

TENDER CALL NOTICE FOR CONSTRUCTION OF ADDITIONAL SPACE FOR ANODIZED PLANT

Sealed tenders are invited under two bid systems from reputed Construction Firms/ Civil contractor/Agency for the construction of additional space to the existing Anodized plant of Central Tool Room and Training Centre, Bhubaneswar. The tender bid documents with details of terms and conditions may be downloaded from CTTC, Website: www.cttc.gov.in. The sealed tender will be received by **Registered post / Speed post / Courier** and Tender bid document may also be dropped in the Tender Box kept at the Security Room of CTTC, Bhubaneswar. The authority will not be held responsible for any postal delay. Tender received after the schedule date and time will not be accepted. The last date of tender submission is **Dt.29.11.2025** up to 4.00 pm. The authority reserves the right to reject/cancel the tender in whole or in part without assigning any reason thereof.



CENTRAL TOOL ROOM & TRAINING CENTRE

(Ministry of Micro, Small & Medium Enterprises, Govt. of India)

B-36, Chandaka Industrial Area, Bhubaneswar-751024

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**NOTICE INVITING TENDER FOR CIVIL WORKS PERTAINING TO
CONSTRUCTION OF ADDITIONAL SPACE FOR ANODIZED PLANT
AT CENTRAL TOOL TOOM & TRAINING CENTRE,
BHUBANESWAR.**

(TWO BID SYSTEM)

Prepared by:

**CENTRAL TOOL ROOM CIVIL
DEPARTMENT, B-36, HANDAKA INDL.
AREA, BHUBANESWAR-751024.**

CENTRAL TOOL ROOM & TRAINING CENTER , BHUBANESWAR

Sealed Item rate tenders in two bid system (Technical Bid and Financial Bid) are invited by the General Manager, Central Tool Room & Training Centre, Bhubaneswar pertaining to the construction of Additional Space for existing Anodized plant at Central Tool Room & Training Centre, Bhubaneswar from reputed construction firms/Civil contractor/Agency who have executed similar civil works:, having completed minimum two similar works costing not less than 05 Lacs or two similar works costing not less than 7 Lacs or one similar work costing not less than 10 Lacs in the last three years. **Preference will be given to contractors who have executed similar civil works.**

Technical Criteria

Tenderers shall furnish proof of satisfactory completion of such work issued by the client along with their full company profile including list of T&P, technical staff, PAN No, GST No, minimum 'C' Class Civil Contractor license and 3 year ITR of company. Technical bid shall be opened first and after evaluation and finalization of technical bid, the list of eligible contractors shall be prepared and financial bid of the short-listed contractors shall be opened.

Tender documents can be downloaded from the CTTC, Bhubaneswar website www.cttc.gov.in.

Earnest Money Deposit	Nil
Last date of Submission of Tenders	29/11/2025 upto 2:00 pm
Date of Opening of Technical Bid	29/11/2025 at 4:30 pm
Date of Opening of Financial Bid	To be notified later

Issued:

Dated: _____

**General Manager,
Central Tool Room & Training Centre,
Bhubaneswar**

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APPENDIX

Defect Liability period	12 Months
Date Of Commencement	Immediate after handing over of the vacated site.
Date of Completion	2 months from the date of commencement
Penalty for delay	500/-per day up-to maximum 10% of the cost of the works.
Value of work	Rs. 6,00,000/- (Rupees Six Lakhs only)
Earnest Money Deposit	Nil
Performance Guarantee	Before issue of letter to start the work, Contractor shall furnish a performance guarantee in the form of a Bank Guarantee to the tune of Five percent (5%) of the cost of the accepted tender amount, which will be kept valid up to 12 months after completion of the works.
	No Mobilization advance will be issued

