with Tender No. and Description of tender, Name of Bidder, contact numbers etc. Please note that offers can also be accepted through COURIER SERVICE OR HAND DELIVERY”.

Tender No.	BUIDCo/YO-1907/2020-182
Bid Security (EMD)	Rs 5,00,000.00/-
Bid Document Cost	Rs 20,000/-
Bid Processing Fee	Rs 17,700/-
Execution Period	9 month
Date of Downloading of bid document	From 29-09-2020 to 27-10-2020 upto 12:00PM, through website www.eproc.bihar.gov.in
Pace & Date of pre-bid meeting	Date 05-10-2020 Time 3:00PM; Office Near RajapurPul, West Boring, Canal Road, Patna-800001
Last date of receiving	Date 07-10-2020 Upto 5:00PM on email id-
Last Date and time for	Date 28-10-2020 Upto 3:00PM, through website
Last Date and submission of Hard copy	Date 28-10-2020 Upto 3:00PM; Office Near RajapurPul, West Boring, Canal Road, Patna-800001
Time and Date of	Date 29-10-2020 Time 4:00PM
Time and Date of Opening financial Bids	to be communicated later
Place of opening of Bid	through website www.eproc.bihar.gov.in
Period of Bid Validity	120 days
Officer Inviting Bid	The Chief Engineer, Design, Planning & Monitoring, (UD&HD), Patna

IMPORTANT NOTE TO BIDDERS:

1. **TIMELY SUBMISSION OF OFFER:**

All the relevant documents as per requirement of the tender shall be submitted physically along with EMD in sealed cover so that the same is received in this office on or before the due date and time. All such documents should be submitted by RPAD / speed post / Hand Delivery. Otherwise the offer will not be considered and no any further communication in the matter will be entertained.

No tender shall be accepted in any case after due date and time of receipt of tender, irrespective of delay due to postal or any other reasons and BUIDCo does not assume any responsibility for late receipt of the tender.

2. **TECHNICAL BID (TECHNO-COMMERCIAL BID) TO BE SUBMITTED BOTH IN PHYSICAL AS WELL AS SOFT COPY:**

Technical bid (Techno-commercial bid) documents are to be submitted in hard copy in scheduled time in sealed envelope and soft copy of techno-commercial bid only.

Technical bid (Techno-commercial bid) envelope shall be superscripted as: Tender No.: **BUIDCo/YO-1907/2020-182** Technical Bid (Techno-commercial bid) for **Setting Up Solid Waste Processing Facility and Landfill Facility for Bhagalpur & Munger Municipal Corporations And Its Operation And Maintenance For 10 Years**, due for opening on **29.10.2020**".

All the envelopes should be superscripted properly showing tender no., purpose (Main Cover/ EMD/ Technical Bid). Main Cover should be addressed to: **The Chief Engineer, Design, Planning & Monitoring, Urban Development & Housing Department, Bihar Urban Infrastructure Development Corporation, Near RajapurPul, West Boring, Canal Road, Patna-800001** and full address of the tenderer along with contact numbers should appear on the envelopes so as to identify the name of bidder who has submitted the offer.

3. Tender fee as applicable shall be submitted with the technical offer in the form of Demand Draft. (Non-Refundable)
4. EMD shall be submitted in separate envelope. EMD of as per NIT is to be paid at the time of submission of technical offer. EMD to be submitted in the form of DD or Bank Guarantee. While submitting the EMD, the tender no.: **BUIDCo/YO-1907/2020-182** due for opening on **29-10-2020**" shall be mentioned on the envelope. Cheque is not acceptable.
5. Bidder to note that Price Bid of those bidders shall be opened who is found technically qualified and is found reasonably responsive to BUIDCo"s tender terms and conditions and scope of Works.
6. Any technical / commercial query pertaining to this tender enquiry should be referred to **The Chief Engineer, Design, Planning & Monitoring, Urban Development &**

**Housing Department, Bihar Urban Infrastructure Development Corporation,
Near RajapurPul, West Boring, Canal Road, Patna-800001**

7. BUIDCo reserve the rights to accept / reject any or all tenders without assigning any reasons thereof.
8. Be in touch with above Websites till opening of the price bid, to know the latest status.

Yours faithfully,
For and behalf of

Bihar Urban Infrastructure Development Corporation Ltd.,

Chief Engineer,
Design, Planning & Monitoring,
Urban Development & Housing Department.

SECTION – II

INSTRUCTIONS TO THE BIDDERS

(ITB)

1. Background / Introduction

- 1.1.** BUIDCO, a nodal agency for development of urban infrastructure in Bihar, has taken the lead role for the development of Solid Waste Management (SWM) facilities in accordance with all applicable laws and regulations including the Municipal Solid Waste (Management & Handling) Rules (2016) for managing the municipal solid waste generated by Urban Local Bodies (ULBs) in Bihar.
- 1.2.** There are 11 Nagar Nigam (Municipal Corporations), 42 Nagar Parishad and 86 Nagar Panchayat in the state of Bihar. The Govt. of Bihar intends to develop Solid Waste Management (SWM) Facilities for all urban local bodies in phased manner. It is proposed to develop SWM facilities in Municipal Corporation as listed below.

Sr.	City Name	District	Type*	Population 2011
1	Bhagalpur	Bhagalpur	UA	4,10,210.00
2	Munger	Munger	City	2,13,101.00
*UA – Urban Agglomeration. City – within municipal limits				
Approximate expected waste generation quantity from the cities per year				
		Bhagalpur		Munger
Year		Ton/year		Ton/year
2021		80852		42002
2022		82469		42842
2023		84086		43682
2024		85703		44522
2025		87320		45362
2026		88937		46202
2027		90554		47042
2028		92171		47882
2029		93788		48722
2030		95405		49562
2031		97022		50402
2032		98963		51410

- 1.3.** BUIDCO has finalized structuring of the project bid documents and agreements required for the project. BUIDCO may also apply for various clearances required for the project. This arrangement has been envisaged to minimize time-delays in obtaining clearances. BUIDCO will make all efforts to apply for the required clearances; however, BUIDCO will not be responsible for getting any or all of such clearances that may be required for the project. In other words, the selected contractor will be responsible to follow-up and obtaining the clearances for which BUIDCO has already applied and also for applying any other clearances that may be required for this project.
- 1.4.** The Project has been structured on EPC format. The land for the different components of the Project, transportation of MSW from collection points and delivery of municipal solid waste (MSW) at Transfer Stations/Processing Facility, along with other necessary facilitation would be provided by BUIDCO for enabling successful implementation of the Project.

2. Scope of work:

The scope of works for the Successful Bidder would be:

- 2.1. To Design, Built, Operate and Maintain the Integrated Municipal Solid Waste Management Facility consisting of the following, for the entire term of the contract period. Land will be provided by BUIDCO.
 - i. Establishing a processing facility to process MSW based on any proven, suitable and viable options such as RDF, bio-methanation etc.; and operation & maintenance of the same
 - ii. Construction & Development of Sanitary Landfill Facility (SLF) and operation and maintenance of the same for the disposal of inert in line with MSW Rules 2016.
 - iii. Construction and operation of the leachate/waste water treatment plant for reuse/recycle/disposal of waste water generated from the facilities.
- 2.2. To ensure that the plant is able to receive, handle, transport, process & dispose the MSW generated in the city as per terms of the contract period.
- 2.3. To ensure that the Project meets stipulated pollution norms and guidelines and that the municipal solid waste is handled and managed in compliance with the MSW (Handling and Management) Rules 2016 and the guidelines of the manual on solid waste management published by CPHEEO, MoUD, BIS etc.
- 2.4. Marketing and selling of the products generated from the processing of the waste and sharing of the revenue generated from the selling of the product with BUIDCO

3. PRE-QUALIFYING REQUIREMENTS (PQR)

This Section contains all the criteria that the Employer shall use to evaluate Bid and qualify Bidders. No other factors, methods or criteria shall be used. The Bidder shall provide all the documentary evidence requested in bid and in the Bidding Forms.

Please note that joint venture is permitted not more than 03 nos. (including lead partner) JV/JV shall jointly meet 100% financial and technical requirement as specified in the tender.

3.1. QUALIFYING REQUIREMENTS

Bidder shall meet the qualification requirements stipulated herein under.

- a. Has an established project management organization covering the areas related to engineering of equipment/systems, interface engineering, procurement of equipment's and the necessary field services required for successful construction, testing and work for this contract and as required by the Bid Documents.
- b. Have adequate design, manufacturing and/or fabrication capability and capacity available to perform the work properly and expeditiously within the time period specified.
- c. Is a firm/EPC contractor, who regularly undertakes the type of work specified and has adequate technical knowledge and relevant experience for the works covered in the bidding documents.
- d. Has adequate financial stability and capability to meet the financial obligations pursuant to the Works covered in the Tender Documents. [The Bidders shall submit copies of their annual reports with profit & loss account and balance sheet for the preceding three (3) financial years].

- e. Has established quality assurance systems and organization designed to achieve high levels of equipment/system reliability, both during his manufacturing and/or fabrication and field installation activities.
- f. Does not anticipate a change in ownership during the proposed period of execution of work. (If such a change is anticipated, the scope and effect thereof shall be defined).

3.2. TECHNICAL QUALIFYING REQUIREMENTS

3.2.1. The bidder shall have successfully carried out similar works on EPC basis during last 7 years in India and all projects are in successful operation.

(i) Three similar completed works each costing not less than 46Cr.

OR

(ii) Two similar completed works each costing not less than 70Cr.

OR

(iii) One similar completed work costing not less than the 90Cr.

3.2.2. Additional technical qualification requirement: Bidder should have experience construction/operations of following during last 5 years.

(i) One processing plant for the mixed municipal waste of capacity 50TPD, anywhere in the world and should be successfully operational as per the design standard for at least one year, documentary evidence of the same to be submitted by the bidder.

(ii) Secured Landfill for disposal of residual waste generated from municipal solid waste processing plant/municipal solid waste of capacity 50TPD, anywhere in India and should be successfully operational for at least one year, documentary evidence of the same to be submitted by the bidder.

(iii) Leachate treatment plant of capacity 23KLD anywhere in the world and should be successfully operational as per the design standard for at least one year, documentary evidence of the same to be submitted by the bidder.

“Similar Works” experience means experience as an EPC contractor of design, detailed engineering, procuring, construction, testing, commissioning of infrastructure related project in India for any Government or Semi-government organization/public sector unit undertaking/public limited company in India.

Bidder shall submit documentary evidence with notarized performance certificate from End user containing details work order no., order Value, name / location of plant, start date, Completion date etc. of successfully completed projects.

Bidders does not have experience **of 3.2.2** can form MOU/JV with following agencies to satisfy the PQR requirement.

1. Technology provider having experience of design engineering, supply of electromechanical equipment’s and supervision of commissioning activity of the processing plant of the required capacity as per qualification requirement.

2. Reputed Engineering Firm having experience of design engineering, and constructions supervision of the Secured Landfill facility of capacity as per qualification requirement anywhere in India.
3. Reputed Engineering Firm having experience of design engineering and supervision of commissioning activity of the leachate Treatment plant of required capacity as per qualification requirement.

The technology provider/Engineering Firm must have a registered office in India fully equipped with trained manpower to extend services as and when required. Documentary evidence on above shall be submitted along with the offer.

Sole Bidder or as JV partner any agency cannot participate in more than one bid

3.3. FINANCIAL QUALIFICATION REQUIREMENTS

- a. The Construction turnover of the Bidder in any one year, in the preceding Five (5) financial years (ending on 31-03-2020) shall not be less than Rs.97.5 Crores (Indian Rupees Ninety Seven Crores Fifty Lakhs only).
- b. The Net Worth of the Bidder shall be positive as on the last day of the preceding financial year (ending on 31-03-2020).
- c. The Bidder shall submit certified copies of last three financial years' annual reports, profit & loss account and balance sheets.

3.4. ADDITIONAL REQUIREMENTS

1. Bidder shall have valid registration with employee's provident fund organization.
2. Bidder shall submit credit facility certificate of INR 19 Crores (Rupees Nineteen Crores) from any Nationalized / Scheduled bank / Foreign Bank having branch in India, acceptable to Client. Credit facility certificate shall not be more than one-year-old ending last day of month previous to the one in which bids are invited.
3. The Bidder shall have to furnish its audited financial statements on stand-alone entity basis. In case where audited results for the preceding financial year are not available, certification of financial statements from a practicing Chartered Accountant shall also be considered acceptable.
4. Details of Key Technical personnel including the project manager along with their qualification and experience (enclose CV) going to be proposed for this project.
5. Bidder shall possess valid PF number. Bid without proof of the same shall be rejected.
6. The Bidder to submit copy of INCOME TAX Permanent Account Number (PAN).
7. ATTESTED COPY OF GST REGISTRATION CERTIFICATE/NUMBER. If party has two Registrations out of which one is cancelled than party has to provide the No Due Certificate from GST Department for the cancelled GST Registration.
8. The bidder should not have been Black Listed by Government of India/Government any State Board/Corporations, since inception of the firm/Company. A Declaration in this

regard on Stamp Paper Duly Notarized shall have to be submitted by bidder along with the tender documents.

9. Details of construction equipment owned / hired by the bidder and going to be used/ mobilized for this project shall be furnished.

3.5. LITIGATION HISTORY:

The bidder should provide accurate information on any litigation history or arbitration resulting from contracts completed or under execution by him over the last ten years. This should also include such cases, which are in process/progress. A consistent history of awards against the bidder may result in failure of the bid. In case the bidder has not provided such information and has come to the notice of the authority, the tender will be rejected at what so ever stage and in such case all the losses that will arise out of this issue will be recovered from the Tenderer/contractor and he will not have any defense for the same.

- 3.6. Bidder shall visit site prior to bidding and shall provide an undertaking along with bid submission to have visited site and has understood the site conditions and have considered all cost pertaining to the site conditions and requirement prior to bidding.

- 3.7. Client reserved the right (i) to change, alter or to waive any technical or commercial terms, condition and qualification (ii) to reject all the bids or any bid in part or full without assigning any reason whatsoever (iii) for making changes/relaxation in eligibility criteria at any time in the interest of the public. The bidder shall have no cause of action or claim against the BUIDCO or its Officers/Employee's successor or assignee for rejection of his tender/bid.

- 3.8. The Tender of those bidder(s) who fail to submit the required documents physically within the stipulated date and time will be treated as non-responsive and their Price Bid will not be opened.

