

Name of work: Improvement works to existing Chetpet Sewage Pumping Station – Civil Works

Contract No: CNT/SEW/GOTN/CMCDM/2305D/2013-14

CHECK LIST FOR THE GUIDANCE OF THE CONTRACTOR

I	The Tender schedule for the above work consists of 35 pages as detailed below:	
	(i)	Checklist for the guidance of the Contractors
	(ii)	Notice Inviting Tender
	(iii)	Special Instructions to bidders for e-submission
	(iv)	Letter of Tender 2 pages
	(v)	Price Schedule
	(vi)	Work schedule
	(vii)	Milestone
	(viii)	Undertaking for adhering additional conditions to be followed regarding ban on entry of workers into the Sewerage System.
	(ix)	Drawings
II	1.	The total number of items in the work schedule – 116 Nos. and the departmental value put to tender is Rs.68,61,312.00
	2.	Tenderers are requested to sign all pages in the tender schedule and must sign letter of tender. Tenders which do not have the Signature of the Tenderer in letter of tender will be rejected. Tenderers are requested to furnish notarized copy of certificates, if any, along with this tender.
	3.	Technical specification of the equipment offered by the Bidders if any, and any other information related to the bid may be enclosed along with Tender Schedule after duly Signing in all the pages.
	4.	Bidders are requested to verify the number of pages in the work schedule and number of items in the work schedule. Any clarification and further information required may be obtained from the Office of the Contracts and Monitoring wing on any working day.
	5.	<p>The present tender document contains priced work schedule and price schedule. The tenderers are requested to quote the percentage variation over the departmental value in words and figures in any one of the forms in price schedule. If there is any discrepancy between words and figures, the lower among the words and figures will be taken into account.</p> <p>All entries should be made legibly in ink. Writing the percentage variation first in pencil and later over writing in ink should be avoided and also over writing the corrections may be avoided.</p> <p>Corrections if any should be made by neatly scoring out the unwanted matter and rewriting legibly. Every such correction should be attested by the full signature of the tenderer.</p>

Signature of the tenderer with seal

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6.	<p><u>Eligibility :</u></p> <ol style="list-style-type: none">Contractors registered in CMWSSB having its current validity in Class – IIA and above i.e. those who are eligible to take up civil and pipe laying works costing more than Rs.30.00 lakhs.Contractors who have executed similar works of the same or higher magnitude and registered in other departments and undertakings of the Central or State Government in the corresponding class are also eligible to tender for this work. <p><u>Note:</u></p> <p>I. <u>Contractors registered in Board:</u> If the performance of the tenderer in the works awarded earlier is found to be poor subsequent to opening of this tender or during evaluation of this tender, his/their tenders will not be considered for evaluation and will be treated as non-responsive.</p> <p>II. <u>Contractors registered in State or Central Government Departments:</u></p> <ol style="list-style-type: none">The tenderer who comes under the Category-2 i.e. not Registered in the Board and who intend to participate in the tender, subject to their eligibility as above are requested<ol style="list-style-type: none">To read the Standard tender document from the Office of the Contracts wing. The contents of Standard Tender document is binding along with the conditions in this tender schedule on the tenderer.To furnish Proof for their registration in other State or Central Government departments in the appropriate class and its current validity and should also furnish performance certificate from an officer not less than the rank of Executive Engineer for having executed works of similar nature of the same or higher magnitude.The tender of tenderers who does not fulfill the above will be treated as non-responsive. The tender received from ineligible contractors will be treated as non-responsive.However the successful tenderer will have to get himself registered in the Board in the appropriate class.If at any circumstances, prior to finalization of the tender, if it is brought to the knowledge of the Board, that the contractor is banned / black listed their tender will be treated as non-responsive.
7.	<p>EMD in the form of Demand Draft or Banker's Cheque or Pay Order drawn from Nationalised / Scheduled Bank / TNSC Bank in favour of CMWSS Board. Cash and Cheque will not be accepted towards Earnest Money Deposit.</p>
8.	<p><u>SECURITY DEPOSIT</u> Security deposit will be collected from the successful Tenderer in the following form and manner within 14 days from the date of receipt of work order: Form in which S.D. collected.</p> <p>a). Certified cheque /Bank Draft in favour of Managing Director, CMWSS Board payable at Chennai.</p>
b)	<p>The value of S.D will be as follows:</p>

