

INSTRUCTIONS TO BIDDERS

SECTION - A

1. SCOPE OF WORKS

- 1.1. The Project Director, State Project Management Unit, Neer Nirmal Pariyojana, Assam (SPMU, NNP-Assam) (The Employer) invites quotations for the construction of works as detailed in the table given below

Brief Description of the Works	Approximate value of Works including supply of related goods (in INR)	Period of Completion (in Months)
Construction of Waste Recovery Centre with supply of related goods for implementation of Solid Liquid Resources Management (SLRM) initiatives in Khetri Gaon Panchayat of Kamrup (M) district of Assam in India	17,16,703.93	3 Months

- 1.2. The successful bidder will be expected to complete the works by the intended completion date specified above.

2. QUALIFICATION INFORMATION

- 2.1. The bidder shall provide qualification information which shall be the Registration Certificate as a contractor with Assam Public Health Engineering Department.

3. QUALIFICATION CRITERIA

- 3.1. To qualify for award of the contract, the bidder should be registered with the Assam Public Health Engineering Department as a **Class II or above grade contractor**.

4. BID PRICE

- (i) The contract shall be for the whole works as described in the Bill of Quantities (BOQ) including supply of the related goods complete, drawings and technical specifications. Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
- (ii) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price.
- (iii) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- (iv) The rates should be quoted in **Indian Rupees only**.

5. SUBMISSION OF QUOTATIONS

- 5.1 The bidder is advised to visit the site of works at his own expense and obtain all information that may be necessary for preparing the quotation.



- 5.2 Each bidder shall **submit only one quotation**. Bidders shall not contact other Bidders on matters relating to this quotation.
- 5.3 The quotation submitted by the bidder shall comprise the following: -
- (i) Quotation in the format given in Section B, duly signed by authorized signatory.
 - (ii) Bill of Quantities signed by authorised signatory;
 - (iii) Copy of all pages of the Invitation for Quotation (IFQ), duly signed by the authorized signatory.
 - (iv) Power of Attorney to sign the Quotations and Invitation for Quotations.
 - (v) Photocopy of Registration as Class II or above grade in Public Health Engineering Department, Assam.
 - (vi) Photocopy of PAN Card.
 - (vii) Photocopy of GST Registration.
- 5.4 The bidder shall seal the quotation in an envelope addressed to the Project Director, SPMU, NNP-Assam. The envelope will also bear the following identification.
- (i) Quotation for **"Construction of Waste Recovery Centre with supply of related goods for implementation of Solid Liquid Resources Management (SLRM) initiatives in Khetri Gaon Panchayat of Kamrup (M) district of Assam in India"**
 - (ii) Do not open before **"15:30 Hours (IST) of 06 December 2019"**
- 5.5 Quotations must be received in the office of the Project Director, SPMU, NNP-Assam not later than the time and date given in the letter of invitation. **If the specified date is declared a holiday, quotations shall be received up-to the same time on the next working day.**
- 5.6 Any quotation received by the Project, Director, SPMU, NNP-Assam after the deadline for submission of quotations will be rejected and returned unopened to the bidder.
6. **VALIDITY OF QUOTATION**
- 6.1. Quotation shall remain valid for a period not less than **60 days** after the deadline date specified for submission.
7. **OPENING OF QUOTATIONS**
- 7.1. Quotations will be opened in the presence of bidders or their authorized representatives who choose to attend on the date and time and at the place specified in the letter of invitation.
8. **CONFIDENTIALITY**
- 8.1. Information relating to evaluation of quotations and recommendations for the award of contract shall not be disclosed to bidders or any other persons not officially concerned with the process until the award to the successful bidder is announced.
9. **EVALUATION OF QUOTATIONS**



- 9.1. The Employer will evaluate and compare the quotations determined to be substantially responsive i.e. which
- (i) meet the qualification criteria specified in clause 3 above;
 - (ii) are properly signed; and
 - (iii) conform to the terms and conditions, specifications and drawings without material deviations.

10. AWARD OF CONTRACT

- 10.1. The Employer will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price and who meets the specified qualification criteria.
- 10.2 Notwithstanding the above, the Employer reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 10.3 The bidder whose bid is accepted will be notified of the award of contract by the Employer prior to expiration of the quotation validity period.

11. PERFORMANCE SECURITY

- 11.1. Within 15 days of receiving the letter of acceptance, the successful bidder shall deliver to the Employer the performance security (either a bank guarantee or a fixed deposit / Term Deposit Certificate pledged in favor of the Employer (**SWSM (SPMU Account)**) for an amount equivalent of **10 %** of the contract price. Such pledging should be suitably endorsed by the bank issuing the certificate. The Performance Security shall be valid till the expiry of the period of maintenance of the work, specified in clause 12. Failure of the successful Bidder to furnish performance security and signing the agreement within the period stipulated shall constitute sufficient grounds for annulment of award and debarring the bidder for a period of one year, in which case the Employer may make the award to the next lowest evaluated bidder or seek quotations afresh.

12. PERIOD OF MAINTENANCE:

- 12.1. The "**Period of Maintenance**" for the work is six months from the date of taking over possession or one full monsoon season whichever occurs later. During the period of maintenance, the contractor will be responsible for rectifying any defects in construction free of cost to the Employer.

13. PURCHASE

- 13.1. Purchase of all construction materials including cement and steel as per the specifications (ISI certification marked goods wherever available) shall be the responsibility of the contractor.



SECTION - B

1. Format for Submission of Quotation.
2. Format of Letter of Acceptance.
3. Draft Agreement Form for Construction through National Shopping.



FORMAT FOR SUBMISSION OF QUOTATION

No.

date:

To,
The Project Director,
State Project Management Unit,
Neer Nirmal Pariyojana-Assam
5th Floor, Redstone Building,
G.S. Road, Dispur, Guwahati-781022,
Assam, India.

Subject: Construction of Waste Recovery Centre with supply of related goods for implementation of Solid Liquid Resources Management (SLRM) initiatives in Khetri Gaon Panchayat of Kamrup (M) district of Assam in India

Ref: 1. IN-SPMU-ASSAM-141654-CW-RFQ

2. No. SPMU /PROC/SLWM/280/2018-19/ 7035

Date: 18 November 2019

Sir,

We offer to execute the above works with supply of goods, described in your letter referred to above in accordance with the Conditions of Contract enclosed therewith for a total Contract Price of

INR _____ [in figures]
INDIAN RUPEES _____ (in words]

This quotation and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any quotation you receive.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery or collusive arrangements with the competitors.

We hereby confirm that this quotation is valid for **60 days as required in Clause 6** of the Instructions to Bidders.

We have not been debarred/removed from approved lists/ (dealings suspended) by the Central/State Governments or by the World Bank.

Yours faithfully,

Authorized Signature :

Date:

Name & Title of Signatory :

Name of Bidder :

Address





**GOVERNMENT OF ASSAM
STATE PROJECT MANAGEMENT UNIT, NEER NIRMAL PARIYOJANA,
ASSAM**

RWSSP-LIS, World Bank Project, 5th Floor, Redstone Building, G.S. Road, Dispur, Guwahati-781022
Web Site: [https:// phennp.assam.gov.in](https://phennp.assam.gov.in) Phone no: 0361-2334345 Email ID: assam_worldbank@rediffmail.com

No. SPMU /PROC/SLWM/280/2018-19/

Date:

LETTER OF ACCEPTANCE CUM NOTICE TO PROCEED WITH THE WORK

To,

Ref No: **IN-SPMU-ASSAM-141654-CW-RFQ**

1. This is to notify you that your quotation dated _____ for **Construction of Waste Recovery Centre with supply of related goods for implementation of Solid Liquid Resources Management (SLRM) initiatives in Khetri Gaon Panchayat of Kamrup (M) district of Assam in India** for the contract price of Rupees _____ [amount in words and figures], is hereby accepted by us.
2. You are hereby requested to furnish **Performance Security** for an amount of INR _____ (equivalent to 10% of the contract price) within 15 days of the receipt of this letter. The Performance Security in the form of Bank guarantee or a Fixed Deposit / Term Deposit certificate, shall be pledged **in favour of the Employer (SWSM (SPMU Account))** and such pledging should be suitably endorsement by the Bank issuing the certificate. The Performance Security shall be valid till the expiry of the period of maintenance i.e. up-to _____. Failure to furnish the Performance Security will entail cancellation of the award of contract.
3. You are also requested to sign the agreement form and proceed with the work not later than _____ under the instructions of the Design Build Engineer, Sivasagar and ensure its completion within the contract period.
4. With the issuance of this acceptance letter and your furnishing the Performance Security, contract for the above said work stands concluded.