- 3.9. Percentage to be charged as supervision charges plus GST for the work got executed through other means: 15% to be charged as supervision charges in addition to cost of executed work if the work got executed through other agency due to default of the agency.

4. Bidding Process

Bidders are requested to submit Proposal in two parts, viz.:

Part 1 : Technical Proposal

Part 2 : Financial Proposal

The bid Security, tender fee and bid processing fee should be submitted along with the technical proposal.

All Bidders are required to submit their proposal in accordance with the guidelines set forth in this Bid document. In order to promote consistency among proposals and minimize potential misunderstandings regarding how Bidders' Proposals will be interpreted by BUIDCO, the format in which Bidders will specify the fundamental aspects of their proposals has been broadly outlined in this Bid Document.

- 4.1.** The evaluation of the Proposals would be carried out in two phases. The first phase would involve technical evaluation of the proposal as per the criteria mentioned in this document. There will a minimum qualifying score for the technical evaluation as per qualification criteria specified. Based on technical evaluation, the Financial Proposal (Part 2) of only qualified bidders would be opened for selecting the Successful Bidder.
- 4.2.** BUIDCO will issue a Letter of Intent (LoI) to the Successful Bidder.
- 4.3.** In this document, the term “Bidder” refers to all those qualified Applicants that have submitted Proposal in response to this bid document. “Developer” refers to the Successful Bidder selected by BUIDCO to develop this Project.
- 4.4.** BUIDCO reserves the right not to follow up this bid and terminate the entire selection process without any obligation to any of the Applicants / Bidders.
- 4.5.** The terms used in this Bid document and not defined herein shall have the meaning ascribed thereto in the Concession Agreement.
- 4.6.** The principal contract between the BUIDCO and the Developer will be the Concession Agreement, the draft of which is provided in the bid document. A prospective Bidder having any comments on the Concession Agreement may notify BUIDCO in writing. Bidders should send in their comments latest by the Last Date for Receiving Queries as given in the schedule of Bidding Process. However, it is not binding for BUIDCO to accept any such comments. If there are any amendments to the Concession Agreement after the submission of Bids but before opening of the Financial Proposals, and if amendments likely to have financial implications in view of BUIDCO, the qualified Bidders may be asked to submit revised Financial Proposal.
- 4.7.** The Developer would be required to ensure compliance of the MSW (M &H) Rules, 2016 and other applicable environmental rules/legislations and guidelines required to be met for the project activities. Any default to the compliance requirements would be default on part of the Developer and could lead to termination of the Concession Agreement.
- 4.8.** The confirmation and cross checking of the waste characteristics, land and other details provided shall be got done by the Bidders on its own.
- 4.9.** Within 30 days from the issue of LoI, the Developer would be required to enter into the Concession Agreement with BUIDCO. The Developer will also be required to submit a Performance Guarantee in favor of BUIDCO (of the amount specified in the Bid document) before signing the Concession Agreement.

5. Eligible Bidders

- 5.1. The **term** Bidder used hereinafter would therefore apply to both a single entity and a JV. The Bidder should submit a Power of Attorney as per the format enclosed at Annex 14, authorizing the signatory of the Proposal to commit the Bidder. In case the Bidder is a JV, it must comply with the additional requirements for Bidding as a JV as specified in this bid document.
- 5.2. At any point of time in the Bidding Process, if required by BUIDCO, it shall be the Bidders' responsibility to provide such evidence of their eligibility as per the terms of the RFP, to the satisfaction of BUIDCO.
- 5.3. One company, single or Joint Venture firm shall not be eligible to submit more than one bid, either individually or as a member of a JV for the same Project.
- 5.4. All Proposals must be submitted, duly signed by the Bidder (or a member authorized to sign the Proposal on behalf of the JV) under the "Covering Letter for Proposal Submission" the format for which is provided at Annex 3.

6. Additional requirements for Proposals submitted by a Joint Venture

- 6.1. In case the Bidder is a JV, the members of the JV shall furnish a Power of Attorney designating one of the members, as per the Memorandum of Understanding (MoU), as their Lead Member. A prescribed format for submitting the MoU along with the key Clauses that should be contained in the MoU is provided at Annex 2C. The authorized representatives of the members shall duly sign the Power of Attorney as per the format enclosed at Annex 2A. The Power of Attorney shall be furnished on a non-judicial stamp paper of Rs. 100/- duly attested by notary public.
- 6.2. Proposal submitted by a Joint Venture should comply with the following additional requirements:
 1. Maximum number of members in a JV would be limited to 3;
 2. Wherever required, the Proposal should contain the information required for each member of the JV;
 3. One of the JV members should have purchased the bid document from BUIDCO as specified in the bid document;
 4. The Proposal should include a description of the roles and responsibilities of individual members;
 5. An individual member applying as a sole Bidder cannot at the same time be member of any JV applying for this Project. Further, a member of a particular JV cannot be member of any other JV applying for this Project. Any member who submits or participates in more than one Bid for this Project will be disqualified and will also lead to disqualification of the JV of which it is a member;
 6. Members of the JV shall nominate one member as the Lead Member. The nomination(s) shall be supported by a Power of Attorney as per the format enclosed at Annex 2B signed by all the members.
 7. Members of the JV shall submit a Joint Venture Agreement / Memorandum of Understanding (MoU) for the purpose of submitting the Proposal, as per format attached in Annex 2C. The Joint Venture Agreement / Memorandum of Understanding (MoU) shall be furnished on a non-judicial stamp paper of Rs.

300/-, duly attested by notary public.

8. A copy of the JV Agreement /MoU duly notarized, should be submitted with the Proposal. The JV/MoU entered into among the members of the JV should be specific to this Project and should contain the above requirements failing which the Application shall be rejected as non-responsive. The JV agreement/MoU should be governed by the laws, rules and regulations of India and should be subject to jurisdiction of Indian Courts only.
9. Any entity which has been barred by BUIDCO/Govt of Bihar from participating in any Projects (BOOT or otherwise) and the bar subsists as on the Proposal Due Date would not be eligible to submit the Proposal, either individually or as member of a JV. An Affidavit as per the format in Annex 2E should be submitted along with the Proposal.
10. The Proposal shall be signed by the duly authorized signatory of the Lead Member and shall be legally binding on all the members of the JV.
11. All witnesses and sureties shall be persons of status and probity and their full names, addresses and telephone numbers/mobile numbers shall be stated below their signature. All signatures in the Proposal documents shall be dated.

7. Concession Period

The Concession Period of the project shall be 10years from the construction period.

8. Change in Composition of the Bidder

In case a Bidder is a JV, change in the composition of the Bidder will not be permitted.

9. Proposal Preparation Cost

The Bidder shall be responsible for all costs associated with the preparation of its Proposal and its participation in the bidding process. BUIDCO will not be responsible nor in any way liable for such costs, regardless of the conduct or outcome of the bidding process.

10. Clarifications

- 10.1. A prospective Bidder requiring any clarification on the RFP may notify the BUIDCO in writing. Bidders should send in their queries latest by the Last Date for Receiving Queries as given in the schedule of Bidding Process. However, it is not binding for BUIDCO to answer/accept any or all of such queries/comments. If there are any amendments to the Concession Agreement/RFP after the submission of Bids but before opening of the Financial Proposals, and such amendments likely to have financial implications in view of BUIDCO, the qualified Bidders may be asked to submit revised Financial Proposal.

- 10.2. Copies of the response will be forwarded to all purchasers of the RFP, including a description of the enquiry.

11. Amendment of Tender Document

- 11.1. BUIDCO may modify the tender document by issuing an Addendum before Proposal Due Date.
- 11.2. Any Addendum thus issued shall be part of the Bid document and shall be communicated in writing to all the purchasers of the Bid document and will also be hosted on the BUIDCO's website. Bidders shall acknowledge receipt of each Addendum in writing to BUIDCO. BUIDCO will assume no responsibility for postal delays.
- 11.3. To give prospective Bidders reasonable time in which to take Addendum into account in preparing their bids, BUIDCO may, at its sole discretion, extend the Proposal Due Date.

12. PREPARATION AND SUBMISSION OF PROPOSAL

12.1. Language of the Proposal

The language of Proposal and related documents and correspondence shall be as per the **Data Sheet**. Supporting documents and printed literature furnished by Bidder along with the Proposal may be in any other language provided that they are accompanied by translations in the language as per the Data Sheet and certified by the concerned Embassy/High Commission/Consulate of the country of origin of Bidder, in India. Supporting materials, which are not translated into the language mentioned in the Data Sheet, shall not be considered for evaluation. For the purpose of interpretation and evaluation of the application, translation certified by Embassy/ High Commission/Consulate shall prevail.

12.2. Currency of Proposal and Payments

The currency for the purpose of the Proposal shall be as per the **Data Sheet**. In case the conversion is required, the conversion to the currency mentioned in the Data Sheet shall be based on the exchange rate (RBI Reference Rate) as was applicable 7 days prior to Proposal Due Date. In all such cases, the original figures in the relevant foreign currency and the Proposal currency equivalent thereof must be given. The date used and exchange rate thereof shall be clearly stated. BUIDCO reserves the right to use any other suitable exchange rate for the purposes of uniformly evaluating all Bidders.

12.3. Bid Security

Proposals would need to be accompanied by a Bid security in Indian Rupees for an amount as given in NIT and valid for 45 days beyond the Proposal validity. The bid security shall be kept valid throughout the Proposal Validity Period including any extensions in the Proposal Validity Period and would be required to be extended and further extended if so required by BUIDCO. Any extension of the validity of the Bid Security as requested by BUIDCO shall be provided to BUIDCO, a minimum of seven calendar days prior to the expiry of the validity of the Bid Security, being extended. When an extension of the Bid Validity Period is requested, Bidders shall not be permitted to change the terms and conditions of their Bids. BUIDCO reserves the right to reject the Proposal submitted by any Bidder who fails to extend the validity of the Bid Security in

line with the provisions of this clause.

The Bid Security shall be in the following form:

An irrevocable Bank Guarantee issued by a Bank in favor of BUIDCO, as per the format set out in Annex 4A OR in form of DD in the name as specified in NIT. For the purpose of providing Bid Security, the “Bank” shall have the meaning specified below and Bank Guarantees issued by the following Banks would be accepted:

- I. Banks**
 1. State Bank of India and its subsidiaries
 2. Any Indian Nationalized Bank
 3. Foreign Bank (issued by a branch outside India) with a counter guarantee from SBI or its subsidiaries or any Indian Nationalized Bank.
 4. Any scheduled Commercial Bank approved by RBI having a net worth of not less than Rs.50 crores as per the latest Annual Report of the Bank. In case of a Foreign Bank (issued by a branch in India), the net worth in respect of Indian operations shall only be taken into account.
- II. The acceptance of the guarantee shall also be subject to the following conditions**
 1. The capital adequacy of the Bank shall not be less than the norms prescribed by RBI
 2. The Bank Guarantee issued by a Cooperative Bank shall not be accepted

The Bid Security along with unopened Financial Proposal of those Bidders whose does not qualify the minimum requirements for technical evaluation will be returned within a period of 1 month from the date of intimation of such rejection. Notwithstanding anything contrary to anything provided in these instructions to Bidders, the validity of the Bid Security of the Successful Bidder, on issue of the Letter of Intent by BUIDCO, should be extended by Developer, till the date on which the Concession Agreement is signed and is in force and Performance Guarantee is submitted (Format of Bank Guarantee enclosed at Schedule 8 of concession Agreement, Part –II of bid document). The Bid Security of those bidders who have qualified the technical evaluation but unsuccessful in financial evaluation shall be returned, subject to the provisions of this clause, within a period of 2 months from the date of announcement of the Successful Bidder. Provided however, that the bid security of the second lowest Bidder as determined on the opening of the Financial Proposal shall be returned by BUIDCO on the expiry of the Proposal Validity Period or the execution of the Concession Agreement, whichever is earlier. In addition to the above, BUIDCO will promptly release all Bid Securities in the event BUIDCO decides to terminate the bidding proceedings or abandon the Project.

3. BUIDCO shall reject the Proposal, which does not include the Bid Security.
4. The entire Bid Security shall be forfeited in the following cases:
 - i. If the Bidder withdraws its Proposal
 - ii. Due Date and expiration of the Proposal Validity Period;
 - iii. If the Successful Bidder fails to submit the Performance Guarantee in favour of BUIDCO and sign the Concession Agreement within the stipulated time.

12.4. Proposal Validity period

Proposal shall remain valid for a period not less than 120 days from the Proposal Due Date. BUIDCO reserves the right to reject any Proposal, which does not meet the requirement.

12.4.1. Extension of Proposal Validity period

12.4.1.1. In exceptional circumstances, prior to expiry of the original Proposal Validity Period, BUIDCO may request the Bidders to extend the period of validity for a specified additional period. The request and the Bidders' responses shall be made in writing. BUIDCO reserves the right to reject the Proposal submitted by any Bidder who fails to extend the period of validity of its Proposal in line with the provisions of this clause.

12.4.1.2. The Bid Validity Period of the Successful Bidder shall be automatically extended till the date on which the Concession Agreement is signed and is in force.

12.5. Project Inspection and Site Visits

The Bidder(s), at their own responsibility and risk are encouraged to visit and examine the site of Project and its surroundings and obtain all information that may be necessary for preparing the Proposal. The costs of visiting the site shall be borne by the Bidder. BUIDCO shall not be liable for such costs, regardless of the outcome of the Bidding process. Interested bidders may give prior intimation to BUIDCO and get necessary permission for the visits.

12.6. Bidders' Responsibilities

12.6.1. The Bidder is expected to examine carefully the contents of all the documents provided. Failure to comply with the requirements of RFP will be at the Bidders' own risk.

12.6.2. It would be deemed that prior to the submission of the Proposal, the Bidder has:

- (i) Made a complete and careful examination of requirements and other information set forth in this Tender Document
- (ii) Received all such information as it was requested from BUIDCO
- (iii) Made a complete and careful examination of the various aspects of the project including but not limited to
 - a. The project site
 - b. Existing Facility and structure
 - c. The conditions of the access roads and utilities in the vicinity of the Project Site
 - d. Conditions affecting transportation, access, disposal, handling and storage of the materials
 - e. Ownership of facilities during and after the Term of Concession
 - f. Clearances obtained by BUIDCO for the Project and All other matters
- (iv) BUIDCO shall not be liable for any mistake or error or neglect by the Bidder in respect of the above
- (v) Each Bidder shall submit only one Proposal in response to this Tender. Submission of more than one Proposal by any Bidder shall be sufficient ground for disqualification of the Bidder. In case, any entity is part of more than one Bidder (either a sole Bidder or a JV), this shall lead to disqualification of all the Bidders in which such an entity is participating that might affect the Bidder's performance under the terms of this Tender.