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i)	for tenders with any plus percentage and upto (-)5% over departmental value – 2% of the contract value.
ii)	for tenders between (-)5% to (-)15% over departmental value --- 4% of the contract value.
iii)	for tenders, above (-)15% over departmental value --- 5% of the contract value.
9.	Milestone details for completion of works and details of penalty for the non-completion of work are furnished in the Milestone at Page No.29 . Tenderers are requested to take note of the details. The above details will be incorporated in the contract documents while executing agreement.
10.	All duties, taxes and other levies payable by the contractor under the contract or for any other cause shall be included in the percentage quoted as submitted by the bidder. Any statutory variations in duties/taxes, which take effect from a date subsequent to the due date for receipt of tender, shall be to CMWSS Board's Account.
11.	<u>Tender Validity</u> Tenders shall remain valid for a period of not less than ninety days (90 days) after the deadline date for bid submission. A tender valid for a shorter period shall be rejected by the Employer as non-responsive.
12.	Tenders with conditions are liable for rejection.
13.	The defects liability period in respect of original civil works and pipe laying works is 5 years and thirty six months in respect of all Electrical, Mechanical and allied works.
14.	The rates and prices quoted by the tenderer shall be fixed during the performance of the contract except for cement and steel components involved in this work which are subject to adjustment in accordance with the provisions of clause 15 as detailed below.
15.	<p><u>Price Adjustment:</u></p> <p>Contract price shall be adjusted for increase or decrease in rates and price of cement and steel in accordance with the following principles and procedures and as per formula given in SI.No.16:</p> <p>(a) The price adjustment shall apply for the work done from the start date and upto end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor.</p> <p>(b) The price adjustment shall be determined during each quarter from the formula as given in SI. No. 16.</p> <p>(c) Following expressions and meanings are assigned to the work done during each quarter:</p> <p>R = Total value of work done during the quarter based on the Contract value. It would also include the amount of secured advance for materials paid for (if any) during the quarter, less the amount of the secured advance recovered, during the quarter. It will exclude value for works executed under variations for which price adjustment will be worked separately based on the terms mutually agreed.</p> <p>It would also include the amount of secured advance for materials paid for (if any) during the quarter, less the amount of the secured advance recovered, during the quarter. It will exclude value for works executed under variations for</p>

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		<p>which price adjustment will be worked separately based on the terms mutually agreed.</p> <p>(d) Price adjustment will apply only when the fluctuation of rates exceeds by 3% compared to the estimate rates (based on RBI Index Price). Should be applied on each items of material individually / separately. Price adjustment shall be made for both increase and decrease in the cost of materials.</p> <p>(e) The percentage of components of inputs to be utilized in the work in each quarter between two milestones are calculated based on the actual quantity executed in the site. Due to delays not attributed to the Contractor, The Contractor may be allowed to execute the work in the subsequent quarter without imposing penalty. Also if the index in the quarter in which the work has been carried out increases / decreases, price adjustment clause governs the same</p> <p>(f) Price adjustment will be applicable for only those quantities which would be utilized to achieve the work as per milestone schedule as given in Page No.29. However, if a certain quantity of work to be completed in a quarter is completed in the succeeding quarter, the price adjustment can be claimed on that quantity at the rates applicable for the intended quarter only. If there is any decrease in the price index in the prevailing(subsequent) quarter, while the carried forward work is executed and measurements therefore are recorded, the payment for such carried forward works will be regulated as per the applicable price index during the prevailing/current quarter, (i.e.) at reduced price and not at the enhanced price index which might have prevailed during the relevant previous/earlier quarter in which the works should have been completed as per the prescribed milestone.</p>
16.		<p>The formula(e) for adjustment of prices are:</p> <p>R = Value of work as defined in SI.No.15 above and the percentage of components of inputs will be calculated based on the actual quantity during execution.</p> <p><u>Adjustment for cement component</u></p> <p>(i) Price adjustment for increase or decrease in the cost of Grey cement procured by the contractor shall be paid in accordance with the following formula.</p> $V_c = 0.85 \times P_c / 100 \times R \times (C_i - C_o) / C_o$ <p>V_c = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for Grey cement</p> <p>C_o = The all India average wholesale price index for Grey cement for the quarter in which bids are opened as published by the Ministry of Commerce & Industry, Government of India, New Delhi</p> <p>C_i = The all India average wholesale price index for Grey cement for the quarter under consideration as published by Ministry of Commerce & Industry, Government of India, New Delhi</p> <p>P_c = Percentage of Grey cement component of the work, as per actual consumption of cement in the reference quarter as per milestone.</p>