Project Director,
State Project Management Unit
Neer Nirmal Pariyojana- Assam



DRAFT AGREEMENT FORM FOR CONSTRUCTION THROUGH NATIONAL SHOPPING

ARTICLES OF AGREEMENT

1. AGREEMENT

- 1.1. This deed of agreement is made in the form of agreement on _____ day _____ month 2019 between the Project Director, State Project Management Unit, Neer Nirmal Pariyojana, Assam (hereinafter referred to as the first party) and _____ (Name of the Contractor), S/O _____ resident of _____ (hereinafter referred to as the second party), to execute the work of "**Construction of Waste Recovery Centre with supply of related goods for implementation of Solid Liquid Resources Management (SLRM) initiatives in Khetri Gaon Panchayat of Kamrup (M) district of Assam in India**" (hereinafter referred to as works) on the following terms and conditions.

2. COST OF THE CONTRACT

The total cost of the works (hereinafter referred to as the "**total cost**") is INR. _____ as reflected in **Appendix 1**.

3. PAYMENTS UNDER ITS CONTRACT:

- 3.1. Payments to the second party for the construction work will be released by the first party in the following manner: -

Mobilization Advance against Bank Guarantee	:	10% of the total cost
On completion of 25% of the value of works (First Stage)	:	25% of the total cost
On completion of 50% of the value of works (Second Stage)	:	25% of the total cost
On completion of 75% of the value of works (Third Stage)	:	15% of the total cost
On completion of 100% of the value of works including supply of all Goods (Fourth Stage)	:	25% of the total cost

Total cost above is excluding contingency amount.

3.2 Payments at each stage will be made by the first party:

- (a) on the second party submitting an invoice for an equivalent amount;
- (b) on certification of the invoice (except for the first installment) by the concerned Design Build Engineer (DBE) nominated by the first party with respect to quality of works in the format in **Appendix - 2**; and
- (c) Upon proper and justified utilization of at least 50% of the previous installment and 100% of any prior installment.

4. NOTICE BY CONTRACTOR TO DESIGN BUILD ENGINEER

- 4.1. The second party, on the works reaching each stage of construction, issue a notice to the first party or the DBE nominated by the first party (who is responsible for supervising the contractor, administering the contract, certifying the payments



due to the contractor, issuing and valuing variations to the contract, awarding extensions of time etc.), to visit the site for certification of stage completion. Within 15 days of the receipt of such notice, the first party or the DBE nominated by it, will ensure issue of stage completion certificate after due verification.

5. COMPLETION TIME

- 5.1. The works should be completed in 3 months from the date of this Agreement. In exceptional circumstances, the time period stated in this clause may be extended in writing by mutual consent of both the parties.
- 5.2. If any of the compensation events mentioned below would prevent the work being completed by the intended completion date, the first party will decide on the intended completion date being extended by a suitable period:
- a) The first party does not give access to the site or a part thereof by the agreed period.
 - b) The first party orders a delay or does not issue completed drawings, specifications or instructions for execution of the work on time.
 - c) Ground conditions are substantially more adverse than could reasonably have been assumed before issue of letter of acceptance and from information provided to second party or from visual inspection of the site.
 - d) Payments due to the second party are delayed without reason.
 - e) Certification for stage completion of the work is delayed unreasonably.
- 5.3. Any willful delay on the part of the second party in completing the construction within the stipulated period will render him liable to pay liquidated damages. @ 0.05% of the contract value of the works per day which will be deducted from payments due to him. The first party may cancel the contract and take recourse to such other action as deemed appropriate once the total amount of liquidated damages exceeds 10 % of the contract amount.

6. DUTIES AND RESPONSIBILITIES OF THE FIRST PARTY

- 6.1. The first party shall be responsible for providing regular and frequent supervision and guidance to the second party for carrying out the works as per specifications. This will include written guidelines and regular site visit of the authorized personnel of the first party, for checking quality of material and construction to ensure that it is as per the norms.
- 6.2. The first party shall supply 3 sets of drawings, specifications and guidelines to the second party for the proposed works.
- 6.3. Possession of the site will be handed over to the second party within 10 days of signing of the agreement.
- 6.4. The DBE or such other person as may be authorized by the first party shall hold meeting once in a month where the second party or his representative at site will submit the latest information including progress report and difficulties if any, in the execution of the work. The whole team may jointly inspect the site on a particular day to take stock of activities.



- 6.5. The DBE shall record his observations/instructions at the time of his site visit in a site register maintained by the second party. The second party will carry out the instructions and promptly rectify any deviations pointed out by the DBE. If the deviations are not rectified, within the time specified in the DBE's notice, the first party as well as the DBE nominated by it, may instruct stoppage or suspension of the construction. It shall thereupon be open to the first party or the DBE to have the deviations rectified at the cost of the second party.

7. DUTIES AND RESPONSIBILITIES OF THE SECOND PARTY

7.1. The second party shall:

- a) take up the works and arrange for its completion within the time period stipulated in clause 5;
- b) employ suitable skilled persons to carry out the works;
- c) regularly supervise and monitor the progress of work;
- d) abide by the technical suggestions/direction of supervisory personnel including engineers etc. regarding building construction;
- e) be responsible for bringing any discrepancy to the notice of the representative of the first party and seek necessary clarification;
- f) ensure that the work is carried out in accordance with specifications, drawings and within the total of the contract amount without any cost escalation;
- g) keep the first party informed about the progress of work;
- h) be responsible for all security and watch and ward arrangements at site till handing over of the building to the first party; and
- i) Maintain necessary insurance against loss of materials/cash, etc. or workman disability compensation claims of the personnel deployed on the works as well as third party claims.
- f) Pay all duties, taxes and other levies payable by construction agencies as per law under the contract (First party will effect deduction from running bills in respect of such taxes as may be imposed under the law.

8. VARIATION / EXTRA ITEMS

- 8.1. The works shall be carried out by the second party in accordance with the approved drawings and specifications. However, if, on account of site conditions or any other factors, variations are considered necessary, the following procedure shall be followed: -

- a) The second party shall provide the DBE with a quotation for carrying out the Variation when requested to do so by the DBE. The DBE shall assess the quotation, which shall be given within seven days of the request before the Variation is ordered.
- b) If the quotation given by the second party is unreasonable, the DBE may order the Variation and make a change to the Contract Price which shall be based on DBE's own forecast of the effects of the Variation on the Contractor's costs.



- c) The second party shall not be entitled to additional payment for costs which could have been avoided by giving early warning.

9. SECURITIES

9.1. The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee.

10. TERMINATION

- 10.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 10.2 Fundamental breaches of Contract include, but shall not be limited to the following:
- (a) the contractor stops work for 28 days and the stoppage has not been authorized by the DBE;
 - (b) the Contractor has become bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (c) the DBE gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the DBE;
 - (d) the Contractor does not maintain a security which is required;
- 10.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 10.4 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

11. PAYMENT UPON TERMINATION

- 11.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the DBE shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law.
- 11.2 If the Contract is terminated at the Employer's convenience, the DBE shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.



12. DISPUTE SETTLEMENT

- 12.1.** If over the works, any dispute arises between the two parties, relating to any aspects of this Agreement, the parties shall first attempt to settle the dispute through mutual and amicable consultation.
- 12.2.** In the event of agreement not being reached, the matter will be referred for arbitration by a Sole Arbitrator not below the level of retired Superintending Engineer, PWD to be appointed by the first party. The Arbitration will be conducted in accordance with the Arbitration and Conciliation Act, 1996. The decision of the Arbitrator shall be final and binding on both the parties.