13. Pre-Bid Conference

- 13.1.** BUIDCO proposes to hold a Pre-Bid Conference on the date specified in the Schedule of Bidding Process to discuss the issues related to the Project with all the Applicants. BUIDCO on its discretion may also hold further discussions with the Applicants to finalise the technical/ commercial/ legal parameters and other related issues for the Project, before submission of the Proposals, which would be common for all the Applicants.
- 13.2.** Prior to the Pre-Bid Conference, the Bidders may submit a list of queries and propose deviations, if any, to the Project requirements and/or the Concession Agreement. Bidders must formulate their queries/proposed deviations and forward the same to BUIDCO before Last Date for Receiving Queries as specified in the Schedule of Bidding Process. BUIDCO may amend the RFP based on inputs, provided by prospective Bidders that may be considered acceptable in its sole discretion.
- 13.3.** BUIDCO, at its sole discretion, may respond to inquiries submitted by the conference attendees after the date of the Pre-Bid Conference. Such a response will be sent in writing to all the Applicants who have purchased RFP document, and will qualify as an “Addendum” to the RFP.
- 13.4.** Bidders may note that BUIDCO will not entertain any deviations to the RFP at the time of submission of the Proposal or thereafter. The Proposal to be submitted by the Bidders shall be unconditional and the Bidders would be deemed to have accepted the terms and conditions of the RFP with all its contents and Addendums issued thereafter including the Concession Agreement. Any conditional Proposal shall be regarded as non-responsive and would be liable for rejection.
- 13.5.** Attendance of Bidders at the Pre-Bid Conference is not mandatory.
- 13.6.** All correspondence/ enquiry should be submitted to communication method given in NIT.

14. GUIDELINES FOR EVALUATING PROPOSAL:

Proposal of the bidders who are technically qualified based on the PQR given elsewhere in the bid document will be further evaluated on **Quality cum Cost-Based Selection (QCBS)** method [80:20].

14.1. Evaluation of Technical Bid:

The Bidder (sole or JV) shall submit their technical proposal clearly mentioning the following:

- Bidder’s understanding of the project concept
- Bidders experience in implementing Infra-structure Projects
- Bidders experience in implementing MSW sector Projects
- Proposed approach, methodology for implementing the proposed project

- Detailed specifications of equipment to be used for this Project.
- Schedule for implementation of the proposed project
- Plans for marketing of products/tie-ups

The bidders will be evaluated against a total score of 100 by the evaluation committee. The distribution of score will be as follows:

Sr. No.	CRITERIA	Max Marks
1	Experience in Infra-structure Project 1. For aggregate value of project in last 5year up to 90Cr. -5 Marks 2. For aggregate value of project in last 5year 90Cr to 500Cr. -5 Marks 3. For aggregate value of project in last 5year greater than 500Cr. - 10 Marks	20
2	Experience in Municipal Solid waste (MSW) sector 1. For aggregate capacity of processing plant/landfill in last 5 years for the MSW processing up to 100TPD – 0 marks 2. For aggregate capacity of processing plant/landfill in last 5 years for the MSW processing 100TPD to 200TPD – 10 marks 3. For aggregate capacity of processing plant/landfill in last 5 years for the MSW processing greater than 200TPD – 20 marks	20
3.	Experience of Leachate Treatment plant 1. For aggregate capacity of Leachate Treatment Plant in last 5 years up to 23KLD – 2 marks 2. For aggregate capacity of Leachate Treatment Plant in last 5 years up to 100KLD – 3 marks 3. For aggregate capacity of Leachate Treatment Plant in last 5 years up to 300KLD – 5 marks	10
3.	Approach & Methodology for implementing this project	15
4.	Technical Presentation: Each Bidder shall have to make a one hour present for the proposal to evaluating committee, Eligible bidder meeting the pre-qualification shall be intimated for the time and date of presentation	25
5.	Details of Professionals	10
	Total	100

Any Applicant who achieves a score of 80 and above against the total marks of 100 will be deemed to be qualified for the technical capability criteria (based on submissions as per guidelines in Response Sheet No 5.B.4 to the technical evaluation Committee).

The technical & financial bids will be given a weightage of 80:20 respectively to arrive at a final score, which determines the preferred bidder. The bidder who has scored the

highest technical score will be assigned a score of 80; while the remaining bidders will get a score calculated as below:

Technical score of bidder = Technical Marks obtained x (80/ Highest score)

14.2. Evaluation of Financial Proposal:

The financial proposals of Technical qualified bidders will be opened. The financial Proposal shall essentially consist of three figures as per Price Bid these figures include:

1. Capital cost for establishing the facility (Process plant+ secured landfill + leachate treatment plant + related infra structure)
2. Tipping fees per Ton of MSW for Processing & Disposal
3. Royalty (Assured sharing of revenue with BUIDCO) per year for marketing and selling of product from processing plant.

Additionally, the NPV format itself includes anticipated projected quantity of MSW for every year during the term.

4. Based on NPV the bidders will be rated the bidder with lowest NPV will be assigned a score of 20; while the remaining bidders will get a score calculated as below:

Financial score of bidder = Lowest NPV x (20/ Total NPV of the Bidder)

5. The consolidated scores of bidders for Technical and Financial will be accounted for the selection. The Bidder with Highest Total Score will be considered as L1 and so on and so forth.

Total Score of Bidder = Technical score of bidder + Financial score of bidder

6. In case of tie on score the bidder with highest technical mark will be given first preference
7. After examining the financial proposal of the selected bidder along with the working sheets / calculations sheet, if the evaluation committee is satisfied with the estimates, then the committee may select the bidder.
8. In case the committee feels that the calculations are not justifiable on a long-term basis, then they may take an appropriate decision to select a suitable bidder from among the selected bidders. The evaluation committee reserves the right to make suitable decisions in the interest of the project and they are not bound to accept proposals purely on financial aspects. Decision of BUIDCO will be final for the selection of the Bidder.

15. Confidentiality

Information relating to the examination, clarification, evaluation, and recommendation for the Bidders shall not be disclosed to any person not officially concerned with the process. BUIDCO will treat all information submitted as part of Proposal in confidence and would require all those who have access to such material to treat the same in confidence. BUIDCO will not divulge any such information unless it is ordered to do so by any authority that has the power under law to require its disclosure.

16. Clarifications

To facilitate evaluation of Proposals, BUIDCO may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Proposal. Notwithstanding anything contained in the RFP, BUIDCO reserves the right not to take into consideration any such clarifications sought by it for evaluation of the Proposal.

17. Acceptance of Letter of Intent (LOI)

Within fifteen (15) days from the date of issue of the LOI, the Successful Bidder shall accept the LOI and return the same to BUIDCO. The Successful Bidder shall execute the Concession with BUIDCO and also submit a Performance Guarantee in favour of BUIDCO (of the amount specified in Data Sheet) within thirty- (30) days of acceptance of LOI.

In case, the Concession Agreement does not get executed within thirty- (30) days of acceptance of LOI and submission of Performance Guarantee, BUIDCO reserves the right to invite any other suitable bidder for discussions/negotiations or may also decide to annul the bidding process or may invite fresh bids for the Project. Only acceptance of LOI without the Performance Guarantee shall not be considered as acceptance of LOI and in such a case the entire Bid security submitted by the Successful Bidder shall be forfeited.

However, BUIDCO on receiving request from the Successful Bidder may at its absolute discretion, permit extension of the aforesaid period of 30 days for execution of the Concession Agreement.

BUIDCO will notify other Bidders that their Proposals have been unsuccessful. The Bid Security of second and third preferred Bidder shall be returned after signing of the concession agreement with the successful bidder. Bid Security of other bidders will be returned as promptly possible as, in any case not later than 2 months from the date of announcement of the Successful Bidder.



Bihar Urban Infrastructure Development Corporation Limited
A Government of Bihar Undertaking

TENDER DOCUMENT FOR

FOR

**SETTING UP SOLID WASTE PROCESSING
FACILITY AND LANDFILL FACILITY FOR
BHAGALPUR & MUNGER MUNICIPAL
CORPORATIONS AND ITS OPERATION AND
MAINTENANCE FOR 10 YEARS**

VOLUME-2: PRICE BID

**Bihar Urban Infrastructure Development Corporation
Ltd (BUIDCO)**

1. Price Bid Format (Rate should be quoted in financial sheet (Excel Sheet) provided through e-proc only.)

Sr. No.	Description	Unit	Basic Rate (Rs)	Applicable rate of GST (%)	Value of GST (Rs)
1.	Establishing processing facility to receive and process the MSW supplied by Urban Local Body (ULB) using suitable technologies preferably for waste to energy along with other suitable options and construction & Development of Sanitary Landfill Facility (SLF) for the disposal of inert in line with MSW Rules 2016 and Development of leachate treatment plant for reuse/recycle/safe disposal of leachate from the facility. Above Facilities should be with all required infrastructure like, boundary wall, road, admin block etc required for efficient operation of plant and handling of waste				
a	Bhagalpur (250TPD)	Rs			
b	Munger (150TPD)	RS			
2.	Receiving the solid waste delivered by municipal corporation and process the waste as per Rule 2016 and as per terms and condition of contract (Total of column 6 of NPV sheet for each city)				
a	Total Amount of Operation for 10 year for Bhagalpur	Rs			
b	Total Amount of Operation for 10 year for Munger	Rs			
3.	Assured Sharing of revenue with BUIDCo for the marketing and selling of the products generated from the processing of the waste. (Total of column 7 of NPV sheet for each city)				
a	Total Aggregate Value of revenue sharing for 10 Year for Bhagalpur	Rs			
b	Total Aggregate Value of revenue sharing for 10 Year for Munger	Rs			

Bidder to note the following while filling-up the price bid:

- The Quoted price should include all the applicable taxes charges etc., accept GST. GST shall be paid extra as per applicable rate as per the notification of government from time to time.

- The price for establishment of the integrated facility to be quoted in item -1 should include the integrated facility capacity suitable to handle next 3 years' waste and the expected leachate and inert generated from it. The price should include all the development expenses including the cost of clearing the site, construction of any temporary permanent construction for the work, boundary wall of at least 2.1m height from FGL with barbed wire fencing, internal road, earth filling etc. as per the detail specification given in tender. No extra payment shall be made for any site development activity.
- For item no.1 bidder to provide the breakup of the quoted price in terms of the facility proposed by the bidder like, boundary wall, road, process plants with each type, SLF, transfer station if any etc. including the cost of constructing the ETP to treat any liquid waste generated from the premises. The Plant should able to meet all statutory requirement.
- The Reject to landfill should not be more than 20% of the waste received
- The operational price to be quoted for item-2 should be based on the quantity of the waste received from the municipal corporation at the processing plant and paid based on the actual quantity of waste received.
- The operation/processing rate: Bidder should Quote for Each Year Operation and processing cost
- The operation cost should accommodate for the increasing the processing and landfill facility capacity to handle the increase in waste generation over the contract period.
- The value quoted in item is the minimum assured value bidder guaranteed to pay as revenue share to BUIDCo. Bidder should quote value for each year.

2. Format for Calculation of NPV (to be submitted for each city separately)

NPV CALCULATION FORMAT									
Sr. No.	Year	Projected waste Qty	Establishment of Processing facility +SLF + Leachate Treatment Plant + Other Infrastructure	Tipping fees for receiving the solid waste delivered by municipal corporation and process the waste as per Rule 2016 and as per terms and condition of contract		Yearly Royalty	Total Value	NPV Factor	Net NPV
		Ton/Year	EPC Value in Rs	Tipping fees = Rs/MT	Total Tipping Fee = Rs/Year	Rs/ year			Rs
1	2	3	4	5	6=3x5	7	8=4+6-7	9	10=8x9
1	2021					-	-	1.00	-
2	2022				-	-	-	0.88	-
3	2023				-	-	-	0.77	-
4	2024				-	-	-	0.68	-
5	2025				-	-	-	0.60	-
6	2026				-	-	-	0.53	-
7	2027				-	-	-	0.46	-
8	2028				-	-	-	0.41	-

					-		-		-
9	2029				-	-	-	0.36	-
10	2030				-	-	-	0.32	-
11	2031				-	-	-	0.28	-
11	2032				-	-	-	0.25	-
Total NPV Value									-

Note:

1. For calculation of NPV, quoted basic rates to be used (i.e. rates without GST)
2. Waste Qty to be adopted as per the details given in tender document
3. NPV for each City to be prepared separately
4. Total NPV of all the cities will be used for evaluation of financial proposal

3. Penalty Clause

3.1. Liquidity Damages.

- i. If the Contractor fails to complete the work under contract by the stipulated date, he shall pay liquidated damages of **0.1 percentage** plus GST as applicable of the EPC contract value (excluding O&M) per week from the date of delaying the said work up to the date of completion and handing over to BUIDCo.
- ii. The aggregate maximum of liquidated damages payable under clause No. (i) shall not exceed **0.1 percentage** plus GST as applicable of contract value per Week and shall be subject to the maximum amount of Ten percentage plus GST as applicable of the EPC contract value (excluding O&M). However, fees payable to consultant due to delay is also recoverable from the contractor as suitable way.
- iii. Delays for requiring payment of ten percentages liquidated damages of the value of the contract for performance shall be sufficient causes for termination of contract and forfeiture of security deposit including amount of performance bond in respect of works and registration of the contractor shall also be kept in abeyance for three years from the date as fixed on all cases.

Moreover, in case of prolonged undue delay more than maximum delay penalty period Contractor shall be put in permanent black list and He shall be liable to pay the liquidated losses which may require to complete the remaining work at the risk and cost of the contractor by assigning the work to any other agency.

3.2. Penalties during Operation and Maintenance:

- i. If the contractor refuse to receive waste up to the anticipated calculated waste quantity as per the tender than penalty at rate **twice** the price quoted as tipping in item 2 of price bid and as applicable for the concern year will be charged for the reduced quantity processed.
- ii. If the waste quantity going to landfill is more than 20% of the quantity receipt than penalty at rate **twice** the price quoted as tipping in item 2 of price bid and as applicable for the concern year will be charged for the increased quantity sent to landfill.