Contractor

Employer

CENTRAL TOOL ROOM & TRAINING CENTER, BHUBANESWAR

Dated:20/11/2025

NOTICE INVITING TENDER

- 1) Sealed Tenders are invited by the General Manager, Central Tool Room & Training Centre, Bhubaneswar for construction of additional space of existing anodized plant at CTTC, Bhubaneswar.
- 2) The Tender shall be submitted in the prescribed Tender form only.
- 3) The works are required to be completed within a period of Three months from the date of commencement.
- 4) The work shall be carried out in accordance with the phasing plan approved by the CTTC authorities to avoid disturbance to the normal working of the Centre. The site is expected to be handed over immediately. The contractor will prepare and submit a Phasing Plan with Bar Chart of all construction activities with targeted dates of completion for all the construction activities and get it approved from the CTTC authorities.
- 5) The Tender document can also be downloaded from CTTC, Bhubaneswar website **www.cttc.gov.in**.
- 6) Plans, specifications etc. pertaining to the works can be inspected in the office of General Manager, Central Tool Room & Training Centre, Bhubaneswar-751024, during office hours on any working day.
- 7) CONTRACTORS are advised to inspect and examine the site and the surroundings and satisfy themselves before submitting their Tender as to the nature of the ground and sub-soil (so far as practicable), the form and the nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain necessary information as to the risks, contingencies and other circumstances which may influence or affect their Tender. CONTRACTOR shall be deemed to have full knowledge of the site, whether he inspects it or not and no extra charge consequent to any misunderstanding or otherwise shall be allowed.
- 8) Submissions of the Tender by the CONTRACTOR implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors bearing on the execution of the works.
- 9) The CONTRACTOR should quote in figures as well as in words the rate(s) quoted. The amount for each item should be worked out and the requisite totals to be given. Special care shall be taken to write rates in figures as well as in words and the amount in figures only in such a way that interpolation will not be possible. The total amount shall be written both in figures and in words. In case of figures the words "Rs." should be written before the figure of rupees . Unless the rate is in whole rupees and followed by the word "only" it should invariably be upto two places of decimals.
- 10) All rates shall be quoted on the Tender form only.

- 11) On acceptance of the Tender, contractor shall furnish performance guarantee in the form of an F.D.R or bank guarantee of 5% of the accepted Tender cost in favor of Central Tool Room & Training Centre, Bhubaneswar before issue of letter to start the work.
- 12) 40% of the security money will be released along with the final bill and the balance after expiry of the successful performance of the Defects Liability Period of one year without any interest.
- 13) A CONTRACTOR shall submit the Tender which satisfies each and every condition laid down in this notice, failing which the Tender will be liable to be rejected.
- 14) Central Tool Room & Training Centre, Bhubaneswar does not bind itself to accept the lowest or any tender or to give any reasons for their decision.
- 15) Central Tool Room & Training Centre, Bhubaneswar reserves the right of accepting the whole or any part of the Tender and CONTRACTOR shall be bound to perform the same at his quoted rates.
- 16) GST , purchase tax, turnover tax or any other tax applicable in respect of this contract shall be payable by the Contractor and Central Tool Room & Training Centre, Bhubaneswar will not entertain any claim whatsoever in respect of the same. However, in respect of service tax, same shall be paid by the contractor to the Central Tool Room & Training Centre, Bhubaneswar on demand and it will be reimbursed to him by Central Tool Room & Training Centre, Bhubaneswar after satisfying that it has been actually and genuinely paid by the contractor
- 17) T.D.S. for GST etc. as applicable to Odisha state shall be deducted from the payments to be made to the Contractor and tax deduction certificate shall be issued by Central Tool Room & Training Centre, Bhubaneswar as per govt. guidelines.
- 18) This notice of Tender shall form part of the contract documents.
- 19) Complete Tender Document with each page should be signed and stamped by tenderer.

Contractor :

Owner:

Duly authorized to sign on behalf of M/s

For and on behalf of

Central Tool Room & Training Centre

Bhubaneswar

Signature:_____

Email:_____

Phone No:_____

Postal Address:_____

Authorized Signatory

To,

The General Manager
Central Tool Room & Training Centre,
Bhubaneswar.

Dear Sir,

I/We have read and examined the following documents relating to tender for construction of additional space of existing anodized plant at Central Tool Room & Training Centre, Bhubaneswar

- 1) Notice Inviting Tender Specifications
- 2) Drawings
- 3) General Conditions of Contract
- 4) Special Conditions
- 5) Tender Schedule

I/We hereby Tender for execution of the works referred to in the aforesaid, documents upon the terms and conditions contained or referred to therein and in accordance in all respects with the specifications, designs, drawings and other relevant details at the rates quoted by us in the Tender schedule. We have visited and examined the site of works and are fully aware of the site conditions, having a bearing on the contract.

In consideration of I/We being invited to the Tender, I/We agree to keep the Tender open for acceptance for 90 Days from the due date of submission thereof and not make any modifications in the terms and conditions which are not acceptable to General Manager Central Tool Room & Training Centre, Bhubaneswar.

Duly authorized to sign the
Tender On behalf of M/s

.....

Signature.....

Dated.....

Postal Address.....