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	<p><u>Adjustment for steel component</u></p> <p>(ii) Price adjustment for increase or decrease in the cost of steel procured by the Contractor shall be paid in accordance with the following formula: $V_s = 0.85 \times P_s / 100 \times R \times (S_i - S_o) / S_o$ V_s = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for steel S_o = The all India average wholesale price index for steel (Rebars) for the quarter in which bids are opened as published by the Ministry of Commerce & Industry, Government of India, New Delhi S_i = The all India average wholesale price index for steel (Rebars) for the quarter under consideration as published by Ministry of Commerce & Industry, New Delhi P_s = Percentage of steel component of the work, as per actual consumption of steel in the reference quarter as per milestone.</p> <p>Note: For the application of this clause, index of Rebars has been chosen to represent steel group.</p>
17.	<p><u>Bonus for advance completion of work:</u></p> <p>Any work completed in advance by not less than 10% of the agreement period can be considered and bonus of 1% on the value of actual quantum of works executed at tendered rate may be paid.</p>

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**CHENNAI METROPOLITAN WATER SUPPLY AND SEWERAGE BOARD
NO.1, PUMPING STATION ROAD, CHINTADRI PET, CHENNAI-600 002.
NOTICE INVITING TENDER**

LOCAL COMPETITIVE BIDDING

Sealed Bids are invited from the eligible bidders for the following works. Bidding will be conducted through Local Competitive Bidding procedures of CMWSSB under single cover system conforming to the Tamil Nadu Transparency in Tenders Act, 1998 and Rules 2000.

Sl. No	Name of Work and Contract No.	Due Date and time of tender submission	Approximate value of Tender Rs/ Lakh	E.M.D. in Rs.	Tender schedule available From - To	Eligibility	Contract Period
1	Improvement works to existing Chetpet Sewage Pumping Station – Civil Works CNT/SEW/GOTN/CMCDM/2305D/2013-14	26.06.2013 on or before 3.00 PM	68.56	44,300/-	06.06.2013 To 25.06.2013	Class II A and above	9 months
2	Due Date and time for opening of tenders	26.06.2013 after 3.00 P.M. If the due date happens to be holiday, tenders will be received and opened on the next working day.					
3	Availability of Tender Schedule In person	Information & Facilitation Officer, CMWSS Board, No. 1 Pumping Station Road, Chintadripet, Chennai-600002, (Telephone: 044-28451300, Extn. 227)					
4	Through Website	www.chennaietrowater.tn.nic.in & www.tenders.tn.gov.in The downloaded document should be properly bounded and submitted for tendering along with necessary enclosures.					
5	Cost of Tender Schedule	Free of cost The document will also be sent by surface mail on an advance payment of Rs.500/- per set.					
6	Address for information and clarifications and for receipt of tenders	Office of Superintending Engineer, Contracts & Monitoring, 4 th Floor, CMWSS Board, Chennai – 600 002 Phone No. 044-2845 1300 Extn. 253 FAX : 044-2845 4336 Email: secm@chennaietrowater.com					
7	e-bid submission & portal	Permitted through portal www.tntenders.gov.in					

SUPERINTENDING ENGINEER
(CONTRACTS & MONITORING)

Signature of the tenderer with seal

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SPECIAL INSTRUCTIONS TO BIDDERS FOR E-BID SUBMISSION

The above tender notice is also available on the web site www.tntenders.gov.in. This site permits downloading of the tender documents at free of cost. The intending tenderers may visit this site and download the tender document at free of cost and use it for tender submission.

The tenderer is also permitted to upload the tender on the web site using the e-token.

The following list of items is to be uploaded by the tenderer (or) bidder within the date & time of submission of bids.

1. Earnest Money Deposit

Scanned copy of the Demand Draft/ Pay Order / Banker's Cheque in the acceptable manner as mentioned in the tender schedule.

2. **Letter of Tender:** Should be signed & the scanned copy of the Letter of Tender, along with the relevant documents in PDF format as one file.

The originals for the above (Item No. 1&2) should be posted/couriered/given in person to the Tender Inviting Authority, within the bid submission date & time for the tender.

3. **Schedule of Works / Bill of Quantities:** The Bidder has to fill only the rates/ percentage in figures in the columns provided in Bill of Quantities in excel form and uploaded as boq.xls file. The same file may also be converted into pdf and uploaded.

The Digital Signature Certificate/ e- token may be obtained from one of the authorised Digital Certifying Authorities such as SIFY / SCS (TCS) / nCode, at the risk and cost of the bidder.