- iii. The restoration period for repairing work/replacement work shall be as under:
(The period shall be counted from intimation received/given to the Contractor)

Sr. No. (1)	Type of Work (2)	Restoration Period (3)
1.	Replacement/repair of electro - mechanical spares and other equipment.	Maximum seven days or as per requirement as decided by BUIDCo's Engineer-in-charge.
2.	Repairing of civil damages	Maximum seven days or as per requirement as decided by BUIDCo's Engineer-in-charge.
3.	For major repairing shut down will be given as per requirement by BUIDCo's Engineer-in-charge with prior permission of competent authority.	

- iv. No work/equipment shall remain ideal/unrepaired or damaged (including spares/Stand by Machinery). If any work/equipment is not repaired, rectified, replacement of major part of equipment as per above reference table column No. 3, the Contractor shall be penalized with no limit at the rate of minimum Rs. 1000/- per day for delay in restoration of work/equipment/Machinery those are required in continuous operation to meet the requirement.
- v. Contractor shall have to maintain lighting facility in the premises. In case if no sufficient light is found or left unrepaired for more than two days then penalty of Rs. 100/- per day per light will be charged.
- vi. For non-satisfactory operation and maintenance, penalty will be charged as decided by BUIDCo's Engineer-in-charge. For example, operator sleeping during duty hours, poor housekeeping, not handling plant and/or Municipal Solid Waste properly, etc.
- vii. All the consumables including lubricating oils, spare parts, etc. as may be required during O&M period shall be provided by the Contractor. The Contract Price shall be deemed to be inclusive of all these items and no extra payment shall be admissible on this account.

4. Payment Terms

4.1. Advance payment

An advance payment of maximum 10% of the construction cost can be released against ABG from the schedule bank approved by BUIDCo. Advance payment to be recovered on pro-rata basis from the RA bill **after completion of 15% of work.**

4.2. For Payment during construction period for establishment of facility:

Contractor to submit the break-up of item.1 of price bid in terms of various items under civil, mechanical, electrical and instrumentation, the same will be considered for payment. Detail item wise payment schedule will be prepared after award of work based on the approved design.

Broad milestone of payment during construction phase shall be as follows:

- i. 5% on approval of design engineering
- ii. 75% of payment on pro-rata basis during construction activity as per approved schedule of payment
- iii. 10% of payment on successful commissioning and completion of all testing and trial and receipt of permission for operations.
- iv. 10% of payment on successful operation of facility for one month.

Taxes as applicable shall be deducted prior to payment.

4.3. SECURITY DEPOSIT CUM PERFORMANCE BANK GUARANTEES (SD CUM PBG):

Security Deposit is required to be furnished by the Contractor as guarantee money for performance of the Contract and observance of Contract Conditions.

Total 10% security deposit of Estimated Contract Value or the Contract Price Quoted by the successful Bidder (whichever is higher) shall be applicable.

Security Deposit shall be submitted in following manner:

Sl. No.	Description	%age of Estimated Contract Value or Contract Price quoted by the successful Bidder, whichever is higher
i	To be deducted from RA bills	5.0%
ii	Performance Bank Guarantee from Scheduled Bank or Nationalized Bank	5.0%
	Total	10%



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VOLUME-3: ANNEXURE

Bihar Urban Infrastructure Development Corporation Ltd
(BUIDCO)

Annexure 1
Template for Pre-Bid Queries

Bidders shall submit all pre-bid queries in excel in the following format.

Sl. No.	TENDER Volume, Section	TENDER Page No	Contents in TENDER	Clarification Sought

Annexure 2
Formats for Submission of the Pre-Qualification Bid

Pre-qualification bid checklist

Sl. no.	Checklist Items	Compliance (Yes or No)	Page No. and Section No. in bid
1	TENDER Document fees		
2	Earnest Money Deposit		
3	Pre-Qualification Covering letter		
4	Copy of Certification of		
	Incorporation/Registration Certificate		
	PAN card		
	GST registration		
	EPFO registration		
5	Audited financial statements for the last three financial years and Certificate from the Statutory Auditor		
6	Declaration of non-blacklisting		
7	Experience Certificate		
8	No Deviation Certificate		
9	Total Responsibility Certificate		
10	Anti-Collusion Certificate		
11	Details of organization structure of the Bidder		
12	Details of Personnel		
13	Details of Machinery Equipment and work Plan		
14	Personnel/ staff proposed for the project		
15	Curriculum Vitae of Project Manager and all key Technical Staff		
16	Proposed site organization and Management		
17	Approach & Methodology with conceptual design & supporting calculations of the system.		
18	Form-H (Declaration)		

Annexure 3
Pre-Qualification Bid Covering Letter

Date: dd/mm/yyyy

To,

[]

Sub: Tender for “Setting Up Solid Waste Processing Facility and Landfill Facility For Bhagalpur & Munger Municipal Corporations And Its Operation And Maintenance For 10 Years”.

Ref: Tender No. <<.....>> **dated** <<>>

Dear Sir,

With reference to your Tender for “Setting Up Solid Waste Processing Facility and Landfill Facility For Bhagalpur & Munger Municipal Corporations And Its Operation And Maintenance For 10 Years” we hereby submit our qualification bid, Technical Bid, etc. for the same. We hereby declare that:

- a) We hereby acknowledge and unconditionally accept that the Authority can at its absolute discretion apply whatever criteria it deems appropriate, not just limiting to those criteria set out in the Tender and related documents, in short listing of Agency for providing services.
- b) We have submitted EMD of INR [] online in the form of FDR/Bank Guarantee and Tender fee of INR [] online in the form of DD.
- c) We hereby declare that all information and details furnished by us in the bid are true and correct, and all documents accompanying such application are true copies of their respective originals.
- d) We agree to abide by our offer for a period of 180 days from the last date of online submission of the bid and/or as prescribed by Authority and that we shall remain bound by a communication of acceptance within that time.
- e) We have carefully read and understood the terms and conditions of the Tender and the conditions of the contract applicable to the tender. We do hereby undertake to provision as per these terms and conditions.
- f) In the event of acceptance of our bid, we do hereby undertake:
 - i. To supply the products and commence services as stipulated in the tender document;

- ii. To undertake the project services for entire contract period from the date of signing of the contract as mentioned in the tender document;
 - iii. We affirm that the prices quoted are inclusive of supply, construction, commissioning, providing facility management and handholding support, and inclusive of all out of pocket expenses, taxes, levies, discounts, etc.
- g) We do hereby undertake, that, until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and notification of award of contract, shall constitute a binding contract between us.
- h) We understand that the Authority may cancel the bidding process at any time and that Authority is not bound to accept any bid that it may receive without incurring any liability towards the Bidder.
- i) We fully understand and agree to comply that on verification, if any of the information provided in our bid is found to be misleading the selection process, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so.

In case of any clarifications please contact _____ email at

Thanking you,

Yours sincerely,

(Signature of the Bidder)

Printed Name

Designation

Seal

Date:

Place:

Business Address:

Annexure 4 Company profile

A. Brief company profile (required for both Bidder and consortium member)

SL.NO.	PARTICULARS Name of Bidder	DESCRIPTION OR DETAILS
1	Name of Bidder	
2	Legal status of Bidder (company, Pvt. Ltd., LLP etc.)	
3	Main business of the Bidder	
4	Registered office address	
5	Incorporation date and number	
6	GST number	
7	PAN details	
8	Primary Contact Person (Name, Designation, address, mobile number, fax, email)	
9	Secondary Contact Person (Name, Designation, address, mobile number, fax, email)	
10	EMD details	

B. Certificate of Incorporation

C. Financial Turnover

The financial turnover of the company is provided as follows:

	2015 – 16	2016 – 17	2017 – 18	2018 – 19	2019-20
Annual Turnover					

Copy of audited financial statements or declaration from the appointed Chartered Accountant to be provided as proof of the financial turnover

Annexure 5
Declaration of Non-Blacklisting

(To be provided on the Company letter head)

Declaration for Bidder:

Place

Date

To,

[]

Subject: Self Declaration of not been blacklisted in response to the Tender for “Setting Up Solid Waste Processing Facility and Landfill Facility For Bhagalpur & Munger Municipal Corporations And Its Operation And Maintenance For 10 Years”.

Ref: TENDER No. <<.....>> **dated** <<>>

Dear Sir,

We confirm that our company or firm, _____, is currently not blacklisted in any manner whatsoever by any of the State or Union Territory and or Central Government in India on any ground including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.

(Signature of the Lead Bidder)

Printed Name

Designation

Seal

Date:

Place:

Business Address:

Annexure 6
No Deviation Certificate

This is to certify that our offer is exactly in line with your tender enquiry/TENDER (including amendments) no. _____ dated _____. This is to expressly certify that our offer contains no deviation either Technical (including but not limited to Scope of Work, Business Requirements Specification, Functional Requirements Specification and Technical Requirements Specification) or Commercial in either direct or indirect form.

(Authorized Signatory)

Signature:

Name:

Designation:

Address:

Seal:

Date:

Annexure 7
Total Responsibility Certificate

This is to certify that we undertake the total responsibility for the defect free comprehensive maintenance of the proposed construction works as per the requirement of the Tender for the duration mentioned in all the volumes of the Tender.

(Authorized Signatory)

Signature:

Name:

Designation:

Address:

Seal:

Date:

Annexure 8
Experience Certificate

EXPERIENCE OF BIDDER

S. No	Name of the work	Work Order			Date of completion of work	Details of similar works executed		Liability period	
		No./dt	Amount in Lacs	Name of Client		Type of work	Amount of work	As provided in contract	As completed as on date

NOTE:

Client Certificate towards satisfactory completion of work from Competent Authority should be attached in respect of each work in Model Format along with copy of work order.

Signature of Bidder

Model Format

To whomsoever it may concern

Certified that M/s.....have successfully completed the work of vide work order number dated costing Rs..... as per following details:-

Sl. No	Locations (give the address details)	Date of completion	Remarks

Date: - Place:-

Signature & Seal of Competent Authority with seal

**Annexure 9
STATEMENT – B**

Statement showing the similar works on hand / in progress before one month prior to Bid Submission date

Sr. No.	Name of Department / Client with Address	Name of work	Estimated cost of work put to tender	Tendered Amount	Date of award of contract	Target date of completion of work as per contract and date of completion of work if completed		Actual Amount of work done	Time limit in year and months		Reasons for delay in completion of work	Remarks
						Target Date	% Progress till Date		Original Y M	Extended (if any) Y M		
1	2	3	4	5	6	7a	7b	8	9a	9b	10	11

Note : (1) Attested Copies of Work Order and detail progress Certificates from issuing authority have to be attached.

(2) It is mandatory to furnish details in this format only.

Signature of Bidder

Annexure 10
STATEMENT – D

**DETAILS OF TECHNICAL AND ADMINISTRATIVE PERSONNEL TO BE
EMPLOYED FOR THE WORK**

Sr. No	Designation	Total number	Number available for this work	Name	Qualification.	Professional experience of details of work carried out.	How these would be involved in this work.	Remarks
1	2	3	4	5	6	7	8	9

Signature of Bidder

Annexure 11 Anti-Collusion Certificate

We hereby certify and confirm that in the preparation and submission of our Bid for “**Setting Up Solid Waste Processing Facility and Landfill Facility For Bhagalpur & Munger Municipal Corporations And Its Operation And Maintenance For 10 Years**” issued by BUIDCo, we have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed or thing, which is or could be regarded as anti-competitive. We further confirm that we have not offered nor will offer any illegal gratification in cash or kind to any person or organization in connection with the instant bid.

(Signature of the Lead Bidder)

Printed Name

Designation

Seal

Date:

Place:

Business Address:

Annexure 12 Performance Bank Guarantee

Ref: _____

Date _____

Bank Guarantee No. _____

<Name>

<Designation>

<Address>

<Phone Nos.>

<Fax Nos.>

<Email id>

Whereas, <<name of the Bidder and address>> (hereinafter called “the Bidder”) has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> <<name of the assignment>> to Gandhinagar Smart City Limited (hereinafter called “the Authority”)

And whereas it has been stipulated by in the said contract that the Bidder shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <Name of Bank> a banking company incorporated and having its head/registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the Bidder such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the Bidder, up to a total of Rs.<Insert Value> (Rupees <Insert value in words> only) and we undertake to pay you, upon your first written demand declaring the Bidder to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs. <insert value> (Rupees <insert value in words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between

you and the Bidder shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This Guarantee shall be valid until <<insert date>>)

Notwithstanding anything contained herein:

I. Our liability under this bank guarantee shall not exceed Rs. <insert value> (Rupees <insert value in words> only).

II. This bank guarantee shall be valid up to <insert expiry date>)

- I. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before <insert expiry date>) failing which our liability under the guarantee will automatically cease.

Date _____

Place _____

Signature _____

Witness _____

Printed Name _____

(Bank's common seal)

Annexure 13
Bank Guarantee for Earnest Money Deposit

To,

<Name>

<Designation>

<Address>

<Phone Nos.>

<Fax Nos.>

<Email id>

Date:

Bank Guarantee No.:

WHEREAS _____ (hereinafter called “the Bidder”) has submitted its Proposal dated _____ for _____ (hereinafter called “the RFP”) and whereas We, Bank; agree to give the Tenderer a guarantee for the Earnest Money Deposit.

1. Therefore, we hereby affirm that we are Guarantors on behalf of the Bidder upto a total of Rupees (i.e. Rs.....) and we undertake to pay to the Bihar Urban Infrastructure Corporation Limited, Patna, upon his first written demand and without demur, without delay and without necessity of previous notice of individual or administrative procedure and without necessity to prove the bank the defects or shortcomings or debit of the Bidder any sum within the limit of Rupees.....
2. We further agree that the guarantee here in contained shall remain in full force and effective during the period that would be taken for the acceptance of the tender. However, unless a demand or claim under this guarantee is made only in writing on or before the we shall be discharged from all liabilities under the guarantee thereafter.

3. We undertake not to revoke the guarantee during its currency except with the previous consent of the Bihar Urban Infrastructure Corporation Limited, Patna, in writing.
4. We lastly undertake not to remove the guarantee for any change in constitution of the Bidder or the Bank.

This guarantee will remain in full force up to and including insert: [the date that is 28 days after the period of Proposal validity], and any demand in respect thereof must reach the Bank not later than the above date.

Signature and Seal of the Guarantor Bank:

Address:

Date:

In the capacity of: [*insert: title or other appropriate designation*] Seal of the Bank

Note:

- This guarantee will attract stamp duty as a security bond.
- A duly certified copy of the requisite authority conferred on the official/s to execute the guarantee on behalf of the bank should be annexed to this guarantee for verification and retention thereof as documentary evidence in the matter.