CHECKLIST FOR QUOTATION SUBMISSION

List of documents to be attached for Quotation submission in a seal envelope:

1. Quotation (as per Format for Quotation submission) duly signed by authorized signatory.
2. Bill of Quantities (BoQ) duly signed by authorized signatory.
3. Copy of all pages of the Invitation for Quotation (IFQ), duly signed by the authorized signatory
4. Power of Attorney to sign the Quotation and Invitation for Quotation (IFQ)
5. Photocopy of valid Registration as Class II or above grade in Public Health Engineering Department, Assam
6. Photocopy of PAN Card.
7. Photocopy of GST Registration.

The sealed envelope addressed to the Project Director, SPMU, Neer Nirmal Pariyojana-Assam, 5th Floor, Redstone Building, Near Pantaloons Mall, Dispur, Guwahati-22 will also bear the following identification.

- (i) Quotation for "Construction of Waste Recovery Centre with supply of related goods for implementation of Solid Liquid Resources Management (SLRM) initiatives in Khetri Gaon Panchayat of Kamrup (M) district of Assam in India"
- (ii) Do not open before "15:30 Hours (IST) of 06 December 2019"

Appendix: 2

FORMAT OF CERTIFICATE

Certified that the works up-to _____ First / Second / Third / Fourth-Stage in respect of "Construction of Waste Recovery Centre with supply of related goods for implementation of Solid Liquid Resources Management (SLRM) initiatives in Khetri Gaon Panchayat of Kamrup (M) district of Assam in India" have been executed in accordance with the approved drawing and technical specifications.

Signature
Name & Designation
(Official address)

Place:

Date:

Office seal

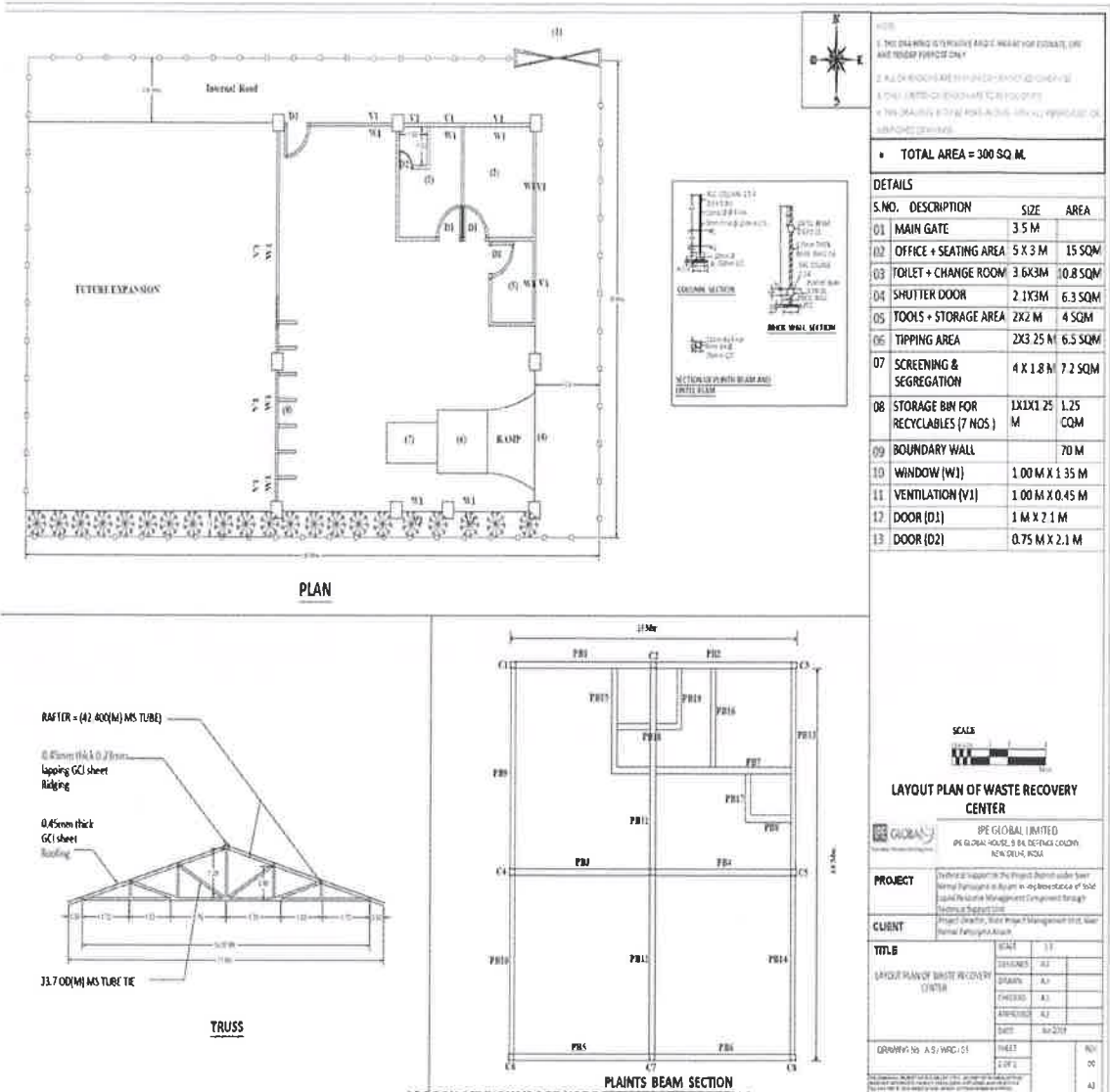
Kindly note: This Certificate for works completed **up-to Fourth Stage** shall not be signed and submitted for payment of the Final Bill, unless all the relevant goods conforming to the specification has been supplied and received in good conditions.