During e-submission of tenders, the following special cares are to be taken:

- 1) Bidder should do the registration in the tender site using the option available. Then the Digital Signature registration has to be done with the e-token, after logging into the site.
- 2) Bidder then login to the site thro' the secured log in by giving the password of the e-token & then the user id/ password chosen during registration.
- 3) The e-token that is registered should be used by the bidder and should not be misused by others.
- 4) After getting the tender schedules, the Bidder should go thro' them carefully and then submit the documents as asked, otherwise, the bid will be rejected.
- 5) If there are any clarifications, this may be obtained online thro' the tender site, or thro' the contact details. Bidder should take into account of the corrigendum published before submitting the bids online.

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- 6) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender schedule and they should be in PDF format. If there are more than one document, they can be clubbed together.
- 7) Bidder should get ready the EMD as specified in the tender. The original should be posted/couriered/given in person to the Tender Inviting Authority, within the bid submission date & time for the tender.
- 8) The bidder read the terms & conditions and accepts the same to proceed further to submit the bids.
- 9) The bidder has to select the payment option as online/offline to pay the fee & EMD as applicable.
- 10) Bidders having current account with ICICI may make the pay the EMD online thro' the ICICI payment gateway during the e-submission of the tender.
- 11) In the case of offline payment, the details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the bid submitted will not be acceptable.
- 12) The rates offered details have to be entered separately against the specified place in the downloaded spread sheet file (xls) and should be submitted as boq.xls file during the e-bid submission.
- 13) The bidders are requested to enter the individual rates offered in the boq.xls file considering all aspects inclusive of any rebates, etc. No separate rebate or discount should be entered at the end of BOQ. The uploaded boq.xls will not be available for subsequent modification.
- 14) The bidders can submit the bids only once and thereafter, it is not possible to make changes in the bids submitted.
- 15) The tendering system will give a successful bid updation message after uploading all the bid documents submitted & then a bid summary will be shown with the bid number & the date & time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed with the e-token of the bidder and then submitted
- 16) The bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid.
- 17) The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening date.
- 18) For any clarifications with the TIA, the bid number can be used as a reference.
- 19) Bidder should log into the site well in advance for bid submission so that he submits the bid in time i.e. on or before the bid submission time. If there is any delay, due to other issues, bidder only is responsible.

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- 20) Each document to be uploaded thro' online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced thro' zip and the same can be uploaded. However if the file size is less than 1 MB the transaction uploading time will be very fast.
- 21) The time settings fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time during bid submission.
- 22) All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not viewable by unauthorized persons during bid submission & not be viewable by any one until the time of bid opening. Overall, the submitted tender documents become readable only after the tender opening by the authorized individual.

For any other queries, the bidders are asked to contact thro'

Mail: secm@chennaietrowater.com
Phone no.: 044-28451300-320, Extn. 209 or 253 well in advance

This Department will not be held responsible for any sort of delay or the difficulty faced in the e-bid submission of tenders online by the bidders.

SUPERINTENDING ENGINEER(C&M)

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LETTER OF TENDER

To be delivered to the Superintending Engineer, C&M Chennai Metropolitan Water Supply and Sewerage Board at or before 3.00 P.M. on **26.06.2013**.

To
The Managing Director
Chennai Metropolitan Water Supply & Sewerage Board
Chennai- 600 002

Sir,

I/We the undersigned do hereby tender and undertake to perform, provide and execute all the works, materials matters and things described or mentioned in the Schedule (Bill of quantities) hereto annexed and the specifications thereto and drawings therein referred to (which have been produced to and carefully examined by me/us) in strict accordance with and under and subject to the terms, provisions and conditions set forth or mentioned in the said Schedule (Bills of Quantities) specifications and the drawings therein referred to, at the rates given and as stated in the Bills of quantities.

I/We herewith enclose D.D/B.C./P.O No..... datedfor having remitted Rs..... into the Board's Cash Section as a guarantee for the due fulfillment of my/our tender, and if successful, undertake and agree to forward to the Board within fourteen days after the notification of the acceptance by the Board of this tender has been received by me/us, the sum as demanded in the Form and manner required as security for the due fulfillment of my/our contract.

I/we undertake and agree that I/We will not withdraw this tender during the period that will be required for intimation, acceptance or non/acceptance as stipulated in clause 15 on the Notice Inviting Tender or during such extended period as agreed to by me/us, such period to date from the last date by which tenders are due to be submitted to the Board and if I/We do so withdraw, I/We shall forfeit the Earnest Money Deposit to the Board.