Annexure 14
Format for Power of Attorney to Authorize Signatory

POWER OF ATTORNEY

[To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant Stamp Act. The stamp paper is to be in the name of the company, who is issuing the power of attorney.]

We, M/s._____ (name of the firm or company with address of the registered office) hereby constitute, appoint and authorize Mr. or Ms._____ (Name and residential address) who is presently employed with us and holding the position of _____, as our Attorney to do in our name and our behalf all or any of the acts, deeds or things necessary or incidental to our TENDER for the Project _____ (name of the Project), including signing and submission of the TENDER response, participating in the meetings, responding to queries, submission of information or documents and generally to represent us in all the dealings with Client or any other Government Agency or any person, in connection with the works until culmination of the process of bidding till the Project Agreement is entered into with _____ (Client) and thereafter till the expiry of the Project Agreement.

We hereby agree to ratify all acts, deeds and things lawfully done by our said Attorney pursuant to this power of attorney and that all acts, deeds and things done by our aforesaid Attorney shall and shall always be deemed to have been done by us.

(Add in the case of a Consortium)

Our firm is a Member or Lead bidder of the Consortium of _____, _____
and _____ dated this the _____ day of _____ 2020.

(Signature and Name of authorized signatory)

(Signature and Name in block letters of all the remaining partners of the firm Signatory for the Company)

Seal of firm Company

Witness 1:

Witness 2:

Notes:

- a) To be executed by all the members individually.
- b) The Mode of execution of the power of attorney should be in accordance with the procedure, if any laid down by the applicable law and the charter documents of the executants(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.

Annexure 15
Form of Agreement (DRAFT)

This agreement is made on the day of 2020 between the The Chief Engineer, Design, Planning & Monitoring, UD&HD, BUIDC, Patna (hereinafter called “BUIDCo”) of the one part and (hereinafter called "Bidder") of the other part.

WHEREAS BUIDCo is desirous for execution of work regarding “Setting Up Solid Waste Processing Facility and Landfill Facility For Bhagalpur & Munger Municipal Corporations And Its Operation And Maintenance For 10 Years” within Concerned Corporation Limit.

WHEREAS BUIDCo has accepted a bid of the Bidder (..... name of the Bidder) for the execution & completion of such work.

NOW THIS AGREEMENT WITNESSES as follows:

In this agreement words and expressions shall have the same meanings as are respectively assigned to them in the conditions of the contract hereinafter referred to.

The following documents shall be deemed to form and be read and constructed as part of this agreement, viz :

- a) Form of agreement
- b) Letter of award and any pre award correspondence between BUIDCo and the Bidder
- c) Bid documents contained in :

Vol-I : Instructions to Bidders

Vol-II : General Conditions of Contract

Vol-III: Price Bid

Vol-IV: Scope of work and Technical specification

The work will be executed strictly according to specifications and drawings relating to the work as indicated in the RFP document. The schedule of items of work to be carried out will be as per approved TENDER.

All correspondence and modifications of bid offer and acceptance letter will form part of this agreement.

The Bidder hereby covenants with BUIDCo to execute the work in conformity in all respects with the provisions of this Agreement.

IN WITNESS thereof the parties to these present have here to set and subscribed their respective

hands the day, month and year first above written.

SIGNED for and on behalf of BUIDCo

Witness

SIGNED for and on behalf of the Bidder Authorized Representative

Witness

Annexure-16

DETAILS OF ORGANIZATION STRUCTURE OF THE BIDDER

1.	Name of Bidder	
2.	Nationality of Bidder	
3.	Office address Telegraphic Address Telephone Number Fax Number E-mail address.	
4.	Year of Establishment	
5.	Location of Establishment	
6.	Bid is submitted as a) An individual b) A proprietary firm c) A firm in partnership d) A limited Company or Corporation e) A Group of Firms / Joint Venture (if applicant is of category "F" give complete information in respect of each other). f) A Group of Companies	
7.	Attach the Organization chart showing the structure of the organization including the names of the Directors and Position of officers	
8.	Number of years of experience a) as a prime contractor (Contractor shouldering main responsibility) i) in own country ii) other countries (Specify countries) b) in a joint venture i) in own country ii) other countries (Specify countries)	
9.	For how many years has your organization been in business of Civil Engineering works under its present name? What were your fields when your organization was established?	

9a	Whether any new fields have been added in your organization? and if so, when?	
10	Whether you were required to suspend construction for a period of more than six months continuously after the work was started? If so, give the name of project and reasons thereof.	
11	Have you ever left the work awarded to you incomplete? (If so, give name of project and reasons for not completing work)	
12	In how many of your projects penalties were imposed for delays? (Please give details)	
13	In which fields of civil engineering construction do you claim specialization and interest?	
14	Give details of experience includes handling of municipal solid waste	
15	Give details of experience for construction of large water supply and sewerage projects. (Deleted)	
16	Give details of experience in using heavy earth moving machinery, machineries for handling of municipal solid waste	
17	Give details of testing laboratory, if any.	
18	In how many of your works cases of litigations have arisen?	
19	If the applicant intends to enter into a Joint Venture for the project, please give the following information otherwise state.	
	<p>I. Name and Address of Joint Venture</p> <p>II. Name of Lead Firm</p> <p>III. Name and address of each of the partner/member of JV</p> <p>IV. Indicating the responsibility of planning, construction equipments and execution of the work of each of the JV partner.</p> <p>V. Name and address of the bankers to the JV</p> <p>VI. Details regarding financial responsibility and participation (percentage share in the total) of each firm in the JV. Attach a certified copy of the JV (in prescribed Proforma)</p>	

Note : In case of Joint venture the above form shall be filled by The JV members separately

Annexure-17
DETAILS OF PERSONNEL

Give details of key Technical and Administrative Personnel who could be assigned the work in the following Proforma.

A)	1) Details of the Board of Directors 2) Name of the Director Address 3) Organization of the Board of Director				
B)	Key Technical and administrative Personnel and Consultants 1) Individual's Name Professional 2) Qualification Present position in 3) the firm Professional experience 4) and details of works carried out 5) No. of years worked with the 6) applicant. 7) Languages known Additional information				
(C)	Key Technical, Administrative Personnel				
	Sr. No.	Key Personnel	Nos.	Professional Experience	Qualification
	1.	Project Manager			
	2.	Civil Engineer			
	3.	Civil Supervisor			
	4.	Technical Assistant			
(D)	Skilled and other labour (indicate number category wise) 1) Skilled labour 2) Other labour				

Note : In case of Joint venture the above form shall be filled by The JV members separately

Annexure-18
DETAILS OF MACHINERY EQUIPMENTS AND WORK PLAN

Plant & Equipments Owned & Proposed for the Project

Name of Applicant:

The Applicant will provide adequate information to demonstrate clearly that it has the capability to meet the requirements for each and all items of equipment listed in the Employers requirements. A separate Form-3 will be prepared for each item of equipment proposed by the Applicant. For each item of equipment, the applicant should attach a copy of ownership certificate or lease agreement.

Name of Equipment		
Equipment information	1. Name of manufacturer	2. Model and power rating
	3. Capacity	4. Year of manufacture
Current status	5. Current location	
	6. Details of current commitments	
Source	7. Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured	

Owner	8. Name of owner	
	9. Address of owner	
	Telephone	Contact name and title
	Facsimile	Telex
Agreements	Details of rental / lease / manufacture agreements specific to the Project	

In case of Joint venture the above form shall be filled by The JV members separately

Annexure -19
PERSONNEL/STAFF PROPOSED FOR THE PROJECT

Name of Applicant or partner of a joint venture

For specific positions essential to contract implementation, applicants should provide the names of at least two candidates qualified to meet the specified requirements stated for each position. The data on their experience should be supplied in separate sheets using one Form-14 for each candidate.

1.	Title of position: Project Manager
	Name of prime candidate:
	Name of alternate candidate:
2.	Title of position: Civil Engineer
	Name of prime candidate
	Name of alternate candidate
3.	Title of position: Mechanical Engineer
	Name of prime candidate
	Name of alternate candidate
4.	Title of position: Procurement Engineer
	Name of prime candidate
	Name of alternate candidate

Note: Attach **Manning (Personnel) Schedule** stating each personnel's roles and responsibility for work to be carried out for the project.

Annexure -20
CURRICULUM VITAE OF PROJECT MANAGER & ALL KEY TECHNICAL
PERSONNEL'S

Name of Applicant or partner of a joint venture

Proposed Position:		Candidate <input type="checkbox"/> Prime <input type="checkbox"/> Alternate	
<i>Candidate information</i>	1. Name of candidate	2. Date of birth	
	3. Professional qualifications:		
<i>Present employment</i>	4. Name of employer		
	Address of employer:		
	Telephone:	Contact (manager / personnel officer):	
	Facsimile:	Telex:	
	Job title of candidate:	Years with present employer:	

Summarize professional experience over the last ___ years, in reverse chronological order. Indicate particular technical and managerial experience relevant to this Project.

From	To	Company / Project / Position / Description of relevant technical & managerial project specific experience

Note : In case of Joint Venture the above form shall be filled by the JV members separately

Annexure 21
PROPOSED SITE ORGANIZATION & MANAGEMENT

Name of Applicant or partner of a joint venture

- A. Preliminary Site Organization Chart at HO level & at field level:
- B. Narrative Description of Site Organization & Project Management Chart
- C. Description of Relationship between Head Office and Site Management¹
- D. Description of Approach & Methodology to carried out work of this project.

Note: Indicate clearly which responsibility and what authority will be delegated to site management.

Annexure -22
Approach and Methodology with Conceptual Design and Supporting Calculations of the System

Bidder may submit their work plan, detail methodology with Conceptual Design and Supporting Calculations of the System to be adopted for this work.

SIGNATURE OF THE BIDDER

Annexure 23
PROFORMA FOR LETTER OF UNDERTAKING (FORM-H)

***(TO BE EXECUTED ON NON-JUDICIAL STAMP PAPER OF Rs. 300/- AND
SUBMITTED BY THE TENDERER ALONG WITH HIS TENDER IN A SEPARATE
COVER)***

To,

The Chief Engineer,
Design, Planning & Monitoring,
Urban Development & Housing Department,
Bihar Urban Infrastructure Development Corporation,
Office, Near Rajapur Pul, West Boring,
Canal Road, Patna-800001, Bihar

Dear Sir,

- i. I/We hereby declare that I/We have visited the site and fully acquainted myself / ourselves with local situations regarding materials, labor and other factors pertaining to the work before submitting this tender.
- ii. I/We hereby declare that I/We have read the Tender Documents published on website www.nprocure.com and accordingly submitted online price Bid for the work of -----

- iii. I/We hereby declare that I/We have carefully studied the conditions of contract and specifications and other documents of this work and agree to execute the same accordingly.
- iv. I/We hereby declare that my/our near relatives are not working in this division or in its sub-divisions as an Engineer of any category, Divisional Accountant, Store Keeper, and in the Circle Office as a Superintending Engineer as on today.
- v. I/we hereby declare that I/we are not declared ineligibility for corrupt or fraudulent practices issued by the central/state govt. In accordance with **Sub Clause No. 24 Fraud and Corrupt Practices** or not in the list of black listed contractors announced by BUIDCo/Govt of Bihar or its Public Sector Undertakings, Government of India, Other states Government or Public Sector Units.
- vi. I/ We hereby submit our tender and undertake to keep our tender valid for a period of 180 days from the last date of online submission of tenders i.e. upto ----- . I/We shall not vary/alter or revoke my/our tender during the validity period of tender. This undertaking is in consideration of BUIDCo agreeing to open my/ our tender, consider and evaluate the same for the purpose of award in terms of provisions of tender documents.

Should this tender be accepted, I/ We also agree to abide by fulfil and comply with all the terms and conditions and provisions of the above mentioned tender documents.

- vii. I/We also declare that the bid duly filled in online and digitally signed and the required Earnest Money Deposit, Tender Fee and other required documents (scanned copy submitted online) will be handed over in physical form to the by **RPAD/Speed Post/Hand Delivery only**.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken I/we shall be debarred from bidding in BUIDCo tender for three years and my/our security deposit may be forfeited by BUIDCo in full & the tender, if any, to the extent accepted, may be cancelled.

Signature along with seal of the Company

(Duly authorised to sign the tender on behalf of the Bidder)

Name:

Designation:

Name of Company (BLOCK LETTERS)

WITNESS :

Signature :

Date :

Date :

Postal Address :

Name & Address :

Telephone/Fax No.

Annexure -24
JOINT VENTURE DATA

A copy of the joint venture agreement must be attached as per Annexure-25. In case the joint venture agreement is not acceptable to Employer, the joint venture may be requested to modify the agreement accordingly. Failure to submit a modified Joint venture agreement within 7 (seven) days upon receipt by the Bidder of the request for modification will disqualify the Bidder for further consideration.

Names of all partners of a joint venture		Financial Stake of the firm (In Percentage)
Partners	Name of Firm	
1. Lead partner		
2. Other Partner		

Annexure -25
FORMAT OF JOINT VENTURE AGREEMENT

(To be notarized on stamp paper of appropriate value)

- 1) The Joint Venture agreement made and entered into at _____(place) on _____day of _____(YEAR) by and between.
 - a. Firm A (Name with address of the registered office)
 - b. Firm B (Name with address of the registered office)
- 2) **Definitions:** In this deed the following words and expressions shall have the meaning set out below.
 - a. "The Employer" shall mean Bihar Urban Infrastructure Development Corporation Limited.
 - b. "The Works" shall mean _____(Name of work) which is more particularly described in the pre-qualification and tender documents issued thereof by the Employer.
 - c. "The Tender" shall mean the Tender to be submitted by Joint Venture to the Employer for the work/works.
 - d. "The Contract" shall mean the contract entered /to be entered into between the Joint Venture and the Employer for the works.

3) Joint Venture (JV)

The Parties hereto declare that they have agreed to form a Joint Venture for the purpose of submitting the pre-qualification Application/ tender document initially and then tender and if successful for the execution of the works as an integrated Joint Venture. The parties are not under this agreement entering into any permanent partnership of Joint Venture to tender or undertake any contract other than the subject works. Nothing herein contained shall be considered to constitute the parties of partners to constitute either Party the agent of the other.