SPECIAL CONDITIONS

1. The work shall be carried out as per specifications in the Tender schedule/latest C.P.W.D. Specifications, along with the correction slips; issued up to date of acceptance of Tender. In case of doubt the decision of the Architect/ Sr. Engineer shall be final and binding on the Contractor.
2. The Contractor shall carryout the work in stages as to cause minimum disturbance to the working of Central Tool Room & Training Centre, Bhubaneswar. He shall be responsible for any damage to the equipment or structures, injury to the personnel during the progress of the work and he shall be liable to pay compensation as may be decided by the Principal or his authorized representative in respect of such damages /injuries.
3. The serviceable materials out of the dismantled materials, if any, will be the property of the CTTC-Bhubaneswar and shall be properly stacked by the Contractor as directed by the Engineer-in-charge. Decision of General Manager or his authorized representative on the service-ability of the dismantled materials shall be final and binding on the Contractor.
4. All laborers employed by the Contractor shall be covered by the Workman's Compensation Act 1923. Any death, injury or mishap to the workmen of the Contractor will entirely be the Contractor's responsibility and the Institute shall not be liable to pay any damages for the same.
5. Contractor shall take adequate safety precautions to avoid any accident etc. at site. Shall erect proper barricades, sign boards, lights, etc. shall provide safety belts, safety shoes, head gears (helmet I.S.I standard) and shall be fully responsible for any criminal & civil liabilities. All safety arrangements are to be made by contractor at his own cost.
6. No laborers or material rate escalation claims will be entertained from the contractor as this work has to be completed within 3 months from the date of commencement of work at site.
7. Rates quoted by the contractor shall be inclusive of all items of work listed below and Any work, supplies or services which might have not been specifically mentioned in the specifications, schedule of items or drawings but are necessary for entire completion of the work shall be executed / provided/ rendered by the CONTRACTOR without any Extra cost and within the time schedule specified. Rates quoted shall be deemed to include such elements of labour and materials necessary to complete the items of work in all respects
8. Contractor shall submit only computerized Bills supported with computerized measurement sheets in A4 size hard copy prints and soft copy in Microsoft Excel Format. Manual Handwritten bills or measurement sheets will not be accepted.
9. Labour Camp will be arranged by the contractor outside the CTTC premises. Central Tool Room & Training Centre, Bhubaneswar does not have space for labour camps inside its premises.
10. General Manager CTTC, Bhubaneswar reserves the right to decrease the items of work, change the specifications of works or remove the entire/any section of work as may be deemed necessary to finish the works within the available budget.

GENERAL CONDITIONS OF CONTRACT

Documents to be submitted

Certificate: (To be attached with the Technical Bid for evaluation)

1. Income Tax Return (Last 3 Years)
2. GST Registration Certificate.
3. Permanent Account Number
4. The Micro, Small and Medium Enterprises Certificate (Not Compulsory)
5. Latest Valid “C” Class Trade License
6. P.F. & E,S,I Registration Certificate (Applicable only those company who have more than 20 employee, A declaration must be upload by bidder)
7. Partnership Deed, Trade License, Company Registration Certificate (If any)
8. Completion Certificates (Only Completion Certificate Accepted)
9. Tenderer must have office in Odisha.
10. Valid labour license under Contract labour (Regulation and Abolition) Act 1970.

Contract documents: shall consist of the following

- a) General and special conditions of contract
- b) Technical specifications
- c) Bills of quantities

TYPE OF CONTRACT

It is an item rate contract. The Contractor shall be paid for the actual quantity and quality of work done, as measured at site on the rates quoted by him, on the basis of a payment certificate issued by the Architect/ Engineer- Incharge.

SCHEDULE OF QUANTITIES

Schedules of quantities given in the contract bill are provisional and are meant to indicate the intent of the work and to provide a uniform basis for the contract. The Owner reserves the right to increase or decrease any of the quantities or to totally omit any of them.

CONTRACT DRAWINGS

1. In general, drawings shall indicate dimension, position & type of construction.
2. Specifications shall indicate the qualities, methods, and bill of quantities shall indicate the quantum and rates. Any work indicated in drawings and not mentioned in the specifications or vice versa shall be furnished as fully set forth in both.
3. Contractor shall not deviate from the drawings and Architects interpretation of the drawings shall be final and without appeal.

4. Errors/inconsistencies discovered in the drawings shall be instantly brought to the notice of the Architect for interpretation and correction, if any.
5. All drawings are the property of CTTC, Bhubaneswar and shall not be used on any other project.
6. Bar bending schedule, if requested by the Architect/Engineer in-charge shall be furnished to him prior to fabrication.