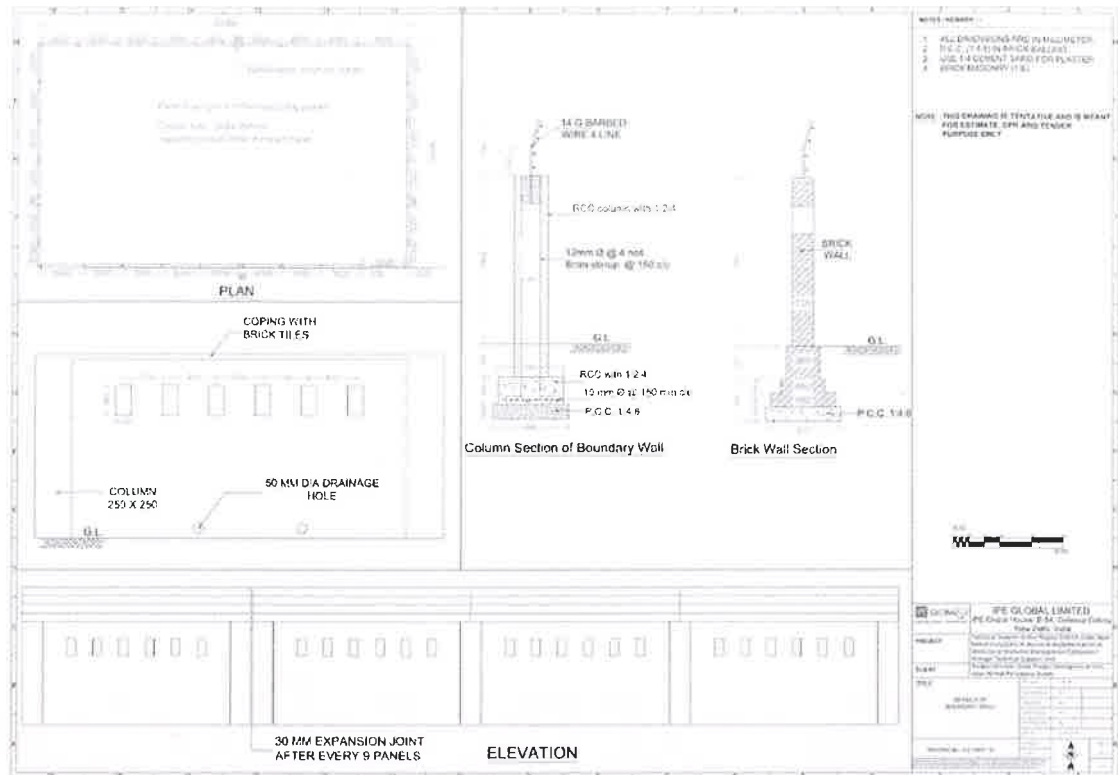


ANNEXURE-A

TECHNICAL SPECIFICATION

- Size of the plot: 20mx15m
- Size of the shed: 15mX10m
- Indicative Drawings





A. SPECIFICATION FOR CIVIL WORKS

1. **Excavation:** Earthwork in excavation as per the approved design specification of the client for foundation, trenches of walls, retaining walls, footings of column, steps, septic tank etc. in all type of soil
2. **Plain Cement Concrete:** Plain Cement concrete (1:4:8) using 40 mm metal with concrete mixture. All work up to plinth level.
3. **Reinforced Cement Concrete:** Steel: HYSD bar reinforcement & Concrete: Supply and Standard Design Mix Concrete grade M20 as per IS 4926-2003 with minimum cement content as per IS code 456-2000 using 20 mm graded metal.
4. **Brick Masonry:** First class traditional size bricks in cm (1:6).
5. **Plastering:** Internal Cement plaster 15 mm thick for internal a single coat in cement mortar 1:4 without neat finish to concrete or brick surfaces. External cement plaster 15 mm thick in cement mortar 1:4 with Debora sponge finishing to concrete or brick surfaces.
6. **Flooring:** RCC flooring in both floor of inside shed and ramp with M20 grade of concrete
7. **Painting:** Painting to new walls with 2 coats of ready mixed oil bound washable distemper of approved brand and shade over a base coat of appropriate primer of approved brand, making 3 coats in all to give an even shade.
8. **Roof: Truss** of M.S. circular hollow section of Grade 210 including purlins, bottom runners and providing M.S. cleat, M.S. angle base plank, bolts and nuts with red oxide primer including fitting bottom runner and cleat etc. corrugated galvanized Iron sheet roofing of TATA SHAKTEE / SAIL, fitting and fixing necessary galvanized J or L hooks, bolts and nuts 8 mm dia. with bitumen washer 25 mm dia.x 3 mm thick and 1.6 mm thick limpet washer complete excluding cost of roof truss, purlin etc. Supplying, fitting and placing of structural steel angle / channel / beam / bars of TATA SHAKTEE / SAIL.



9. **Fencing:** Galvanized barbed wire fencing with seven strands of barbed wire 12 S. W. G .x 2plies x 4 points at 75mm apart with angle iron intermediate fencing posts not more than 1800mm apart and straining and end post etc. as necessary to be fitted with straining eye bolts and staples etc.
10. **Door and Windows:** Wood work in frame (chowkaths) of doors, windows, clerestory windows and other similar works wrought, framed and fixed in position in contact with C.C or brick masonry wall including supplying, fitting and fixing with M.S. hold fast (40mmx3mmx250mm) as per design embedded in cement concrete block in proportion 1:2:4 and with two coats of kiricide oiling to the timber faces in contact with C.C and masonry as directed and specified.

ANNEXURE-B

SPECIFICATION FOR THE SUPPLIED GOODS

• TRICYCLES

1. Driving Mechanism: Pedestal Chain, Length of Tricycle (mm):2300 millimeter
2. Length of Cart (mm):1500
Width of Cart (mm):1000
Height of Cart (mm): 300
3. Number of Plastic Containers with lid and handle (Nos.): 8
Capacity of each Container (Litres): 40
4. Material of the Container and Lid Virgin: HDPE
5. Frame Structure Made of MS Tubes Diameter of MS Tube (mm): 25 millimeter
6. Thickness of MS Tube (mm): 25 millimeter
7. Cart Frame Material MS Angle of size: 25 x 25 x 3 mm
8. Material of Bottom Plate of Cart: Mild steel plate
9. Thickness of Bottom Plate of Cart (mm): 3 millimeter
10. Stiffener Material M S Angle of size: 25 x 25 x 3 mm
11. Type of Front Wheel Tyre: Tube Wheel
12. Diameter of Spike of Front Wheel (mm): 20 millimeter
13. Number of Rear Wheels (Nos): 2
14. Type of Rear Wheels: Puncher-less Rubberized Wheel
15. Rear Rim Diameter (mm): 700 millimeter
16. Rear Rim Width (mm): 3.1 millimeter
17. Thickness of Spike of Rear Wheel (mm):1.6 millimeter
18. Minimum Wall thickness of the Plastic Container and Lid (mm): 4 millimeter
19. Maximum Ash content of the container and Lid when tested as per Annex D of IS 14887/2014 (%): 1
20. Pre-treatment Two coats of red oxide after phosphating before painting, Paint Powder Coating



• HANDCART

1. Utility: Public (Mobile containers confirming IS: 12402)
2. ISI Marked: yes
3. Material: HDPE



4. Bin Capacity (Volume) (Ltrs): 240 Litres (as per IS: 12402 Pt 1 and 2)
5. Wall: Non- Perforated
6. No. of Compartments in the Bin: single
7. Colour: Other than green or blue
8. Wheel Lock: Without
9. Load carrying Capacity (Kgs): 150
10. Wall: Non- Perforated
11. Lid: without lid
12. Handle: yes
13. Wheel: yes
14. Wheel Material: Rubber, metal
15. Towage Provision: yes
16. Gripping Provision: Both Frontal &Ventral
17. Plugged outlet for washing & draining: With
18. UV Resistant: yes
19. Dust Bin stand: with
20. No. of Compartments in the Bin: single

• **INCINERATOR**

1. Wall mounted: Yes
2. Thickness of thermal Insulation material (mm): 25 millimeter
3. Thickness of MS/SS sheet of burning chamber (internal) (mm) (Min):3 millimeter
4. Machine Weight(kg):5-15
5. Thickness of door (mm):20 millimeter
6. Flexible emission Outlet pipe dia (mm):25 millimeter
7. Material of Housing cabinet (External):Mild Steel(CRCA) sheet
8. Material of Burning chamber (Internal):Mild Steel(CRCA) sheet
9. Material of Thermal Insulation: High Density Ceramic Fiber sheet
10. Burning Capacity per day (Number of Napkins):100-200
11. Burning Capacity at a time (Number of Napkins):1-15
12. Burning time of full capacity Napkins/pads (minutes):5 minute
13. Material of housing of Smoke Control Unit (SCU):Mild Steel(CRCA) cabinet
14. Number of filters in Carbon control chamber: One
15. Type of filters in Carbon control chamber: Activated Carbon filter
16. Number of filters in Odour control chamber: One
17. Blower RPM:1800



• **DUSTBIN**

1. Colour: Green
2. Capacity: 1000 Litres (as per IS: 12402 Pt1 and 2)
3. Weight of Dustbin (Complete unit) (Grams): 90000
4. Load carrying Capacity (Kgs): 600
5. Wall: Non- Perforated
6. Lid: hinged
7. Handle: With
8. Wheel: Without
9. Gripping Provision: Both Frontal &Ventral
10. No. of Compartments in the Bin: Single



11. Dust Bin stand: Without
12. UV Resistant: Yes

- **PLATFORM WEIGHING MACHINE / SCALE**

1. Capacity: 100 kg
2. Accuracy: 10 gm
3. Platform: 400x400 mm
4. Frame MOC: MS



- **SAND BUCKET:**

- 1) Material of Buckets: Stainless Steel
Sheets Grade designation X07Cr18Ni.9
of IS: 5522 latest
- 2) Nominal Capacity (litre): 6
- 3) Height (Nominal Size) of Buckets (mm):
300
- 4) Sheet Thickness (mm): As per
Specification IS : 4768 latest



- **FIRE EXTINGUISHER 2 KG-FIRE EXTINGUISHER**

- 1) Conformity to Standard: "EN 3-7 + A1: 2007 &
EN 3-8;2006 with latest amdnt. "
- 2) Type: Stored Pressure
- 3) Extinguishing Media: Foam Based