I/We further undertake to produce the Income-tax Clearance Certificate and the certificate and the Sales Tax Verification Certificate from the Commercial Tax Department of this State and agree to execute at my/our cost the agreement attached and to sign the plans therein referred to within 14 days after the notification of the acceptance of my/our tender has been received by me/us. In the event of my/our failing to make the Security Deposit or to execute the agreement in the said manner and sign the plans within the time specified for the purpose, the sum of **Rs.44,300/-** accompanying this tender shall be forfeited to the Board and this concluded contract shall in such case be considered, as having been cancelled or terminated and you may thereupon at such time or times, in such manner and on such terms as you may think fit, arrange either departmentally or by any other person or persons to carry out the works and provide, execute and do all works, materials, matters and things described or mentioned herein and I/We agree to be liable irrespective of the forfeiture aforesaid for all damages, losses, costs, charges and expenses arising from or by reason of such failure and arrangements.

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I/We undertake to assume full responsibility for the stability and soundness of the Works/structures that will be executed by me/us as per this contract.

I/We also undertake to do all extra or varied works which may be ordered as part of this contract upon the terms provided for in the conditions and specifications. The tenders shall be valid for a period of 90 days from the last date fixed for receipt of tenders. In case my/our tender for the work of **“Improvement works to existing Chetpet Sewage Pumping Station – Civil Works”** is accepted, I/We agree and guarantee to commence the said works within a period of seven days from the date of receipt of work order and complete the work as stipulated for a period of **9 months** from the date of commencement of the work by me/us. I/We also agree that time is the essence of contract. I/We have actually inspected the site of works and have tendered for the works after such inspection.

UNDERTAKING

I/We have gone through the copy of standard tender document received from the Office of the Contracts and Monitoring wing and abide by the same for this contract also.

As witness my/our hand this.....day of.....2013.

**Signature of the tenderer
with seal** -----

Name and
address:

Signature of the tenderer with seal

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PRICE SCHEDULE

1. This tender has been called for in the percentage tender system. In the work schedule, detailed items of works involved in the work with specifications along with the quantity, the departmental rates and amount for individual items are furnished. The total value of the work is also furnished.
2. The tenderers are requested to quote the percentage variation over the total departmental value, which will be applicable for all items of works, individually and uniformly at which they are willing to execute the works, in the following format. In case any discrepancy / correction are found between figures and words furnished for the percentage, then the LOWER percentage among them ALONE will be taken as correct.

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FILL UP ANYONE OF THE FORM - A, B or C

STRIKE OUT THE IRRELEVANT FORMS WHICH ARE NOT APPLICABLE

FORM - A

I / We agree to execute the work of “**Improvement works to existing Chetpet Sewage Pumping Station – Civil Works**” with a tender percentage of (-) Minus-----
------(in words) -----(in figures) over departmental value of **Rs.68,61,312.00** as furnished in the work schedule which is also applicable for all items of works, individually and uniformly over the departmental rates, furnished in the work schedule.

FORM - B

I / We agree to execute the work of “**Improvement works to existing Chetpet Sewage Pumping Station – Civil Works**” at the department value of **Rs.68,61,312.00** for all items of work furnished in the schedule.

FORM - C

I / We agree to execute the work of “**Improvement works to existing Chetpet Sewage Pumping Station – Civil Works**” with a tender percentage of (+) Plus -----
------(in words) ----- (in figures) over departmental value of **Rs.68,61,312.00** as furnished in the work schedule which is also applicable for all items of works, individually and uniformly over the departmental rates, furnished in the work schedule.

NOTE:

1. If the tenderer offers to carry out the work at a value less than the department rate, the tenderer is requested to quote his percentage in Form No:A and strike out the Form B and C.
2. If the tenderer offers to carry out the work at the department rate, the tenderer is requested to strike out the Form A and C.
3. If the tenderer offers to carry out the work at a value higher than the department rate, the tenderer is requested to quote his percentage in Form No:C and strike out the Form A and B.
4. If there is any discrepancy in percentage quoted in words and in Figures the lowest percentage quoted will be considered.
5. If the price schedule is not quoted as above the tender submitted will be treated as Non-responsive.

Signature of the tenderer with seal

ABSTRACT

Name of work:Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No: CNT/SEW/GOTN/CMCDM/ 2305D/2013-14

Bill No.	Description	Amount Rs. P
1	CONSTRUCTION OF SCREEN / GRIT WELL	1642637.19
2	CONSTRUCTION OF SUCTION WELL OF 6 M DIA	3970566.87
3	CONSTRUCTION OF GRIT PIT	30574.20
4	SILT RAISER ARRANGEMENTS	39390.14
5	CONSTRUCTION OF COLUMN AND ERECTION OF BEAM	101380.90
6	CONSTRUCTION OF VALVE CHAMBERS	77088.20
7	INTER CONNECTION WORK BETWEEN LAST MANHOLE & SCREEN WELL AND BETWEEN SCREEN WELL TO SUCTION WELL	325314.60
8	CONSTRUCTION OF PANEL CUM OFFICE BLOCK - 9 m x 4 m Size	674359.50
	Total Amount	6861311.60
	Say	68,61,312.00