SCOPE OF WORK OF CONTRACTOR

The scope of work as per BOQ to be carried out by the CONTRACTOR shall also include the following:

- a) Setting out of the works in respect of position, level dimensions, alignments, etc. including establishment of bench marks, survey reference points, etc.
- b) Clearance of the site.
- c) Site leveling /terracing within the limits as shown in the drawings or as directed by the Engineer In charge.
- d) Disposal of debris, excavated materials, etc. as per the instructions of the Engineer In-Charge
- e) Testing of water, soil and concrete. And any other test as required by CPWD norms.
- f) Pumping out rain water/underground water from foundations, excavations and drainage of surface water from work site.
- g) All scaffolding, shorting, centering, shuttering works, etc.
- h) Running and maintenance of all construction plants and equipment, tools and tackles, etc.
- i) Protection and maintenance of trees, shrubs, green and other surfaces as instructed by the Engineer In charge.
- j) Any other work required in connection with the execution of the contract work.

The cost of all the above mentioned works shall be deemed to be included in the rates for various items of work although such inclusion may not be specifically spelt out.

Whether specified elsewhere in the Agreement or not, the CONTRACTOR shall provide all materials (including steel and cement unless specifically spelt out in the agreement otherwise), labors of every description, energy and water and all tools, tackles, plant and transport necessary for proper execution of the work to the entire satisfaction of the OWNER.

CONTRACTORS FIELD ORGANIZATION AND EQUIPMENT

1. The Contractor shall employ qualified and competent licensed engineers on the site.
2. Contractor shall provide and install all necessary hoists, ladders, scaffoldings, tools, tackles, plants and machinery necessary for execution of the works
3. Guardrails shall be provided by the Contractor for safety of labour and general public at the site of works.

TAXES

GST, purchase tax, turnover tax or any other tax applicable in respect of this contract shall be payable by the Contractor and Central Tool Room & Training Centre, Bhubaneswar will not entertain any claim whatsoever in respect of the same.

STATUTORY OBLIGATIONS

By way of illustration of various Acts/statutory compliances as stated above, the following Acts as amended from time to time shall be complied with by the CONTRACTOR:

- a) Employee's Provident Fund Act 1952
- b) Contract Labour Act (Regulations and Abolition 1970)
- c) Minimum Wages Act 1948
- d) Payment of Wages Act 1936
- e) Workmen Compensation Act 1923

MEASUREMENT OF WORK

Unless otherwise specified, measurement of work shall be carried from the works actually executed. The measurements for the purpose of preparing Bills will be taken jointly by the CONTRACTOR's representative and representative of General Manager. In measurement of work as stated above, the CONTRACTOR shall certify that the work has been carried out strictly as per the drawings, specifications and item of work in terms of the agreement.

In the event of any dispute with regard to the measurement of the work executed, the decision of General Manager. CTTC- Bhubaneswar shall be final and binding on the CONTRACTOR

REJECTION

If the Contract work, any materials or any portion thereof, at any time, is found to be defective or fails to fulfill the requirements of the agreement, the General Manager shall give the CONTRACTOR notice in writing setting-forth particulars of such defects or failure and the CONTRACTOR shall forthwith make good the defects or replace or alter the same to make it comply with the requirements of the agreement.

The CONTRACTOR shall not be entitled to any extension of time or extra cost for rejection as per above

CLAIM FOR EXTRA

In the case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the contractor will submit rates, supported by rate analysis, for the work and the General Manager shall within one month of the receipt of the rates supported by rate analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

DEDUCTION FOR UNCORRECTED WORK

If the General Manager deems it in-expedient to correct work damaged or not done in accordance with the contract, an equitable deduction from the contract price shall be made thereof.

FLUCTUATIONS

The Contractor shall not claim any extras for fluctuation of price and the contract price shall not be subjected to any rise or fall in prices.

INSPECTION AND TEST

- i. The CONTRACTOR shall ensure inspection and test of all materials and work at his cost through his ENGINEER and other technical staff either at site or through any approved laboratory.
- ii. The CONTRACTOR shall ensure proper supervision and inspection during the progress of work at site.
- iii. All materials and work, whether at the site or in the CONTRACTOR's premises shall be subject to inspection and test by the representative of General Manager. The CONTRACTOR shall provide all facilities free of cost to the representative including all labor, materials, tools, tackles, instruments, appliances, etc. to carry out inspection and/or test.
- iv. The CONTRACTOR shall not be entitled to any claim for extra time or cost due to any delay in carrying out inspection and testing or re-inspection and re-testing if so decided by the General Manager.
- v. The CONTRACTOR shall take adequate steps to rectify the defects or to replace such materials and work which have failed during inspection /testing

DAMAGES FOR NON-COMPLETION OR DELAY

If the Contractor fails to complete the works by the date specified or within any extended time granted to him, the Contractor shall allow the General Manager to deduct a sum calculated at the agreed liquidated damages, from the money due to him for the period the work remained incomplete, subject to a maximum amount of 10% of the Contract Value.