- 4) **Witnesses:** Whereas Gandhinagar Smart City Development Limited as an Employer has invited tenders from intending Bidders and the Employer has permitted a group of firms (not exceeding two) forming a Joint Venture to eligible to be a Bidder. And whereas _____party of the first part and _____party of the Second part are desirous to enter into a Joint Venture in the nature of partnership engaged in the joint undertaking for the specific purpose of execution of the work of constructing _____and whereas Parties of the first and Second part reached understanding to submit pre-qualified/ tender, if pre-qualification, and to execute the contract if awarded;

This agreement witness as follows

- a) The parties do not enter into an agreement of any permanent partnership of Joint Venture to tender or undertake any Contract other than the specified above;
 - b) That the operation of this Joint Venture firm concerns and is confined to the work of _____ of Board
 - c) The name of the Joint Venture firm for convenience and continuity shall be _____.
 - d) The Address of Joint Venture for communication shall be as under :
 - e) The Joint Venture shall jointly submit pre-qualification application on the above name according to all terms and conditions stated in the relevant instructions contained in the bid documents.
 - f) That this Joint Venture shall regulate the relations between the parties thereto and shall include without being limited to them the following conditions:
 - 1) _____ firm shall be the lead company in charge of the Joint Venture for all intents and purpose.
 - 2) In case the said work is awarded to the Joint Venture, the partners of the Joint Venture will nominate a person with duly notarized power of Attorney on stamp paper, who will represent the Joint Venture with the authority to incur liabilities, receive instructions and payments, sign and execute the contract for an on behalf of the Joint Venture,
 - g) All the joint venture parties agree to make financial participation and to place at disposal of Joint Venture the benefits of its individual experience, technical knowledge, skill and shall in all respect bear its share as regards planning and execution of the work and responsibilities including the provision of information, advice and other assistance required in the Joint Venture and participation shall be in proportion of, Firm – A.....% Firm - B.....%.
 - h) All rights, interests, liabilities, obligations work experience and risks (and all net profits or net losses) arising out of the contract shall be borne by the parties in proportion to their shares. Each of the parties shall furnish its proportionate share in any bonds, guarantees, sureties required for the works as well as its proportionate share in connection with the works. The share and participation of the two/three partners in working capital and other financial requirements shall be in ratio as mentioned above.
- 5) **Internal responsibilities and liabilities**
- a) The division of individual scope of work may be worked out mutually by the parties but the party shall be jointly and severally liable to the Employer for the whole work.
 - b) The parties specifically undertake to carry out their separate works in full compliance with the contract with the Employer. Each party shall be responsible jointly and severally for consequences if any arising out of defective or delayed execution of works which falls within the individual's party's area of responsibility and/ or it has been caused due to acts and /or omission of the concerned party.
 - c) The parties jointly and severally agree to replace, modify or repair any defect in their respective portions of works in accordance with the terms and condition of the contract with the Employer.
 - d) The parties jointly and severally shall indemnify and hold harmless to each other against any claim made by the Employer or any other third party for injury, damage, loss or expenses is attributed to the breach /non-performance of his responsibilities by the indemnifying party in accordance with the agreements and /or contract with the Employer.
 - e) None of parties have joined in any other Joint Venture for the said works.

6) **Responsibilities and liabilities of Joint Venture towards the Employer**

- 1) Parties hereto shall be jointly and severally liable and responsible for the acts, deeds and things done or omitted to be done in respect of the execution of the Contract and for any financial liability arising there from.
- 2) Parties hereto shall be jointly and severally responsible to the Employer for the execution of the works in accordance with the Contract conditions;
- 3) Parties hereto shall be jointly and severally indemnify to the Employer against any claim made against the Employer or any other third party for any injury, damage or loss which may be attributed to the breach of the obligations under the Contract pursuant to the Contract conditions.

7) **Site management**

- a. The execution of the work on the site will be managed by a Project Manager appointed by the Joint Venture and who will report to the _____(JV) the project manager shall be authorized to represent the Joint Venture on site in respect of matters arising under the Contract.
- b. The _____ (Name of the JV) shall be jointly and severally liable to the Employer for the execution of the Contract commitment in respect of the works in accordance with Contract conditions.

8) **Termination of the Agreement**

This agreement shall be terminated in the following circumstances.

- a) The Employer awards the Contract for the work to the other Bidder.
 - b) The Employer cancels the work to award the Contract.
 - c) On completion of the defect liability period as stipulated in the Contract agreement of the works and all the liabilities thereof are liquidated.
- 9) No partner has right to assign any benefits, obligation of liability under the agreement to any third party without prior written consent of the other partner as well as Employer.

10) **Financial matter**

- a) Bank Account in the name of the Joint Venture will be opened with any scheduled or nationalized Bank to be operated by an individual signatory as decided mutually by the Joint Venture partners.
- b) (b) All the partners shall be responsible to maintain or cause to maintain proper Books of accounts balance sheet and profit and loss account as to the state of affairs of the firm as at the end of the financial year and as to the profit and loss made or incurred by the firm for the year ended on that date, respectively shall be prepared and the same shall subject to audit by a Chartered Accountant.
- c) None of the party shall be entitled to make any borrowing on behalf of the Joint Venture without express prior written consent of the other party.
- d) Bank guarantee for the application /execution of the work shall be provided jointly from a bank acceptable to the Employer.

- 11) **Negotiation** : Any negotiation of agreement between the parties hereto and the Employer subsequent to the submission of the tender and prior to award, shall take place only with consent of each of the parties who shall be represented at the such negotiation by one or more representative(s) duly empowered to make such negotiation or agreement.

- 12) **Legal jurisdiction:** All questions relating to validity interpretation of this agreement shall be governed by the law of India and shall be subject to jurisdiction of High court at Patna.
- 13) **Settlement of disputes:** Any dispute in interpretation of any condition mentioned herein shall be referred to an arbitrator/tribunal by mutual consent of the partners and such proceedings shall be governed as mentioned elsewhere in the Tender Document. The award of arbitrator shall be final and binding on the party hereto. Neither the obligation of each party here to the performance of Contract nor the execution of work shall stop during the course of arbitration proceeding or as a result thereof.
- 14) Insurance**
- a) The Joint Venture through the parties individually shall take such insurance in connection with the work in accordance with the tender condition as acceptable to the Employer.
- b) The cost of the insurance premium paid by the Joint Venture shall be borne and paid by the parties in proportion to the respective shares of work. Other insurance taken individually by the parties shall be fully borne by the respective parties.
- 15) No change shall be made in this agreement without prior written consent of the Employer and other party. However, if the Employer directs the parties to make changes in the agreement so as to fulfil the Tender conditions the parties discuss with Employer and mutually agreed such changes required to be made in the agreement.
- 16) **Default and withdrawals from the Joint Venture :** In case that either party fails to observe the provision stipulated in this agreement withdrawal from the Joint Venture, Loss and/or expenses incurred by other party due to such default and /or withdrawals shall be fully compensated by the party who has defaulted.
- 17) All matter relating to or arising due to this agreement shall be treated as confidential and shall not be disclosed to any other party. In witness where of the parties have caused their duly authorized representatives to sign below.

Witness:

- 1 Signed for and on behalf of firm-A
2 Date Seal

Witness:

- 1 Signed for and on behalf of firm-B
2

Date Seal

Witness:



Bihar Urban Infrastructure Development Corporation Limited
A Government of Bihar Undertaking

TENDER DOCUMENT FOR

FOR

**SETTING UP SOLID WASTE PROCESSING
FACILITY AND LANDFILL FACILITY FOR
BHAGALPUR & MUNGER MUNICIPAL
CORPORATIONS AND ITS OPERATION AND
MAINTENANCE FOR 10 YEARS**

VOLUME-4: Project Details

**Bihar Urban Infrastructure Development Corporation Ltd
(BUIDCO)**

1. Introduction

BUIDCO, a nodal agency for development of urban infrastructure in Bihar, has taken the lead role for the development of Solid Waste Management (SWM) facilities in accordance with all applicable laws and regulations including the Municipal Solid Waste (Management & Handling) Rules (2016) for managing the municipal solid waste generated by Urban Local Bodies (ULBs) in Bihar.

There are 11 Nagar Nigam (Municipal Corporations), 42 Nagar Parishad and 86 Nagar Panchayat in the state of Bihar. The Govt. of Bihar intends to develop Solid Waste Management (SWM) Facilities for all urban local bodies in phased manner.

As part of this tender it is proposed to develop integrated solid waste processing facilities in Municipal Corporation as listed below.

Sr.	City Name	District	Type*	Population 2011
1	Bhagalpur	Bhagalpur	UA	4,10,210.00
2	Munger	Munger	City	2,13,101.00
*UA – Urban Agglomeration. City – within municipal limits				

2. Projected Receipt of MSW at Site

At present mix solid waste is being collected by the municipal corporation. It is expected that during the concession/contract period of the concessioner will keep receiving the mix waste. However, depending on the strategy and the solid waste management adopted by municipal corporation the nature, composition and qty of waste may change. The contract should make a note of this and adopt the suitable technology for the processing the solid waste.

An approximated anticipated waste generation from the city is listed below.

Approximate expected waste generation quantity from the cities per year		
Year	Bhagalpur	Munger
	Ton/year	Ton/year
2021	80852	42002
2022	82469	42842
2023	84086	43682
2024	85703	44522
2025	87320	45362
2026	88937	46202
2027	90554	47042
2028	92171	47882
2029	93788	48722
2030	95405	49562
2031	97022	50402
2032	98963	51410

The integrated waste processing facility should be sufficient to handle and process the anticipated waste qty.

Initially during the construction phase the facility should be developed for the capacity of the waste generation as per 2024 (next third year of O&M period) and during the O&M period the plant capacity to be augmented to handle waste for subsequent.

Bidder to note that the land available is for total requirement of 10 years, hence the judicious use of the available land is to be demonstrated.

Bidder to highlight in the technical proposal the land required for the total contract period for all the facilities of the integrated solid waste processing facility namely waste handling plant, processing plant, landfill, leachate plant and other auxiliary facilities like admin block, laboratory, vehicle management, parking area, etc.

3. Salient Project Details

The successful bidder shall have to receive the mixed waste at the weighbridge of the site and utilize the same for processing after due segregation. The successful bidder shall have to appoint adequate number of supervisors manage the vehicular traffic in effective and efficient manner. The supervisors appointed by the successful bidder shall work along with Corporation and co-ordinate with them in managing the solid waste.

The Works required under this project are herein referred to as follows:

1. Creating basic infrastructures and undertaking site development works such as peripheral boundary wall / fencing, roads, storm water drains, water supply, electrification, office building, landscaping, etc.
2. Works related to construction and operation of waste processing plant and operation and maintenance of all the facilities throughout the period of Concession
3. Works related to the development and operation of landfills.
4. Establishing a comprehensive mechanism to market and sell the products/by products generated from the processing facility and share portion of the revenue generated with BUIDCo.

3.1. Site Development Works /Basic Infrastructure Facilities

The Concessionaire shall undertake following site development works at site. The Concessionaire may, subject to recommendations by Engineering In-charge for the project from client, adopt alternate designs for the site development works.

“Site Development Works” under the concession includes the following components, but is not limited to:

- a) Site grading and construction of rain water diversion drains
- b) Provision for water supply, power, lighting and communication
- c) Construction of roads, boundary wall and fencing
- d) Maintenance of all the above facilities throughout the period of Concession.

3.1.1. Roads

The Concessionaire shall provide and maintain good quality motorable roads. There shall be 4.5m. wide road with 1.5m. wide shoulder on either sides along the entire length of boundary wall with adequate drainage facility. Pavement design shall conform to the latest revisions of codes and Standards published by Indian Road Congress (Specifications for Road and Bridge Works, IV Revision by Ministry of Shipping, Road, Transport & Highways, Government of

India) and Bureau of Indian Standards (BIS).

Following are the minimum requirement for pavement:

- i. Sand layer of required thickness overlaid by geotextile sheet (GSM 250)
- ii. Granular Sub Base (GSB) of designed thickness.
- iii. Wet Mix Macadam (WMM) layer of designed thickness.
- iv. Dry Lean Concrete (DLC) layer in cement concrete of proportion 1:2:4
- v. Interlocking concrete paver blocks, having minimum thickness of 100mm and crushing strength not lesser than 45N/mm², laid over a layer of 45mm. thick uniformly graded river sand with a mechanical compactor.

Hard shoulder shall be constructed in Grade 2 & 3 metal.

3.1.2. Lighting and Other Electrical Works

The Concessionaire shall provide and maintain through ought the Concession period:

- (i) adequate lighting system to achieve adequate Lux level as per standard calculation for the surrounding office area and road;
- (ii) road lighting with permanent Mild Steel light post (assembly of 150mm, 125mm. and 100mm. MS tubes) of 11m. height, embedded in concrete foundation, pole painted with two coats of aluminium paint over a coat of metal primer with necessary fixtures, cable arrangement and High Pressured Sodium or Mercury Vapor (HPSV / HPMV) fittings.
- (iii) The Concessionaire shall provide, maintain and implement all electrical works in accordance with Good Industry Practices and as per the Drawings approved by the Independent Engineer. The Concessionaire shall provide power back-up to ensure operation of at least the following facilities:
 - a. Water supply system and control room
 - b. All incoming and outgoing cables, meeting room, transformer yard and electrical panel room

3.1.3. Boundary Wall and Fencing

The Concessionaire shall construct 3m. high compound wall constructed in brick masonry over Un Coursed Rubble Masonry (UCR) duly plastered with cement mortar. On top of the compound wall, Concertina barbed razer tape coil of appropriate diameter, width and gauge shall be provided. The total height of the compound wall with Concertina barbed razer tape coil shall not be less than 6m.

3.1.4. Green Belt

The Concessionaire shall provide a vegetative cover in a strip of width 5 m all along the Boundary wall. The species of trees for providing vegetative cover shall be approved by the Independent Engineer. Approximately 33% of the development area shall be developed with vegetative cover as green Belt.

3.1.5. Codes and Standards

The following standards in order of preference shall be adopted in consultation with the Independent Engineer, unless otherwise specified:

- i. MSW Rules
- ii. Any other standards specified by statute and Applicable Laws
- iii. Bureau of Indian Standards (BIS)
- iv. General Specification as furnished in tender document
- v. Suitable specification/standard devised by the Independent Engineer

- vi. Any other standard proposed by the Concessionaire and approved by the Independent Engineer

All items of building works shall conform to Bihar Public Works Department (BPWD) specifications for Class 1 building works and standards given in the National Building Code (NBC).