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
BILL 1 : CONSTRUCTION OF SCREEN / GRIT WELL						
1	Excavation in hard stiff clay, stiff black cotton, hard red earth, shales, murum, gravel, stoney earth and earth mixed with small size boulders as per SS20B with initial lead of 10m and lift of 2.0m	35.00	cu.m	40.00	cu.m	1400.00
2.	Providing form work with centering for soffits of reinforced concrete slabs or plain surfaces including strutting upto 3m high	212.00	sq.m	581.00	sq.m	123172.00
3.	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of M25 grade for reinforced cement concrete structural elements under controlled water cement ratio with plasticiser using 20mm and down graded machine broken granite stone jelly excluding the cost of centering and shuttering and reinforcement but including curing, fixing, fan clamps etc., as per standard specification and as directed by the departmental officers complete.-1m3					
(i)	a) Well steining	37.00	cu.m	3922.00	cu.m	145114.00
(ii)	a)Raft slab	35.00	cu.m	4006.50	cu.m	140227.50
4.	Providing point edge to well curb using ISA 150x75x10 mm of weight 16.9 kg/m	197.00	kg	65.00	kg	12805.00
5.	Sinking well with 0.35m thick wall steining in all kinds of soils and in all depths under water including removal of excavated earth and allother etc.including bailing and pumping out water with all tools and plants such as air compressor,helmet etc. complete.					
	3m dia well					
a	2m to 4m	2.00	m	2593.00	m	5186.00
b	4m to 6m	2.00	m	5177.00	m	10354.00
c	6m to 8m	2.00	m	9991.00	m	19982.00
d	8m to 8.28	0.98	m	18673.00	m	18299.54

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
6.	Supplying, fabricating and laying in position MS or RTS rods for RCC works including cost of steel, binding wire, cutting, cranking and tying, in position with binding wire assembly etc complete.	4100.00	kg	58.00	kg	237800.00
7.	Plastering with C.M.1:3 for 20mm thick including curing etc complete.(well inner)	95.00	sq.m	204.00	sq.m	19380.00
8.	Plastering with C.M.1:3 for 12mm thick including curing etc complete.(well outer)	28.00	sq.m	107.00	sq.m	2996.00
9.	Plugging the bottom of the well in C.C 1:3:6 using 40mm gauge hard broken stone jelly for plain cement concrete work including laying in layers of not more than 15cm thick including ramming curing etc complete	3.00	cu.m	2710.00	cu.m	8130.00
10	White washing one coat Top of well + well outer for 1m	16.00	sq.m	10.00	sq.m	160.00
11	Colour washing two coats	16.00	sq.m	20.00	sq.m	320.00
12	Supplying and fixing C.I.steps.	31.00	nos	347.00	each	10757.00
13	C.C 1:2:4 using 20mm gauge hard broken stone jelly for PCC works including laying, ramming, curing etc complete for benching and channeling as directed.	1.00	cu.m	3510.00	cu.m	3510.00
14	Refilling with excavated earth other than sand	14.00	cu.m	14.10	cu.m	197.40
15	Disposal of surplus earth	97.00	cu.m	73.55	cu.m	7134.35
16	Supplying conveying and fixing penstock valve for 700mm dia DI pipe at a depth of 8.28m in the well drive shaft supporting clamps,bevel gear arrangement assembly with hand wheel etc., complete as directed at site	1.00	no	215740.00	each	215740.00
17	Supply and installation of SS screen with 50*10mm tk flats for outer frame and 50*10mm SS flats spaced at 35mm centre to centre to serve bar screens inside the screen well	1.00	no	606000.00	each	606000.00