MAINTENANCE GUARANTEE / DEFECTS LIABILITY PERIOD

Maintenance Guarantee period will be **12 months** from the actual date of completion and handing over to the OWNER.

- a) The CONTRACTOR guarantees that within the maintenance guarantee period, the contract work shall not show any signs of defects, cracks, settlements, disfigurations, shrinkage, leakage, dampness or any other defects.
- b) The CONTRACTOR shall maintain and satisfactorily execute, at his own cost, all such works of repair, amendment, re-construction, rectification, replacement and any other

work to make good the faulty work as stated in Article (a) during the maintenance guarantee period.

- c) At the end of the maintenance guarantee period, the CONTRACTOR, along with the General Manager or representative of GM, CTTC-Bhubaneswar, shall carry out final inspection of the contract work to prove that no defects had appeared in the contract work or that all defects which appeared in the contract work have been rectified to the entire satisfaction of the General Manager. If during the final inspection it is found that the defects still remain in the contract work, the period of maintenance guarantee shall be extended at the discretion of the General manager and the CONTRACTOR shall be liable to make good the defects and be responsible for the maintenance of the work till the defects have been fully rectified.

INJURY TO PERSONS

The Contractor shall indemnify the General Manager, CTTC- Bhubaneswar against any liability, loss, claim or proceedings whatsoever arising under any statutory or common law in respect of personal injury to or the death of any person, whomsoever arising out of or in the course of or caused by carrying out the work.

LABOUR

Contractor shall not employ child labour under 18 years of age and if female workers are employed he should make provision for safeguarding the small children to keep them clear of the site. All labour shall wear safety helmets and shoes to protect them from injury.

SAFETY

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per C.P.W.D. Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith.

PERFORMANCE GUARANTEE

In addition to the Security Deposit the Contractor shall furnish a performance guarantee in the form of a Bank Guarantee to the tune of Five percent (5%) of the cost of the tender amount, which should be valid for 60 days beyond the defect liability period.

ARBITRATION

In case of dispute, the difference of opinion on any matter pertaining to the works, the decision of the General Manager shall be final and binding on the contractors and the owners. If either party is not satisfied with the decision of the General Manager, within 28 days a notice to this effect will be sent to the General Manager in writing. The matter can then be referred to sole arbitrator or a panel of two arbitrators who should be fellows of Indian Institute of Architect/ IDCO, Bhubaneswar for a final award. Decision of General Manager of CTTC, Bhubaneswar shall be final and binding in this regard.

TERMINATION OF CONTRACT

If the CONTRACTOR violates the Agreement or shall neglect to execute the work with due diligence or expedition or shall refuse or neglect to comply with any reasonable directions, instructions or orders given to him in writing by the general Manager in connection with the work or shall contrivance or breach any provisions of the Agreement, the General Manager may give notice in writing to the CONTRACTOR to make good the failure, neglect or contravention complained of or cure that breach within a period of 30 (thirty) days of receiving such notice and in default of the compliance with the said notice, the General Manager without prejudice to his rights as below may rescind or terminate the Agreement stating therein the effective date of termination, holding the CONTRACTOR liable for the damages that the OWNER may sustain in this behalf. Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Owner shall have the option of terminating the contract without compensation to the CONTRACTOR.

CIVIL WORKS

EARTH WORK & EXCAVATION

The rates quoted shall include the following:

- a) Excavation either straight, inclined or curved in trenches, footings, rafts, basements etc., including raking out, cutting and dressing sides and bottom to true dimension and depositing excavated stuff beyond three meters clear of the edge of the trench, filling back as required and disposal of surplus earth anywhere within the plot as directed by engineer-in charge/ architect.
- b) Clearing all shrubs, roots, vegetation and trees from alignment of the Shade.
- c) Bailing out, pumping out or otherwise removing all water which may accumulate in the excavation from any or all causes whatsoever
- d) All labour and material required for fencing and protection against risk of accident to open excavations etc., with necessary shoring planking and strutting and for providing gangways, with handrails across open trenches etc., where necessary during the progress of the work.
- e) Filling back available excavated earth in plinths, sides of foundations, sides of basements, under floors and for ground formation etc., as and where required in 150 mm thick layers, breaking goods, ramming, watering, consolidation, the same with 10 M.T. Rollers or hand tampers where rollers are not accessible, and dressing the filled up areas.
- f) Battering, benching, forming steps in the sides of foundations and mass excavations where required and removal of the slips and falls. This item is not payable separately.
- g) Water table has to be maintained at least 1.0 Mt., below lean concrete level of raft by providing adequate de-watering arrangements. This water table has to be maintained till

Basement floor slab is cast including the retaining wall. This item is not payable separately.