3.1.6. Submission of Technical Details for Site Development Works

Under the component of Site Development Works, the bidder will provide a minimum of following details

- (i) Construction of Bund and Approach Road, office building, compound wall, security cabin, etc., Under this component, bidder will provide detailed design of the approach/peripheral roads, office building, compound wall, security cabin and all other infrastructure facilities to be provided under this Concession. The bidder will indicate number, type and capacity of equipment's/machinery to be deployed for the purpose with justification for the time period estimated for the activity.
- (ii) Greenbelt / Landscaping: Provide a conceptual landscape plan detailing of each element of landscape plan.

All of the above should be suitably supported with the engineering drawings, manpower requirement, fuel/power requirement and explanation of estimated time schedule for each of the above activity. The selected design will be fully owned by the design for technical and structural aspects and the bidder will be fully and solely responsible to meet the relevant performance standards.

The bidder shall also provide a list of key personnel proposed to be deployed for the work with their curriculum vitae.

3.2. Construction Requirements for Waste Processing Facilities

The Waste Processing Facilities shall conform to the minimum design requirements set out in here and to the MSW (M & H) Rules, 2016 and subsequent amendment.

The minimum facilities to be provided in the Waste Processing Facility which is to be implemented by the Concessionaire as part of the Project have been highlighted

3.2.1. Overall Design Parameters and capacity

The location of the Waste Processing Facility shall be such as to allow access from outside the Site without transgressing the Landfill Facility and the traffic management of the waste transporting vehicle is effective and efficient.

The Concessionaire shall design the Waste Processing Facilities so as to have a capacity for processing the Municipal Solid Waste (MSW) per day, anticipated to be generated in the third year of operations from the year of the concession.

The concessionaire is at liberty to adopt any technology he deemed suitable to process the waste however while selection he has to ensure the following thing

1. The technology adopted should be proven, well established and sustainable to treat the mix waste expected
2. The technology should be expandable to the growing demand of waste processing over the period of time
3. The total waste to landfill should not exceed 20% of the incoming waste. Only inert non-recyclable waste is allowed to landfill
4. The product/by-product/waste/effluent from the processing facility shall meet the latest applicable standards and its amendment from time to time.

3.2.2. List of Mandatory Facilities

The Concessionaire shall provide the facilities in the manner as set out under this clause (“Mandatory Waste Processing Facilities”). The Concessionaire, subject to review and approval of the same by Engineer in Charge, may adopt alternate designs for the Mandatory Waste Processing Facilities.

A. Weigh Bridge

The Concessionaire shall provide a minimum of two weigh bridges plus one standby of rated capacity of 40 metric tonnes each at the entry gate to the Project Facilities. Each weighing platform shall have minimum dimensions of 12m length and 3m width. The provision and placement of the weigh bridges should be such that at the peak arrival of waste at any stage of operation of the facility, the waiting time for incoming vehicles at the weigh bridge should not exceed five minutes.

There shall be microprocessor controlled (Closed circuit cameras and computers) for monitoring of weighbridge activities from the Offices of Engineer in Charge and Concessionaire simultaneously.

The weigh bridge shall meet the minimum technical specifications set out as under

Weigh Bridge	
Parameter	Specifications
Type	Pitless Design, Fully Electronic Weighbridge
No. of platforms	As per requirement
Capacity	40 MT per platform
Resolution	5 kg (Display Increment)
Size	12m x 3m

Weighing Electronics	<p>Micro-controller type multi-processing of weighment based digital weight indicator with</p> <ul style="list-style-type: none"> • Menu driven Operations • Auto Zero /Auto Zero Maintenance • Auto Gain & Full Digital Calibration • Auto Calibration Check <ul style="list-style-type: none"> • Programmable Update Rate with adjustable digital averaging and auto latching • A/D Converter : 24 Bit high resolution integrated • Password Security • Parallel Printer Port & Serial EDP port • Real Time Clock • Self & Operator Diagnostics
UPS	Adequate for 1 hour operation of the weigh bridge
Weighbridge Construction	Rugged Fabricated Steel Structure, side girders, 8mm thick Top Deck Chequered Plate, Cross Girders, designed to take 100% Rated Load, 150% Safe Over Load & 200% Ultimate Load
Load Cells	<ul style="list-style-type: none"> • 4 nos double ended shear beam type, IP 68 class protection capacity • 12 VDC/15VDC
Software	To print Weighment slip consisting of Ward number, Time, Date, Lorry Number, Product, Customer, Tare Weight, Gross Weight, Net Weight.
	<p>There shall be microprocessor controlled system (Closed circuit cameras and computers) for monitoring of weighbridge activities from the Offices of EIC and Concessionaire simultaneously.</p> <p>Separate weigh bridge to be provided for</p> <ol style="list-style-type: none"> 5. Receiving the Waste from corporation 6. Dumping of inert to landfill 7. Product/by product weighing if required as per the type of product/by product anticipated by bidder.

B. Storm Water Drainage System

The Concessionaire shall design and implement the storm water drainage system within the Waste Processing Facility in such a manner as to ensure that

- a. it is independent from the Leachate System; the run-off rain water from the surrounding areas does not enter the Municipal Solid Waste storage and processing area; there is no stagnation of rain water in the Site.
- b. The drainage system shall be constructed so as to meet the minimum technical specifications set out here under.
 - i. Shall have trapezoidal cross section
 - ii. Shall be provided with rubble stone pitching/RCC lining
 - iii. Shall be as per the designs and drawings approved by EIC

C. Leachate System

The Concessionaire shall, construct leachate collection tank(s) and provide a leachate collection network which shall meet the O&M Requirement.

- i. ensure that the leachate from the Waste Processing Facility is carried to the Leachate Collection Tank without any stagnation (except in storage/holding tanks)
- ii. The leachate so collected shall be treated to required standards as per pollution control board.
- iii. Overall design of the leachate system should be such as to ensure that there is no percolation of the leachate into the ground and it does not come into contact with any water body. There shall be single centralized leachate treatment plant that will treat the leachate from the area of processing facilities and the sanitary landfills.

D. Water Supply System

The Concessionaire shall provide a water supply system adequate to meet the requirements for Processing of Municipal Solid Waste, drinking and washing purposes in accordance with Good Industry Practice

E. Quality Control Laboratory

The Concessionaire shall provide a quality control laboratory with the equipment adequate to carry out the following tests:

- (i) MSW analysis and characterization
- (ii) Product quality as per requirement to test the quality of produce as per Schedule IV of MSW Rules.
- (iii) Digested Garbage Test for the Residual Inert Matter
- (iv) Test for silt to check the toxicity level

F. Worker Amenities

The Concessionaire shall provide workers amenities in accordance with Good Industry Practice.

G. Other Facilities to be Provided by the Concessionaire

The Contractor shall furnish a site office space of 200m² for the Engineer In Charge and his staff with office equipment and furniture for the use of engineer, which shall become the property of BUIDCo after concession period.

This office space is over and above the space required by the concessionaire for establishing the laboratory, SCADA/monitoring facility, Administrative block etc.

3.2.3. Submission of Technical Details for Site Development Works

The bidder should provide following as minimum

- a. Methodology Statement
- b. Process Flow Chart and Material Balance statement
- c. Resource Utilisation Statement
- d. Operations & Maintenance Scheme
- e. Project Schedule
- f. Quality Assurance and Quality Control Procedures
- g. Environment, Health & Safety Policy and practice

Methodology Statement:

The Bidder shall provide a methodology statement, which broadly sets out the approach to the Project. The methodology statement shall include the Bidder's appreciation of the Project, the sequencing of activities to be performed, the facilities to be provided, design standards and basis for calculations of the Processing activities etc. The methodology statement should address aspects relating to all the activities of Processing including receipt, weighment and processing of Municipal Solid Waste. The methodology should clearly highlight the approach for:

- a. Geotechnical survey of the site for proposed developmental works
- b. Infrastructure development
- c. MSW Processing Technology
- d. Maintenance of the site infrastructure facilities processing unit
- e. Secured landfill phasing and development details

The information provided shall include site layout Plan clearly indicating area for each module for hotel, restaurant and market waste processing, site infrastructure and development, including weighbridge(s), access roads, bund, compound wall/fencing, parking area, roads, utilities and office buildings and basis for their siting and area allocation.

Detailed plan for technical specifications of weighbridges, proposed mechanism for technical surveillance and plan for record keeping that will facilitate accurate account of hotel, market and restaurant waste received at the site and facilitate identification of non-conforming wastes should be provided.

The methodology statement should clearly demonstrate the compliance of the approach to be adopted by the Bidder for the implementation of the Project to the minimum specifications set out in the Draft Concession Agreement. Usage of existing infrastructure namely, weighbridges, high mast light units (if any), etc., belonging to BUIDCo shall also be considered while drawing up the methodology statement.

Process Flow Chart and Material Balance Statement:

The Bidder shall provide a process flow chart and a material balance statement setting out the activities and the outputs at each stage.

For each process module provide process description, process flow chart, layout and preliminary engineering drawings. For each unit operation/process of waste processing modules (varying in technology or size) provide MSW mass balance, energy mass balance; and water, power, machinery and manpower requirement.

The purpose of seeking this information is to assess the technical adequacy, area allocation, management of process outputs and rejects and evaluate the robustness of the revenue projections made through use/sale of the process outputs.

Technical supporting details of any similar plants designed/constructed/operated by the bidder that will help the BUIDCo ascertain the adequacy/suitability of the proposed MSW processing scheme.

The above should be accompanied with the following information:

1. Plant Capacity: Capacity for each section
2. Salient Features of the Processing Technology offered, including:

- a. Design capacity and Turn-down ratio
- b. Process highlights and benefits
3. Subunit-wise details of various Section of the Processing Plant
4. Waste Characteristic adopted for Design
5. Description of Mechanical and Electrical Equipment and Instrumentation
6. Description of Civil Work involved, size and specifications of various structures
7. Requirement of utilities and services i.e. Process water, electricity etc.
8. Manpower Requirements for O&M
9. Consumables and Chemicals required for O & M on monthly basis and expected life of the plant

Resource Utilisation Statement

A statement with proper undertakings indicating the procurement, deployment and utilisation of the resources shall be provided. The statement shall include proposed organisational structure, employee deployment, equipment procurement and utilisation, contracting activities, utilisation of office and other facilities.

Operations and Maintenance Scheme

The Bidder shall separately set out the operations and maintenance scheme for Processing of Municipal Solid Waste indicating the operational practices. The maintenance (regular and emergency) schedules and mechanism should also be indicated over the Concession Period. Similarly, operation and maintenance scheme for infrastructures such as administrative office building, road, weighbridge lighting, electrical switch gear, etc., shall be submitted in detail.

Quality Assurance and Quality Control Procedures

The bidder will provide details QA/QC procedure that will be followed for civil, mechanical and electrical works to be undertaken by the bidder.

Time Schedule

The Bidder shall indicate a activity schedule over the Concession Period including the construction activities, including, infrastructure and site development, waste processing facility and the Operation & Maintenance. However, the overall target dates mentioned in the RFP document shall be adhered to.

Environment, Health & Safety Policy and Practice

The Bidder shall indicate the environment, health and safety policy and practices, which are proposed to be adopted during the Concession Period. The aspects relating to employee and worker safety, control mechanisms of litter, pest, odour, fire, surface runoffs etc needs to be elaborated.

3.3. OPERATIONS AND MAINTENANCE REQUIREMENTS - WASTE PROCESSING FACILITY

3.3.1. General

- (a) The Concessionaire shall comply with the O&M Requirements set out in this section. In doing so, the Concessionaire shall ensure that the Waste Processing Facilities are maintained to the standards and specifications as set out in the Constructions Requirements and also meet the other requirements, if any, set out in the Agreement.

- (b) In the design, planning and implementation of all works and functions associated with the operation and maintenance of the Waste Processing Facilities, the Concessionaire shall take all such actions and do all such things (including without limitation, organizing itself, adopting measures and standards, executing procedures including inspection procedures, and engaging contractors, if any, agents and employees) in such manner, as will:
- (i) ensure the safety of personnel deployed on and users of the Waste Processing Facilities or part thereof;
 - (ii) keep the Waste Processing Facilities from undue deterioration and wear;
 - (iii) permit unimpaired performance of statutory duties and functions of any party in relation to the Project;
- (c) During the Active Operations Period and till the date of handback of the Waste Processing Facilities, the Concessionaire shall, in respect of the Waste Processing Facilities, ensure that:
- (i) applicable and adequate safety measures are taken
 - (ii) the Project Facilities are kept free from undue deterioration and undue wear; adverse effects on the environment and to the owners and occupiers of property and/or land in the vicinity of the Waste Processing Facilities, due to any of its actions, is minimised;
 - (iii) any situation which has arisen or likely to arise on account of any accident or other emergency is responded to as quickly as possible and its adverse effects controlled/minimised;
 - (iv) disturbance or damage or destruction to property of third party by operations of the Waste Processing Facilities is controlled/minimised;
 - (v) data relating to the operation and maintenance of the Waste Processing Facilities is collected;
 - (vi) all materials used in the maintenance, repair and replacement of any of the Waste Processing Facilities shall meet the Construction Requirements;
 - (vii) the personnel assigned by the Concessionaire have the requisite qualifications and experience and are given the training necessary to enable the Concessionaire meet the O&M Requirements.

3.3.2. Operations and Maintenance Manual and O&M Plans

- A. Prior to making application for the Readiness Certificate for the Project the Concessionaire shall finalise in consultation with the Engineer in Charge:
- (i) the O&M Manual (including the formats for the reports to be submitted during the Active Operations Period and the Post Closure Period)
 - (ii) the O&M Plan for the first year of operations.
- B. Six weeks prior to the anniversary of COD each year, the Concessionaire shall submit to the Engineering In Charge an annual O&M Plan for the next year of operation.

3.3.3. Weighment, Acceptance and Rejection of Municipal Solid Waste

3.3.3.1. Weighment of Municipal Solid Waste

- A. The Concessionaire shall provide for a weigh-bridge in accordance with the Construction Requirements for weighment of the Municipal Solid Waste supplied by MCGM.
- B. The Concessionaire shall record at least the following data:
 - i. Date of operation
 - ii. Registration number of the truck supplying Municipal Solid Waste/ Lorry number
 - iii. Total laden weight of the truck
 - iv. Time of entry of the truck
 - v. Ward from which MSW has been collected
 - vi. Total unladen weight of the truck
 - vii. Net weight of MSW Time of exit of the truck
- C. The format for recording shall be finalized in consultation with the EIC, and the same shall be documented as part of the O&M Manual.
- D. In the event that the weigh-bridge provided in accordance with clause above is not in operation, the following methodology shall, unless modified with mutual consent of the Parties, be adopted for computing the weight of Municipal Solid Waste supplied by Corporation:

$$WS = W_{avg} * N$$

Where,

WS, is the weight of Municipal Solid Waste supplied during the period for which the weigh-bridge was inoperable

Wavg, is the average weight of Municipal Solid Waste carried per truck based on the data available for the six Months prior to the Month in which the weigh-bridge was rendered inoperable.