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
18	Providing Fusion bonded epoxy coating not less than 175 microns thickness and upto 300 microns to reinforcement of all diameters as per IS 13620/1993 including testing of coating at plant. The rate is inclusive of cost of careful handling, PVC coated binding wires, touch up material supplied by coating agency, repair work, loading, unloading and straightening of bent rods etc. complete as per specification and as directed by the Engineer in charge	4.10	MT	13164.00	MT	53972.40
Sub total Bill 1						1642637.19
BILL 2 : CONSTRUCTION OF SUCTION WELL OF 6 M DIA						
1	Excavation in hard stiff clay, stiff black cotton, hard red earth, shales, murum, gravel, stoney earth and earth mixed with small size boulders as per SS20B with initial lead of 10m and lift of 2.0m	111.00	cu.m	40.00	cu.m	4440.00
2.	Providing form work with centering for soffits of reinforced concrete slabs or plain surfaces including strutting upto 3m high	574.00	sq.m	581.00	sq.m	333494.00
3.	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of M25 grade for reinforced cement concrete structural elements under controlled water cement ratio with plasticiser using 20mm and down graded machine broken granite stone jelly excluding the cost of centering and shuttering and reinforcement but including curing, fixing, fan clamps etc., as per standard specification and as directed by the departmental officers complete.-1m3					
	i) upto 1.5m from GL & below GL					
	Well steining	179.00	cu.m	3922.00	cu.m	702038.00
	well curb	20.00	cu.m	3922.00	cu.m	78440.00
	ii) from 4.5m to 9.0m depth					
	raft slab	13.00	cu.m	4006.50	cu.m	52084.50
4.	Providing point edge to well curb using ISA 150x75x10 mm of weight 16.9 kg/m	393.00	kg	65.00	kg	25545.00

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
5.	Sinking well with 0.7 m thick wall steining in all kinds of soils and in all depths under water including removal of excavated earth and allother etc.including bailing and pumping out water with all tools and plants such as air compressor,helmet etc. complete.6m dia well					
	2m to 4m(chetpet pumping station)	2.00	m	12799.00	m	25598.00
	4m to 6m (chetpet pumping station)	2.00	m	25584.00	m	51168.00
	6m to 8m (chetpet pumping station)	2.00	m	47935.00	m	95870.00
	8m to 10m (chetpet pumping station)	2.00	m	89413.00	m	178826.00
	10m to 12m (chetpet pumping station)	1.08	m	169174.00	m	182707.92
6.	Supplying, fabricating and laying in position MS or RTS rods for RCC works including cost of steel, binding wire, cutting, cranking and tying, in position with binding wire assembly etc complete.	21200.00	kg	58.00	kg	1229600.00
7.	Plastering with C.M.1:3 for 20mm thick including curing etc complete.(well inner)	260.00	sq.m	204.00	sq.m	53040.00
8.	Plastering with C.M.1:3 for 12mm thick including curing etc complete.(well outer)	62.00	sq.m	107.00	sq.m	6634.00
9.	Plugging the bottom of the well in C.C 1:3:6 using 40mm gauge hard broken stone jelly for plain cement concrete work including laying in layers of not more than 15cm thick including ramming curing etc complete .	19.00	cu.m	2710.00	cu.m	51490.00
10	White washing one coat Top of well + well outer for 1m	38.00	sq.m	10.00	sq.m	380.00
11	Colour washing two coats	38.00	sq.m	20.00	sq.m	760.00
12	Supplying and fixing C.I.steps.	41.00	nos	347.00	each	14227.00
13	C.C 1:2:4 using 20mm gauge hard broken stone jelly for PCC works including laying, ramming, curing etc complete for benching and channeling as directed.(chetpet pumping station)	0.90	cu.m	3510.00	cu.m	3159.00
14	Refilling with excavated earth other than sand	55.00	cu.m	14.10	cu.m	775.50
15	Disposal of surplus earth	353.00	cu.m	73.55	cu.m	25963.15

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
16	Supplying conveying and fixing penstock valve for 700mm dia DI pipe at a depth of 7m in the well drive shaft supporting clamps,bevel gear arrangement assembly with hand wheel etc., complete as directed at site(As per market enquiry)	1.00	no	225250.00	each	225250.00
17	Supply and installation of SS open mesh flooring with 25x6mm thick flats for outer frame and 25x3mm SS and 12x3mm SS flats spaced at 30mm and 60mm respectively forming a mesh over the wells for operation of pumps/Pulley block (As per drawing enclosed)	1.00	no	350000.00	each	350000.00
18	Providing Fusion bonded epoxy coating not less than 175 microns thickness and upto 300 microns to reinforcement of all diameters as per IS 13620/1993 including testing of coating at plant. The rate is inclusive of cost of careful handling, PVC coated binding wires, touch up material supplied by coating agency, repair work, loading, unloading and straightening of bent rods etc. complete as per specification and as directed by the Engineer in charge	21.20	MT	13164.00		279076.80
Sub total Bill 2						3970566.87
BILL 3 : CONSTRUCTION OF GRIT PIT						
1	Earth work excavation in all kinds of soils except hard rock requiring blasting including of shoring strutting and bailing out water wherever necessary refilling the sides of foundation with excavated earth in layers of 15cm thick well rammed and consolidated depositing surplus earth within in compound in places as shown by the departmental officers clearing and levelling the site with initial lead of 10mts. and lift of 2m etc. complete.	9.00	cu.m	40.00	cu.m	360.00
2	Supplying and filling with sand for foundation and basement as per standard specification	1.00	cu.m	437.00	cu.m	437.00
3	C.C 1:3:6 using 40mm gauge hard broken stone jelly for PCC works including laying in layers of not more than 15 cm, thick, ramming, curing etc. complete	1.50	cu.m	2710.00	cu.m	4065.00