- h) Water table shall also be maintained till such time the waterproofing of retaining wall and raft is complete. This item is not payable separately.

PLAIN AND REINFORCED CEMENT CONCRETE

The rates quoted shall include the following:

- a) Making all drips, grooves, moulds, curved surfaces and chamfered edges etc. in concrete and/or plaster work as directed.
- b) Forming all expansion and/or construction joints as per standard specification and/or as directed.
- c) All projections, toothings, ornamental work etc. and finishing to shape as directed.
- d) Embedding all electric pipes, fan hook boxes, structure suspensions and inserts of any description etc. in R.C.C slab, beam, walls etc., as directed.
- e) Providing slump tests apparatus at site and test for checking the workability of concrete.
- f) Working up or hacking of concrete surfaces for providing keys for further concrete work including applying thick cement slurry or mortar as directed
- g) Providing 12 mm thick cement plaster 1:6 (1 cement: 6 fine sand) and a coat of lime wash on all brick wall surfaces serving as bearing for RCC work.
- h) Exposed architectural or ordinary centering, shuttering and formwork, strutting, boxing, propping etc. except wherever specified to exclude in the item. Shuttering to be made water tight with plywood and timber if necessary.
- i) Use of shuttering oil as specified
- j) Use of cement slurry over shuttering before commencing concreting
- k) Machine mixing of all concretes and hoisting to all lifts, carrying to all leads, consolidating by rodding, vibrating, tamping and curing.
- l) Forming cutouts, openings and concreting at a later stage as required
- m) Providing sleeves for pipes etc. before concreting
- n) Working in narrow widths, small quantities and curved alignments etc.
- o) Removing rust, mild scales, oil, grease, paint etc. from steel reinforcement.
- p) Providing 16 gauge annealed binding wire and binding the reinforcement with the same without any extra cost on the account for labour or material
- q) Providing cover to steel with cement concrete briquette spacers at no extra cost.
- r) Payment of labour for laying steel as per Indian standard section weights actually placed in position as per design and drawing or as directed

MASONRY WORK

The rates quoted shall include the following:

- a) Work in English bond or any other design as directed by the authorized representative of GM.
- b) Work in square round and rectangular pillars, flower troughs, under floor drains, making curved and tapered surfaces steps etc.
- c) Forming openings, chases, grooves etc.
- d) Embedding/ cutting chases for conduits, boxes other fixture of any descriptions, holdfasts of doors,
- e) Fixing Windows glazing etc.,
- f) Making all drip courses, projected courses of any description, offsets, setbacks, corbels, architrave's or any other feature of description.
- g) Raking out joints for plastering or pointing in plinth super structure or finishing joints flush in foundation as directed
- h) Bonding with RCC work.
- i) Work in narrow widths, small quantities etc. supplying Moulds, taking briquettes, getting tested, any fees, costs etc., relating to the same.
- j) Machine mixing of mortars
- k) Curing of brick work
- l) Preparing bricks for testing (efflorescence, water absorption, crushing strength, shapes, sizes etc.) in the field laboratory and or an approved laboratory, and any fees, costs etc. relating to them.