- **MEDICAL KIT**

Container Type	Box
Container Material	Aluminium
Contents	EMPTY BOX ONLY
Model Name	First Aid Box (EMPTY) - Small
Container Color	Grey
Number of Items	1





Dimensions

Width	16 cm
Height	25 cm
Depth	7 cm
Weight	0.4 kg

• ITEMS

NO.s

SPECIFICATION

Wound Management

Elastic Adhesive Dress

1

6 cm x 10 cm

Adhesive Plaster

5

19 x 72 mm

Safety Pin

5

SS

Cotton Tip Applicator

5

Cotton Tip Applicator

Adhesive Plaster Round

1

25 mm

Wound Cleaning Wipes

3

Alcohol Wipes

Antiseptic Wipes

3

BZK Wipes

Microporous Tape

1

1.25 x 5 m

Sterile Gauze Swab

2

10 cm

Sterile Dressing Small

1

Sterile No1 Dressing

Gauze Bandage

1

5 cm x 3?ymtr

Other Injuries

Triangular Bandage

1

90 x 90 x 130 cm

Gauze Band

1

7.5 cm x 3 m



Safety Pin	5	SS
Sterile Burn Gel Dressing	1	10 cm x 10 cm
Sterile Dressing for Eye and Ear	1	Sterile No1 Dressing
Sterile Oval Eye Pad	2	Oval

General Supplies

Cpr Face Mask With Gloves	1	Mouth Barrier
Thermometer Digital	1	Digital
Absorbent Cotton	1	15 gms
Scissors	1	7 cm Plastic Handed
Forceps Plastic	1	Plastic
Dusting Powder	1	10 gms
First Aid Guide	1	SJFA
Tourniquet, Whistle & Penlight	1+1+1	Easy Usable



BILL OF QUANTITIES

Name of Package: Construction of Waste Recovery Centre with supply of related goods for implementation of Solid Liquid Resources Management initiatives in Khetri Gaon Panchayat of Kamrup (M) District of Assam in India
Reference No: IN-SPMU-ASSAM-141654-CW-RFQ

SUMMARY OF COST

S. N.	Part	Particulars of Items	Specifications	Estimated Amount in INR	Bidder's Quoted Amount in INR including GST	
					In Figure	In Words
1	A	Construction of Boundary wall	in BoQ / Annexure-A	357819.29		
2	B	Construction of Gate	in BoQ / Annexure-A	36,445.49		
3	C	Construction of Shed	in BoQ / Annexure-A	1,206,323.15		
4	Supply of Goods					
1		Tricycles (2 nos.)	in Annexure-B			
2		Hand Carts (2 nos.)	in Annexure-B			
3		Bins for inert waste (1 no.)	in Annexure-B			
4		Weighing machine (1 no.)	in Annexure-B			
5		Medical kits (1 no.)	in Annexure-B			
6		Sand Bucket (1 no)	in Annexure-B			
7		Fire extinguisher: 2 Kg (1 no.)	in Annexure-B			
8		Incinerator (1 no)	in Annexure-B			
Gross Total Cost: INR				GRAND TOTAL		

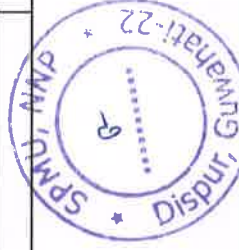
We agree to execute the works including supply of goods in accordance with the approved drawings and specifications at the estimated rates indicated in the Table above, i.e. for a contract price of INR _____ (amount in figures) (INDIAN RUPEES _____ amount in words)



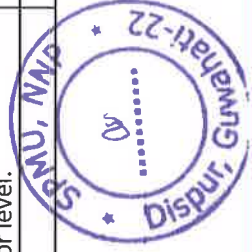
Signature of Authorised signatory

PART A: CONSTRUCTION OF BOUNDARY WALL

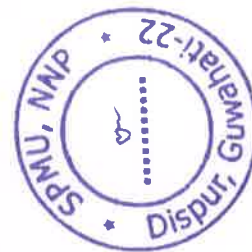
Sl No.	Item No.	Description	Unit	Rate	Qty	Amount
1	1.1/Page no. 23/SOR /Civil works	EARTHWORK IN EXCAVATION				
		Earthwork in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified. (for foundation of column and wall)				
		(A) Up to a depth of 2.00m below the existing ground level.				
2	2.1.1/Page no. 29/SOR /Civil works	(a) In ordinary soil	Cum	Rs.108.82	42.56	4,631.38
		Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid separately). (for column and wall)				
		(b) In prop 1cement: 4 sand :8 coarse aggregate by volume	cum	Rs. 3,890.61	7.98	31,047.07
	2.2	REINFORCED CEMENT CONCRETE WORKS				
		Providing and laying plain/reinforced cement concrete works cement, coarse sand & 20mm down graded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work (form work and reinforcement will be measured and paid separately) (for sub structure and superstructure of Column)				
		(I) Using Mixer Machine				
		(A) In substructure up to plinth level				



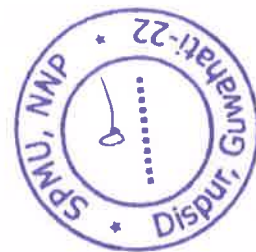
3	2.2.1/Page no. 30/SOR /Civil works	Foundation, footing, columns with base tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100mm thick up to plinth level.					
		N) Without using admixture, plasticiser					
		b) M20 grade concrete or Prop. 1:1.5:3	cum	Rs. 6,063.65	2.34		14,188.94
4	3.1.1/Page no. 39/SOR /Civil works	ii) Columns, pillars, posts, struts, suspended floor, roof, landing, shelf and support, balcony, lintel, sill band, beam, girder, bressumer, cantilever, staircase (except spiral staircase and landing) including preparing the top surface and finishing of nosing.					
		N) Without using admixture, plasticiser					
		b) M20 grade concrete or Prop. 1:1.5:3	cum	Rs. 6,331.46	2.03		12,852.86
		Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc., height of propping and centering below supporting floor to ceiling not exceeding 4.0M and removal of the same for in-situ reinforced concrete and plain concrete work in:					
		Foundation, footings, bases of columns, pile cap, raft and mass concrete works etc.					
5	4.1.4/Page no. 51/SOR /Civil works	(b) Using 25mm thick plank	Sqm	Rs.252.24	12.96		3,269.03
		Columns, Pillars, Posts & Strut					
		(a) Square, Rectangular, polygonal in plan or any shape like Tee/L etc. having plane vertical face					
		(ii) Using 25mm thick plank	Sqm	Rs.364.01	38.70		14,087.19
		Brick work in cement mortar with 1st class brick including racking out joints and curing complete as directed.					
		(I) In Sub-structure upto plinth level including dewatering if necessary					
		(d) In proportion 1:6.	Cum	Rs. 5,515.11	17.07		94,142.93
		(II) In superstructure above plinth level up to 1st floor level.					
		(d) In proportion 1:6.(1 cement:6 sand)	Cum	Rs. 5,681.61	9.14		51,929.92



6	6.2.2/Page no. 96/SOR /Civil works	15 mm thick Cement plaster in single coat on single or half brick wall for interior plastering up to 1st floor level including arises, internal rounded angles, not exceeding 80mm girth and finished even and smooth including curing complete as directed.				
		A) On rough side				
		b) In cement mortar 1:4 on fair side	Sqm	Rs. 147.23	81.59	12,012.50
		b) In cement mortar 1:4	Sqm	Rs. 145.70	113.99	16,608.34
7	17.7/Page no. 284/SOR /Civil works	Supplying , fitting and fixing galvanised barbed wire fencing with seven strands of barbed wire 12 S. W. G .x 2plies x 4 points at 75mm apart with angle iron intermediate fencing posts not more than 1800mm apart and straining and end post etc. as necessary to be fitted with straining eye bolts and staples etc.complete as directed, specification of the angle iron post as given below. (for boundary wall)				
		a) Intermediate post 35mm x35mm x5mm x1800mm long bottom torched and duly slotted.				
		c) Corner posts 65mm x 65mm x 6mm x1820mm long with 2 stays of 35mm x 35mm x 5mm x 1 670 mm and 3 base plates 200mm x 200mm x 5mm,duly slotted to take eye bolts etc.				
		(All the angle iron posts to be embedded 600mm in C.C.pillars of size 300mmx300mmx600mm in prop.1: 3: 6 and one coat of anticorrosive ready mixed painting to all iron works) including excavation of foundation trenches for C.C. blocks and refilling and removal of surplus soil after completion of works.	M	Rs.630.70	70	44,149.00