N, is the number of truck-loads of Municipal Solid Waste accepted by the Concessionaire during the period for which the weigh-bridge was inoperable.

3.3.3.2. Acceptance and Rejection of Municipal Solid Waste

- i. MCGM shall be free to supply Municipal Solid Waste at any time around the clock
- ii. The Concessionaire shall not accept Municipal Solid Waste which is not supplied by MCGM or any other Person appointed by it.
- iii. The procedure to be adopted by the EIC for sampling and testing of Municipal Solid Waste supplied by Corporation to ascertain whether it contains Hazardous and/or Bio-medical Waste shall be finalized by the Parties in consultation with the EIC and the procedure documented as part of the O&M Manual.

3.3.3.3. Production of Product and by products

The Concessionaire may adopt any such process and/or methods as it considers necessary for the Processing of Municipal Solid Waste in order to ensure that the produce after such Processing is certified as being Fit for Sale.

3.3.3.4. Routine Maintenance Standards

In order to ensure smooth and uninterrupted operations, routine maintenance of the Project Facilities shall include but not be limited to:

- (i) prompt repairs of the weigh-bridge, windrow platforms, leachate collection drainage and treatment system, electrical items, drains, internal roads, sieving machinery, lighting and fencing;
- (ii) replacement of equipment/consumables, horticultural maintenance and repairs to equipment, structures and other civil works which are part of the Project Facilities;
- (iii) maintaining the shape, scope, full cross-section of the storm water drainage system and leachate collection and drainage system;
- (iv) keeping the Project Facilities in a clean, tidy and orderly condition and taking all practical measures to prevent damage to the Project Facilities or any other property on or near the Site;
- (v) undertaking maintenance works in accordance with the O&M Plan and O&M Manual;
- (vi) preventing, with the assistance of law enforcement agencies, where necessary, any unauthorised entry to and exit from and any encroachments including any encroachments on the Site;
- (vii) taking all reasonable measures for the safety of all the workmen, material, supplies and equipment brought to the Site. Explosives, if any, shall be stored, transported and disposed of by the Concessionaire in accordance with Applicable Laws/Applicable Permits.

3.3.3.5. Emergency Maintenance

The Emergency Response Protocol (“ERP”) shall be developed by the Concessionaire in consultation with the EIC. This shall be a part of the O&M Manual developed by the Concessionaire.

The ERP shall set out steps to be taken and measures to be adopted by the Concessionaire in responding to dealing with Emergency including those situations related to vehicle accidents involving personal injuries or fatalities, property damage and force majeure as follows:

- a. In the event of an Emergency, the Concessionaire shall immediately carry out an inspection of the area affected by the Emergency. Where Emergency has necessitated closure of the Project Facilities or part thereof, the Concessionaire shall promptly carry out any repair works necessary to restore the Project Facilities to safe condition and in any event shall carry out such works before the affected area of the Project Facilities is re-opened to for normal operations.
- b. The Concessionaire shall ensure that sufficient staff, plant, equipment and materials, including without limitation medical assistance are available to respond to Emergency within reasonable period at all times during the Active Operations Period

In case of Emergency, the Concessionaire shall

- (i) carry out such emergency maintenance and repairs as may be required to repair the damages, if any, in consultation with the EIC and where required under the supervision of the police in order to ensure that the Project Facilities are returned to normal operating standards as quickly as possible

(ii) take all necessary measures to minimise pollution in accordance with the procedure specified in the O&M Plan/ Environmental Management Plan.

3.3.3.6. Reporting

- (a) The Concessionaire shall ensure that EIC is provided with adequate information and forewarned of any event or any other matter affecting the Project Facilities to enable them to control/minimise any adverse consequences.
- (b) The frequency and formats for the reports to be submitted shall be finalised in consultation with the EIC and form part of the O&M Plan and O&M Manual.

3.4. Construction Requirement for Landfill Facilities

General

1.1 The minimum facilities to be provided in the Landfill Facility which is to be implemented by the Concessionaire as part of the Project have been highlighted in this Annexure.

1.2 The Landfill Facilities shall conform to the minimum design requirements set out in this Annexure and to the MSW Rules.

Landfill Design and Construction

The bidder however is free to select a suitable landfill area within the allocated area while meeting the requirement of landfilling the MSW/process residues/silt for the concession period

Based on the site substrata bidder to finalize the least possible footprint area with best possible height with respect to the applicable norms. Bidder to ensure the landfill facility is structurally safe and operable with ease in operation and post closure maintenance.

The capacity of landfill should be adequate to accommodate the projected inert waste from processing plant based on the processing plant approved mass balance.

Bottom Protective Liner system

Bottom Liner system shall be designed and constructed to meet the requirement of MSW Rules 2016.

Daily Cell Cover

The Concessionaire shall, in accordance with the O&M Requirements, provide the Daily Cell Cover which shall consist of a 100 mm thick compacted soil / C&D. A minimum compaction density of 1.5 ton/cum for landfill will be achieved by using suitable landfill compaction instruments

Final Cover System

The Concessionaire shall, in accordance with the O&M Requirements, provide the Final Cover that at the minimum, will meet the impermeability specification as per MSW Rules 2016 but will be sufficient to keep the leachate generation as per the subclause 10 above. The drainage layer in the cover will comprise of geo-textile and geonet with a protective cover of at least 450 mm thick layer of locally available soil with an additional layer of 150mm of topsoil and

vegetative layer to act as erosion control layer. The top cover will be laid at a slope not exceeding a gradient of 1:3 (1 vertical, 3 horizontal).

The bidder will design the final cover system to provide factor of safety of 1.5 or above against cover soil sliding on the geo-membrane.

Leachate Collection and Removal System (“LCRS”)

At any point of concession period, the landfill operations, design of final cover system and its placement on the landfill will be planned and executed in a manner to keep the average leachate generation (during the monsoon) below 1% of rainfall on the constructed area of landfill footprint.

The leachate collection system will be laid in plain or corrugated HDPE pipes of suitable wall thickness so that to withstand pressure of designed overburden of 50m of waste. The leachate collection trenches will be covered with geotextile of suitable characteristics to avoid clogging of leachate collection system by migration of material from overlying layers.

Overall design of the leachate system should be such as to ensure that there is no percolation of the leachate into the ground and it does not come into contact with any water body.

The bidder will use HELP 3.0 or recent version to demonstrate the designed landfill cover system and mechanism of placement of waste during the monsoon is adequate to keep the leachate generation levels below 1% of rainfall.

Design shall be made in such a way that the leachate from all the landfills shall be let out into centralized treatment facility.

Gas Venting system

Pro gas venting system should be designed for the landfill as per applicable rules

List of Other Mandatory Facilities

The Concessionaire shall also mandatorily provide the facilities in the manner as set out under this clause (“Mandatory Landfill Facilities”). The Concessionaire may, subject to review and approval of the same by EIC adopt alternate designs for the Mandatory Landfill Facilities

- (i) Weigh Bridge
- (ii) Storm Water Drainage System
- (iii) Water Supply System
- (iv) Quality Control
- (v) Worker Amenities
- (vi) Internal Roads
- (vii) Lighting Other Electrical Works
- (viii) Boundary Wall and Fencing
- (ix) Green Belt

Codes and Standards

The following standards in order of preference shall be adopted in consultation with the Independent Engineer, unless otherwise specified:

- (i) MSW Rules
- (ii) Any other standards specified by statute and Applicable Laws
- (iii) Bureau of Indian Standards (BIS)
- (iv) General Specification

- (v) Suitable specification/standard devised by the EIC
- (vi) Any other standard proposed by the Concessionaire and approved by EIC

All items of building works shall conform to Bihar Public Works Department (BPWD) specifications for Class 1 building works and standards given in the National Building Code (NBC).

3.5. Operations and Maintenance Requirements for Landfill Facility

3.5.1. General

- a) The Concessionaire shall comply with the O&M Requirements set out in this Annexure. In doing so, the Concessionaire shall ensure that the Landfill Facilities are operated and maintained to the standards and specifications as set out in the Construction Requirements and also meet the other requirements, if any, set out in the Agreement.
- b) The design, planning and implementation of all works and functions associated with the operation and maintenance of the Landfill Facilities, the Concessionaire shall take all such actions and do all such things (including without limitation, organising itself, adopting measures and standards, executing procedures including inspection procedures, and engaging contractors, if any, agents and employees) in such manner, as will :
 - a. ensure the safety of personnel deployed on and users of the Landfill Facilities or part thereof; keep the equipment and machinery employed at the Landfill Facilities from undue deterioration and wear;
 - b. permit unimpaired performance of statutory duties and functions of any party in relation to the Project
- c) During the Concession Period, the Concessionaire shall, in respect of the Landfill facilities, ensure that :
 - i. applicable and adequate safety measures are taken;
 - ii. adverse effects on the environment and to the owners and occupiers of
 - iii. property and/or land in the vicinity of the Landfill Facilities, due to any of its actions, is minimised;
 - iv. any situation which has arisen or likely to arise on account of any accident or other emergency is responded to as quickly as possible and its adverse effects controlled/minimised;
 - v. disturbance or damage or destruction to property of third party by operations of the Landfill Facilities is controlled/minimised;
 - vi. data relating to the operation and maintenance of the Landfill Facilities is collected;
 - vii. all materials used in the operation, maintenance of any of the Landfill Facilities shall meet the Construction Requirements;
 - viii. the personnel assigned by the Concessionaire have the requisite qualifications and experience and are given the training necessary to enable the Concessionaire meet the O&M Requirements.

3.5.2. Operations and Maintenance Manual and O&M Plans

The Concessionaire shall finalise the O&M Plan and the O&M Manual for the Landfill Facility in the manner acceptable to EIC encompassing all the requirements of daily operations and maintenance.

3.5.3. Sampling and Testing

Unless modified with mutual consent by the Parties, the Residual Inert Matter shall be sampled and tested in the manner as set out below:

The Residual Inert Matter proposed to be taken to the Landfill Facility shall be placed in at least ten heaps of almost equivalent size. The EIC shall take ten random samples from each of these heaps. These random samples shall then be thoroughly mixed and a single random sample taken and tested as per the standard method. In case the composition of this single random sample satisfies the criteria for landfill disposal it shall be certified as being “Fit for Landfilling”.

Any sample which fails to be certified as “Fit for Landfilling” shall be rejected and cause the rejection of the all the heaps from which it was sourced and the Concessionaire shall subsequently act in accordance with the direction of the EIC with regard to such rejected heaps.

Notwithstanding any certification of the EIC, the Concessionaire shall be solely responsible for the composition of the material disposed in the Landfill Facility.

3.5.4. Weighment

- a) The Concessionaire shall provide for a weigh-bridge in accordance with the Construction Requirements.
- b) The Concessionaire shall not take any Residual Inert Matter into the Landfill Facility without having obtained the “Fit for Landfilling” certificate from the Independent Engineer. The Concessionaire shall plan his operations in a manner such that the Landfill Waste is taken into the Landfill Facility only between 9:00 AM and 5:00 PM or as mutually agreed upon between EIC and the Concessionaire after commissioning of processing facilities.
- c) The Concessionaire shall record the following minimum data with regard to the Landfill Waste:
 - Date of operation
 - Total laden weight of the truck
 - Time of entry of the truck
 - Total unladen weight of the truck
 - Time of exit of the truck
- d) The procedure for Weighment of the Landfill Waste and certification by the EIC shall be as set out in the O&M Plan and the O&M Manual.

3.5.5. Landfill Operation

- A. Intermediate liner system
- i. The Concessionaire shall provide a liner layer (“Intermediate Liner”) before the onset of monsoon leaving only a temporary unrestored sloping face
 - ii. The Intermediate Liner shall be as per the Construction Requirements
- B. Daily Cell Cover
- On each day during the Active Operations Period, the Concessionaire shall compact the Landfill Waste and cover the same (“Daily Cell Cover”) in the manner as specified in the Construction Requirements.
- C. Special Operational Conditions
- Except with specific approval from the EIC, the Concessionaire shall ensure the following:
- Provide a benching (terrace) of 5 m width for every 10 m height of filling within the Engineered Sanitary Landfill.
 - The slope of the Engineered Sanitary Landfill face shall not exceed 1:3.
- D. Landfill Closure
- (a) The Concessionaire shall demonstrate the actual stability by considering the strength parameters of compacted inert material for every 10 m of benching.
 - (b) Upon reaching a height of 10 m and any increment in steps of 10 m of the Engineered Sanitary Landfill the Concessionaire shall lay the final cover on the site slopes as per the construction requirement.
 - (c) On reaching the design height, or at the end of 10 years of concession whichever is earlier the Concessionaire will intimate the EIC providing the following details:
 - (i) The estimated quantity of processing residues that landfilled as per the MSW inflows to the site, waste characteristics and the waste processing scheme adopted by the Concessionaire in the remaining life of the concession
 - (ii) The Concessionaire at this stage will submit a closure plan to the EIC for approval providing for the placement schedule of the final cover as per the construction requirement and scheduled to be completed with the completion of concession period

3.5.6. Reporting

- (a) The Concessionaire shall ensure that MCGM and Independent Engineer is provided with adequate information and forewarned of any event or any other matter affecting the Project Facilities to enable them to control/minimise any adverse consequences.
- (b) The frequency and formats for the reports to be submitted shall be finalised in consultation with the Independent Engineer and form part of the O&M Plan and O&M Manual.
- (c) The following data should form part of the reports submitted by the Concessionaire:
 - o Residual Inert Matter quality test reports (including moisture content)
 - o Leachate generation
 - o Emission of greenhouse gases
 - o Ground Water quality (both within and outside the Site)
- (d) The Concessionaire shall also maintain a system for tracking the location of Landfilling operations within the Engineered Sanitary Landfill on a daily basis.
- (e) The Concessionaire shall furnish to MCGM three copies of “as-built” Drawings of any construction undertaken after COD.