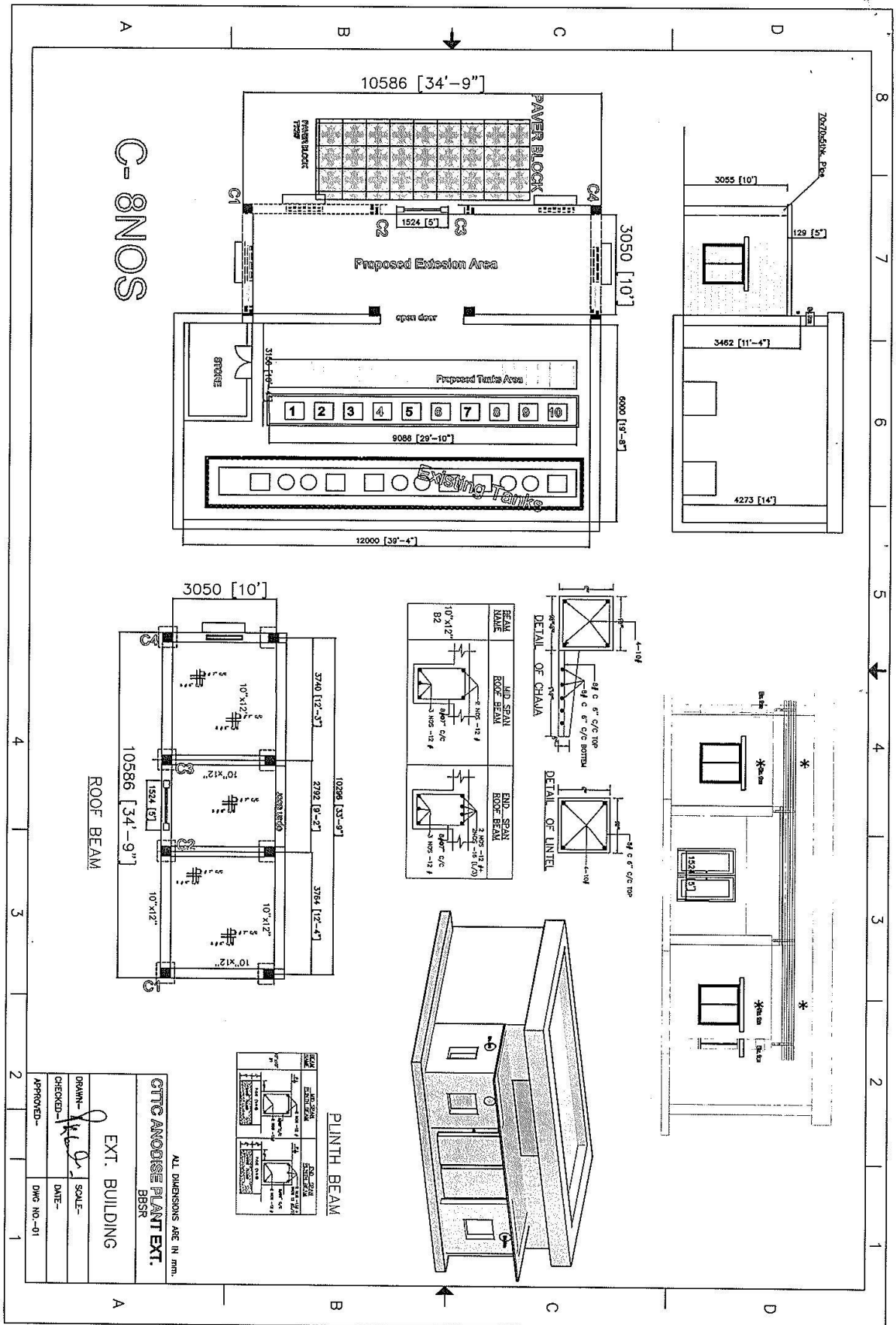
BOQ
CTTC ANODIZED PLANT

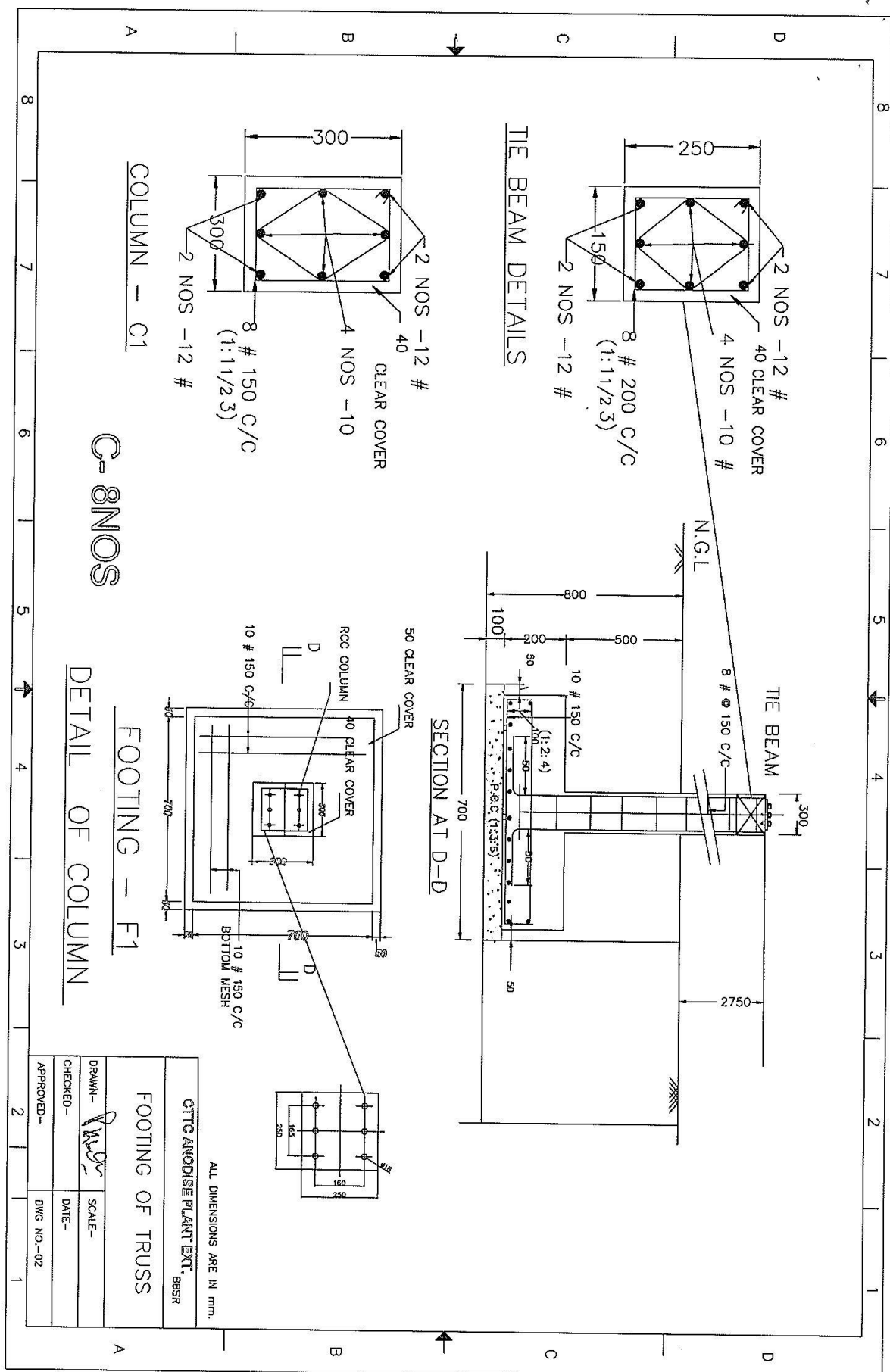
<u>S. No.</u>	<u>Description of Items</u>	<u>Qty</u>	<u>Unit</u>	<u>Rate</u>	<u>Amount</u>
1	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. (STORE ROOM PARTITION WALL)				
	In cement mortar.	2.265	cum		
2	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge. (EXTENDED CHAJJA PORTION)	0.424	cum		
3	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc complete and stacking within 50 metres lead : (DOOR)				
	Of area beyond 3 sq. metres	each			
4	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	All kinds of soil.	8.276	cum		
5	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	5.2	cum		
6	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	10.76	cum		
7	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : (PCC)				
	1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	0.511	cum		
8	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering ,shuttering ,finishing and reinforcement - All work up to plinth level :				
	1:2:4 (1 cement : 2 coarse sand including manufactured sand derived from Recycled Concrete Aggregate (RCA) upto 20% : 4 graded stone aggregate 20 mm nominal size of Recycled Concrete Aggregate (RCA) upto 20%). (FOOTING)	0.776	cum		

9	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :				
	1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand derived from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size Recycled Concrete Aggregate (RCA) upto 20% (COLUMNS)	3.528	cum		
10	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).(PLINTH BEAM / LINTEL BEAM / ROOF BEAM)	4.013	cum		
11	CEMENT PLASTER (IN FINE SAND 12 mm cement plaster of mix :				