8	18.1.1/Page no. 291/SOR /Civil works	Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. Code for R.C.C. work/ R.B. walling including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete. (No extra measurement for lap, hook, chair, anchor etc. will be entertained in the measurement as they are included in the rate) (Upto 1st floor level)				
		b) Other ISI approved TMT reinforcement bar (SAI/BISCON/THERMAX) (For Assam Type Bldg., drain works,,retaining wall&boundary wall etc. .	Qtl	Rs.6,026.82	3.59	21,636.28
9	13.5.1/ page No.240 of SOR/Civil works	Applying one self-priming coat of acrylic emulsion coating of Unicem "Rakshak" brand by thinning 1ltrs of paints with 1ltrs of water over freshly plastered wall surface after thoroughly brooming the surfaces free from mortar droppings and other foreign matter and including preparing the surface even and sand papered smooth as specified and directed by the department.	Sqm	Rs.52.66	195.58	10,299.24
10	13.5.2/ page No.240 of SOR/Civil works	Finishing wall with two coats of acrylic emulsion exterior coatings of Unicem "Rakshak" brand of required shade by thinning 1ltr. of paint with 750ml of water to give an even shade after thoroughly brooming the surfaces to remove all dirt and remains of loose powdered materials as specified and directed by the department.	Sqm	Rs.85.77	195.58	16,774.90

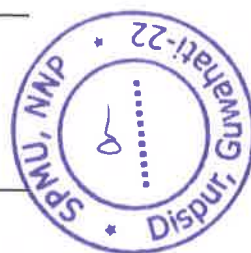


11	13.3.2/ page No.235 of SOR/Civil works	Providing two coats of acrylic water based wall putty/ wall filler of Asian Paints/ Berger/ Dulux over concrete/ cement plaster/ brick walls and ceilings both internal and external after removing all the loosely adhering material from the wall/ ceiling surface with the help of emery stone, putty blade or wire brush, moistening the wall with the help of sufficient quantity of clear water as specified and directed by the department.	Sqm	Rs.52.10	195.58	10,189.72
				TOTAL COST	Rs	357,819.29

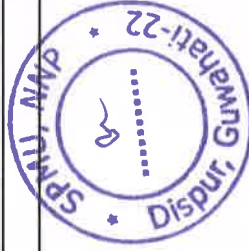
NB: Estimate prepared on the basis of APWD (Civil Works) SOR for the year 2013-14



PART B: CONSTRUCTION OF GATE					
SL . No.	Item No.	Description of Item	Units	Rate	Qty
1	1.1/Page no. 23/SOR /Civil works	Earthwork in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified. Ordinary soil, Mechanical Means - Up to 2 m depth	cum	Rs.108.82	1.50
2	2.1.1/Page no. 29/SOR /Civil works	Plain Cement concrete (1:2:4) using 20 mm metal with concrete mixture. All work up to plinth level.	cum	Rs. 3,890.61	0.30
	2.2.1/Page no. 30/SOR /Civil works	Providing and laying plain/reinforced cement concrete works cement, coarse sand & 20mm down graded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work (form work and reinforcement will be measured and paid separately)			
		(I) Using Mixer Machine			
		(A) In substructure up to plinth level			



3		Foundation, footing, columns with base tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100mm thick up to plinth level.				
		N) Without using admixture, plasticiser				
		Below GL				
		b) M20 grade concrete or Prop. 1:1.5:3	cum	Rs. 6,063.65	0.44	2,668.01
		ii) Columns, pillars, posts , struts, suspended floor, roof, landing, shelf and support, balcony, lintel, sill band, beam, girder, bressumer, cantilever, staircase (except spiral staircase and landing) including preparing the top surface and finishing of nosing.				
4		N) Without using admixture, plasticiser				
		Above GL				
		b) M20 grade concrete or Prop. 1:1.5:3	cum	Rs. 6,331.46	0.54	3,418.99
	3.1.1/Page no. 39/SOR /Civil works	Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc., height of propping and centering below supporting floor to ceiling not exceeding 4.0M and removal of the same for in-situ reinforced concrete and plain concrete work in:				
	3.1.1.1/Page no. 39/SOR /Civil works	Foundation, footings, bases of columns, pile cap, raft and mass concrete works etc.				
		(b) Using 25mm thick plank	Sqm	Rs.252.24	1.92	484.30
	3.1.1.3/Page no. 39/SOR /Civil works	Columns, Pillars, Posts & Strut				
		(a) Square, Rectangular, polygonal in plan or any shape like Tee/L etc. having plane vertical face				
		(ii) Using 25mm thick plank	Sqm	Rs.364.01	7.92	2,882.96



5	6.2.2/Page no. 96/SOR /Civil works	15 mm thick Cement plaster in single coat on single or half brick wall for interior plastering up to 1st floor level including arises, internal rounded angles, not exceeding 80mm girth and finished even and smooth including curing complete as directed.	on fair side	Sqm	Rs. 145.70	7.20	1,049.04
6	17.12/Page no. 288/SOR /Civil works	b) In cement mortar 1:4 Supplying, fitting and fixing double leaf heavy duty iron gate, frame made from 40mm x 40mm x 6mm M.S. angle and with M.S. flat of 40mm x 6mm size as per approved design.Necessary locking arrangement for temporary closing the gate and 2nos.(minimum) strong iron hinges of M.S bars and flat of same sizes on each leaf to be embedded in C.C brick pillars as necessary including a red oxide painting to all iron works as directed and specified.(Separate payment will be made for posts).		Qtl	Rs.6,808.23	2.09	14,229.20
7	17.13/Page no. 288/SOR /Civil works	Providing rails for plying of rollers of gate made from 50mm x 6mm size M.S. flat and to be fitted with 3 nos of hinged hold fasts to be embedded in concrete prop. 1:2:4 of 10mm wide and 75 mm deep over brick flat soling 250mm wide including curing etc. complete.		M	Rs.446.97	6.00	2,681.82
8	17.14/Page no. 288/SOR /Civil works	Providing roller to the gate including welding etc.complete					
		a) With 25mmx50mm (dia) roller		Each	Rs.251.84	2.00	503.68



9	18.1.1/Page no. 291/SOR /Civil works	Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. Code for R.C.C. work/ R.B. walling including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete. (No extra measurement for lap, hook, chair, anchor etc. will be entertained in the measurement as they are included in the rate) (Upto 1st floor level)				
			kg	22.25		
			kg			
			kg			
10	13.5.1/ page No.240 of SOR/Civil works	b) Other ISI approved TMT reinforcement bar (SAI/BISCON/THERMAX) (For Assam Type Bldg., drain works,,retaining wall&boundary wall etc. .	Qtl	Rs.6,026.82	0.70	4218.774
		Applying one self-priming coat of acrylic emulsion coating of Unicem "Rakshak" brand by thinning 1ltrs of paints with 1ltrs of water over freshly plastered wall surface after thoroughly brooming the surfaces free from mortar droppings and other foreign matter and including preparing the surface even and sand papered smooth as specified and directed by the department.				
		Column	Sqm	Rs.52.66	7.20	379.152



11	13.5.2/ page No.240 of SOR/Civil works	Finishing wall with two coats of acrylic emulsion exterior coatings of Uniceem "Rakshak" brand of required shade by thinning 1ltr. of paint with 750ml of water to give an even shade after thoroughly brooming the surfaces to remove all dirt and remains of loose powdered materials as specified and directed by the department.	Sqm	Rs.85.77	7.20	617.544
12	13.3.2/ page No.235 of SOR/Civil works	With reference to item No. 9 Providing two coats of acrylic water based wall putty/ wall filler of Asian Paints/ Berger/ Dulux over concrete/ cement plaster/ brick walls and ceilings both internal and external after removing all the loosely adhering material from the wall/ ceiling surface with the help of emery stone, putty blade or wire brush, moistening the wall with the help of sufficient quantity of clear water as specified and directed by the department.	sqm	Rs.52.10	7.20	375.12
13	13.7.2/ page No.245 of SOR/Civil works	Applying primary coat over new steel and other metal surface over 100m in width or girth after preparing the surface by thoroughly cleaning oil,grease, dirt and other foreign matter and scoured with wire brushes, fine steels, wood scrapers and sand paper. a). With ready mixed "red-lead/ red oxide" primer.	sqm	33.96	16.75	568.83



14	13.7.4/ page No.245 of SOR/Civil works	Painting two coats (excluding priming coat) on new steel and other metal surface with enamel paint of approved brand and manufacture(Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac) to give an even shade including cleaning the surface of all dirt, dust and other foreign matter.				
		(i).Surfaces over 100mm in width or girth.				
		a). General purpose (Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac).	sqm	61.95	16.75	1037.6625
		TOTAL COST			Rs.	36445.49

NB: Estimate prepared on the basis of APWD (Civil Works) SOR for the year 2013-14



PART C: CONSTRUCTION OF SHED

Sl no	Item No	Description of Item	Unit	Rate	Qty	Amount
1	25.6/Page no. 388/SOR/Civil works	Jungle clearance including uprooting of vegetation, grass, brush-wood, sapling and trees not exceeding 300mm girth and disposal of the same outside the periphery and lift upto 1500mm. (for boundary wall and waste recovery centre)	m2	5.47	300	1641.00
2	1.1/ page No. 23 of SOR/Civil works	Earth work in Excavation for Foundations,trenches of walls, retaining walls, footing ofcolumns including refilling (return filling) the quantity as necessary after completion of work, breaking clods and ramming of surplus earth with all lead and lift as directed and specified. (for column foundation and Wall foundation)	m3	108.82	7.59	825.94
		(A) Up to a dpeth of 0.8 m below the				
		(a) In ordinary Soil				
3	1.3/ page No. 24 of SOR/Civil works	Earth/ sand filling in plinth in layers not more than 150mm thick including necessary carriage, watering, ramming etc. complete as directed and specified including payment of land compensation, forest royalty, sales tax and other duties and taxes as may be necessary.(for sand filling of 0.45 m up to plinth level and for ramp section).	m3	105.25	82.65	8698.91
		(a) With earth or silt or sand obtained by head load with lead upto 90m and lift upto 2m				
4	2.1.1/ page No. 29 of SOR/Civil works	Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid separately).(for PCC work of column and brick wall)	m3	3890.61	4.32	16807.44
		(b) In prop 1cement: 4 sand :8 coarse aggregate by volume				



5	2.1.3/ page No. 29 of SOR/Civil works	Providing and laying 25mm thick damp proof course with cement concrete in prop 1:1.5:3 with graded stone agg. of 10mm down nominal size including providing approved damp proof admixture in proportion as recommended by the manufacturer including curing etc. complete as directed. (For Plinth beams of building)	m2	181.99	29.25	5323.21
6	2.2.1/ page No. 30 of SOR/Civil works	Providing and laying plain/reinforced cement concrete works cement, coarse sand & 20mm down graded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work (form work and reinforcement will be measured and paid separately)				
		Foundation, footing, colm with base, tie and plinth beam,..... not less than 100mm thick upto plinth level.	m3	6063.65	22.56	136795.94
		b) M20 grade concrete or Prop. 1:1.5:3				
		(b) In super structure from Plinth level upto 1st.floor level				
		(ii) Columns, pillars, posts, struts, suspended floor, roof, landing, shelf & support, balcony, lintel, sill band, beam, girder, bressumer, cantilever, stair case including preparing the top surface and finishing of nosing. (For Column and lintel beam)				
		(b) M20 1:1.5:3				
		@ Rs.	m3	6331.46	11.59	73381.62
7	3.1.1.1/ page No. 39 of SOR/Civil works	Providing form work of ordinary timber planking so as to give a rough finish including centering shuttering, strutting & propping etc. height of propping & centering below supporting floor ceiling not exceeding 4.0m and removal of the same for in situ R/F concrete & P.C.C. work. (For footing and ramp)	m2	252.24	5.76	1452.90
		(1) Foundation and footing base of colm.				
		(ii) Using 25mm thick Plank				
	3.1.1.2	Column, pillars, post and strut	m2	364.01	38.88	14152.71



		(a) square, rectangular, polygonal in plain				
	3.1.1.4	Sides and soffits of beams...for a depth of 1.00m	m2	202.44	201.75	40842.27
8	4.1.1/ page No. 51 of SOR/Civil works	Providing soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete. (For below floor and ramp)	m2	217.83	137.75	30006.08
		(c).Stone soling of thickness 150mm.				
9	4.1.4/ page No. 51 of SOR/Civil works	Brick work in cement mortar with first class brick including racking out joints and dewatering if necessary.....up to PL.(for foundation and ramp side wall)	m3	5515.11	2.4	13236.26
		(d) In proportion 1:6.				
		(II) In superstructure above plinth level up to 1st floor level.	m3	5681.61	28.83	163800.82
10	6.2.2/ page No. 96 of SOR/Civil works	15 mm thick Cement plaster in single coat on single or half brick wall for interior plastering up to 1st floor level including arises, internal rounded angles, not exceeding 80mm girth and finished even and smooth including curing complete as directed. (for wall)				
		A) On rough side	m2	147.23	171	25176.33
		B) On fair side	m2	145.7	247.5	36060.75
11	9.1.2/ page No. 159 of SOR/Civil works	Providing wood work in frame (chowkaths) of doors, windows, clerestory windows and other similar works wrought, framed and fixed in position in contact with C.C or brick masonry wall including supplying, fitting and fixing with M.S. hold fast (40mmx3mmx250mm) as per design embedded in cement concrete block in proportion 1:2:4 and with two coats of kiricide oiling to the timber faces in contact with C.C and masonry as directed and specified. (for door)				
		(a) With sal wood	m3	121163	0.27	32714.01



12	9.9.2/ page No. 166 of SOR/Civil works	Providing, fitting and fixing full panelled doors/ windows including oxidised M.S butt hinges (100mm x75 mm x3.55mm) with necessary screws (other fittings to be measured and paid separately) (for Door)				
		B) With 1st class local wood				
		(ii) 35 mm thick.	m2	3150.88	8.5	26782.48
13	11.1.2/ page No. 187 of SOR/Civil works	Providing, fitting and fixing anodised aluminium sliding windows and ventilators of standard sections of approved brand without horizontal glazing bars, joints mitred and welded (manufactured to relevant IS specifications) and providing and fixing handles, angle cleat, rubber gasket, roller, bolting device, locking arrangements, screws etc as required complete as specified and directed for all levels. (For window and ventilation)				
		(a)2 Track sliding window				
		(i)6mm clear glass	m2	4766.85	20.25	96528.71
14	18.1.1/ page No. 291 of SOR/Civil works	Supplying fitting and fixing in position R/F bars conforming to I.S. code for RCC work including straightening, cleaning, cutting, and bending to proper shape and length as per details, supplying and binding with 20 G black annealedchairs , spacers etc. complete (upto 1st floor level) (for column footing,beam,floor,ramp etc.)				151514.25
			Qtl	6026.82	25.14	
15	18.3.1/ page No. 291 of SOR/Civil works	Providing, fitting, hoisting and fixing of roof trusses fabricated out of combination of any two or all of the following sections (i) Square section (ii) Rectangular Hollow section of specification RSH/SHS and (iii) M.S. circular hollow section of Grade 210 including purlins, bottom runners and providing M.S. cleat, M.S. angle base plank, bolts and nuts with red oxide primer including fitting bottom runner and cleat etc. for fixing ceiling joist as per design complete as directed as per specifications.	Qtl	8410	7.7	64757.00



		b) Using other ISI marked approved circular hollow section				
16	18.4.2/ page No. 294 of SOR/Civil works	Providing and fixing rolling shutters of approved make made of 80mm wide M.S. laths interlocked together through their entire length and jointed together at the ends by end-locks mounted on specially designed pipe shaft with bracket plates, guide channels and arrangements for inside and outside locking with push-pull operation complete including cost of wire, spring and hood cover for the shutters. (for front door)	m2	3069	6.3	19334.70
17	8.1.1/ page No.139 of SOR/Civil works	Providing corrugated galv. Iron sheet roofing including fitting.....excluding cost of roof truss, purlins etc. (for roofing)				
		(a) .45mm thick	m2	450.45	185.6	83603.52
18	8.1.2/ page No.139 of SOR/Civil works	Providing galvd iron ridging of TATA SHAKTEE / SAIL including supplying and fixing necessary galvd screws/washers etc. complete as directed.	m2	152.69	16	2443.04
19	13.2.2/ page No.233 of SOR/Civil works	m) Distempering two coats with oil bound distemper of approved brand and manufacture and of required shade on new wall surface to give an even shade, over and including a priming coat with distemper primer of approved brand and manufacture after thoroughly brooming the surface free from mortar droppings and other foreign matter and including preparing surface even and sand papered smooth.	m2	34.56	224.5	7758.72
		(i). Priming coat with distemper primer				
		(ii). Top coat	m2	48.68	224.5	10928.66