	1:4 (1 cement: 4 fine sand) (BOTH INTERIOR & EXTERIOR)	120.77	sqm		
12	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.				
	Two or more coats on new work	120.77	sqm		
13	Finishing walls with water proofing cement paint of required shade :				
	New work (Two or more coats applied @ 3.84 kg/10 sqm)	158	sqm		
14	Reinforced cement concrete work in arches, archribs, domes, vaults, shells, folded plate and roofs having slope more than 15° up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources). (ROOF SLAB)	6	cum		
15	CEMENT PLASTER (IN FINE SAND 15 mm cement plaster of mix :				
	1:4 (1 cement: 4 fine sand) (ROOF SLB)	36.789	sqm		
16	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
	Fixed to steel windows by welding (4 WINDOWS)	200	kg		
17	Surface dressing of the ground including removing vegetation and in equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift up to 1.5 m. 2.28.1 All kinds of soil	20	sqm		

18	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge (PAVER BLOCK)				
	60mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.	20	sqm		
19	Cement concrete flooring 1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
	63.5 mm thick with 20 mm nominal size stone aggregate	2.477	cum		
20	Sand Filling	24.78	cum		
21	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : (FLOORING)	32.52	sqm		
22	Centering and shuttering including stutting , propping etc and removal of form suspended floor , roofs , landings , balconies and access platform .				
	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
23	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture (DOORS & WINDOWS)				

SITE DRAWING





CTTC ANODISE PLANT EXT. BSR	
FOOTING OF TRUSS	
DRAWN- <i>[Signature]</i>	SCALE-
CHECKED-	DATE-
APPROVED-	DWG NO.-02