20	13.5.1/ page No.240 of SOR/Civil works	Applying one self-priming coat of acrylic emulsion coating of Unicem "Rakshak" brand by thinning 1ltrs of paints with 1ltrs of water over freshly plastered wall surface after thoroughly brooming the surfaces free from mortar droppings and other foreign matter and including preparing the surface even and sand papered smooth as specified and directed by the department.	m2	52.66	196	10321.36
21	13.5.2/ page No.240 of SOR/Civil works	Finishing wall with two coats of acrylic emulsion exterior coatings of Unicem "Rakshak" brand of required shade by thinning 1ltr. of paint with 750ml of water to give an even shade after thoroughly brooming the surfaces to remove all dirt and remains of loose powdered materials as specified and directed by the department.	m2	85.77	196	16810.92
22	13.3.2/ page No.235 of SOR/Civil works	Providing two coats of acrylic water based wall putty/ wall filler of Asian Paints/ Berger/ Dulux over concrete/ cement plaster/ brick walls and ceilings both internal and external after removing all the loosely adhering material from the wall/ ceiling surface with the help of emery stone, putty blade or wire brush, moistening the wall with the help of sufficient quantity of clear water as specified and directed by the department.	m2	52.1	420.5	21908.05
23	13.8.2/ page No.248 of SOR/Civil works	Painting two coats on new G.C.I sheets with ready mixed anticorrosive paint of approved brand and shade suitable for painting over G.C.I sheets to give an even shade including the cleaning the rust patches with emery paper, dust ,dirt, grease and other foreign matter with water complete.	m2	55.87	185.6	10369.47



24	13.6.3/ page No.242 of SOR/Civil works	Applying priming coat over new wood and wood based surfaces over 100mm in girth/width after and including preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter , sand papering and knotting.	m2	36.9	17	627.30
		(b). With ready mixed paint , wood primer (white).				
25	13.6.5/ page No.243 of SOR/Civil works	Painting two coats (excluding priming coat) on new wood and wood based surface with enamel paint of approved brand and manufacture (Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac) to give an even shade including cleaning the surfaces of all dirt, dust and other foreign matter sand papering and stopping.	m2	61.95	17	1053.15
		(i).Surfaces over 100mm in width or girth.				
		a). General purpose (Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac).				
26	13.6.4/ page No.242 of SOR/Civil works	Applying priming coat over new wood based surfaces up to 100mm in girth/width after and including preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter , sand papering and knotting.	m	3.95	77.25	305.14
		(b). With ready mixed paint , wood primer (white).				
27	13.6.5/ page No.242 of SOR/Civil works	Applying priming coat over new wood based surfaces up to 100mm in girth/width after and including preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter , sand papering and knotting.				
		(i).Surfaces up to 100mm in width or girth.				
		a). General purpose (Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac).	m	7	77.25	540.75



28	13.7.2/ page No.245 of SOR/Civil works	Applying primary coat over new steel and other metal surface over 100m in width or girth after preparing the surface by thoroughly cleaning oil,grease, dirt and other foreign matter and scoured with wire brushes, fine steels, wood scrapers and sand paper.				
		a). With ready mixed "red-lead/ red oxide" primer.	m2	33.96	24.45	830.32
		@ Rs.				
29	13.7.4/ page No.245 of SOR/Civil works	Painting two coats (excluding priming coat) on new steel and other metal surface with enamel paint of approved brand and manufacture(Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac) to give an even shade including cleaning the surface of all dirt, dust and other foreign matter.				
		(i).Surfaces over 100mm in width or girth.				
		a). General purpose (Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac).	m2	61.95	78.83	4883.52
30	15.1.1/ page No.261 of SOR/Civil works	Supplying, fitting, fixing electrocoloured iron fittings of approved make, resonably smooth, free from sharp edges and corners, flaws and other defects and with counter sunk holes for wood screws including necessary screws etc. complete.				
		(a) Sliding door bolts				
		ii) 250mm x 16mm	Each	152.04	5	760.20
		(b)Tower bolts for door				
		ii)150mmx10mm	Each	92.12	5	460.60
		(c) Cast iron stove door handle				
		iii) 150mm	Each	41.24	5	206.20



31	3.1.2/ page No.142 of SOR/sanitary and water supply/vol II	Supplying fitting and fixing approved PVC Pipes of different sizes, with all necessary 'R' brand or similar approved P.V.C. fittings such as bend, tee, elbow, reducer, nipple, plug, long screw fitting, clamps etc. complete at all levels including below G.L. as directed and specified.				
		a) In exposed surfaces or in trenches.				
		c) 32 mm dia	m	184.51	5	922.55
		f) 15 mm dia	m	97.83	3	293.49
32	3.3.1/ page No.150 of SOR/sanitary and water supply/vol II	Supplying fitting and fixing stop-cock of approved brand of size as mentioned below and directed and specified (G.I. & C.P. pipes will be measured and paid separately)				
		l) Brass stop cock (heavy) of Sant make				
		i) 15 mm dia	Each	215.13	4	860.52
33	3.2.1/ page No.147 of SOR/sanitary and water supply/vol II	Supplying fitting and fixing C.P. bib cock 15mm dia of approved brand directed and specified. (G.I. & C.P pipes will be measured separately)				
		Essco make (Delux/Sumthing spl./Tropical)				
		(a) Bib cock short body				
		i) 15 mm dia	Each	727.88	3	2183.64
34	1.1.2/ page No.21 of SOR/sanitary and water supply/vol II	Providing fitting and fixing vitreous water closet squatting pan (Indian type W.C Orissa pattern) with all fittings and fixtures complete including cutting and making good to the walls and floors wherever required. (Flushing Cistern to be paid separately)				



	supply/vol II	Indian type W.C Orissa pattern of size 580 x 440 mm				
		i) Parryware make	Each	1	3146.98	3146.98
35	1.37.1/ page No77 of SOR/sanitary and water supply/vol II	Supplying, fitting and fixing PVC pipes of 6 Kg/cm2 (Supreme/Prince) or other ISI approved including joining ,fitting and fixing wiyh clamps etc.as necessary complete at all levels including below G.L as directed and specified.				
		a) In exposed surfaces or in trenches.				
		(ii) 110mm dia.	m	630.8	3	1892.40
36	Rate analysis	Twin pit toilet				
		a) 10 users (each unit contain two pit)	m	12093	1	12093.00
37	10.2/ page No.183 of SOR/Civil works	Providing, fitting and fixing M.S. grill of required pattern for windows/ clerestory windows/ openingwith M.S. flats at required spacing in frame all round, squre or round M.S. bars with round headed bolts and nuts or screws.				
		I . Plain grill				
		(c) Fixed to Brickwork/P.C.C/R.C.C.	kg	88.74	182	16150.68
			Sub Total			1171187.53
Internal electrification (3%)						35135.63
Total Cost (INR)						1206323.15

NB: Estimate prepared on the basis of APWD (Civil Works) and Sanitary and Water supply SOR for the year 2013-14