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
4	Cement concrete 1:2:4 using 20mm gauge hard broken stone jelly for PCC works including laying, ramming, curing, finishing etc complete.	1.00	cu.m	3510.00	cu.m	3510.00
5	Stock brick work in cement mortar 1:4 using second class bricks including curring etc. complete for over 23 cm thick wall	1.00	cu.m	3935.00	cu.m	3935.00
6	Stock brick work in cement mortar 1:4 using second class bricks including curring etc. complete for 23 cm thick wall	2.00	cu.m	4436.00	cu.m	8872.00
7	Supplying, fabricating and laying in position MS or RTS rods for RCC works including cost of steel, binding wire, cutting, cranking and tying in position with binding wire assembly etc., complete.	10.00	kg	58.00	kg	580.00
8	Cement concrete 1:2:4 using 12mm to 20mm gauge hard broken stone jelly for reinforced concrete works excluding centering,shuttering and cost of steel reinforcement but including laying in position ,compacting, curing, finishing etc complete.	1.00	cu.m	3956.00	cu.m	3956.00
9	Providing formwork with centering for soffits of reinforced cement concrete slabs or plain surface including strutting upto 3.0m high etc complete complying with standard specifications.	5.00	Sqm	581.00	Sqm	2905.00
10	Plastering with C.M.1:3 for 12mm thick including curing etc., complete.	18.00	Sqm	107.00	Sqm	1926.00
11	Refilling with excavated soil (other than sand) compling with standard specification for filling in foundation and basement etc. complete	2.00	cu.m	14.10	cu.m	28.20
Sub total Bill 3						30574.20
BILL 4 : SILT RAISER ARRANGEMENTS						
1	Supplying, conveying and fixing the following CI specials as per IS 9543 etc. complete.					
a	100 mm dia CI d/f pipe - 1 m	1.00	No.	2551.96	each	2551.96
b	100 mm dia CI d/f pipe - 2.5 m	3.00	Nos.	5235.70	each	15707.10
c	100 mm dia CI d/f 90 degree bend	2.00	Nos.	1474.76	each	2949.52
d	100 mm dia CI Bell Mouth	1.00	No.	864.52	each	864.52
e	100 mm dia sluice valve	1.00	No.	3557.80	each	3557.80
f	100 mm dia CI d/f pipe - 2.0 m	2.00	Nos.	4381.12	each	8762.24
2	Making flanged joints -100 mm dia including cost of jointing materials	18.00	nos.	116.50	each	2097.00

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
3	Supplying, laying , jointing and testing 100mm dia SW pipe including earthwork excavation for trenches in hard stiff clay, stiff black cotton, hard red earth, shales, muram, gravel, stoney earth and earth mixed with small size boulders and hard gravelly soil depositing the earth on banks with initial lead of 10m , lowering the pipes into the trenches, aligning, refilling the trenches with excavated earth in layers of not more than 23 cm thick watering , ramming to consolidation , depositing the surplus earth, etc. complete at an average depth of 2.0m.	10	m	290.00	m	2900.00
Sub total Bill 4						39390.14

BILL 5 : CONSTRUCTION OF COLUMN AND ERECTION OF BEAM

1	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of M20 grade for reinforced cement concrete structural elements under controlled water cement ratio with plasticiser using 20mm and down graded machine broken granite stone jelly excluding the cost of centering and shuttering and reinforcement but including curing, fixing, fan clamps etc., as per standard specification and as directed by the departmental officers complete.-1m ³					
	i) upto 1.5m from G.L	0.20	cu.m	3688.00	cu.m	737.60
	ii) 1.5 m to 4.5m above G.L	0.40	cu.m	3730.70	cu.m	1492.28
2	Providing form work with centering for soffits of reinforced cement concrete slabs or plain surfaces including strutting upto 3m high.	8.00	sq.m	581.00	sq.m	4648.00
3	Supplying, fabricating and laying in position MS rounds or RTS rods for RCC works including cost of reinforcement, binding wire, cutting bending, cranking and tying in position with binding wire assembly, etc.	30.00	kg.	58.00	kg.	1740.00
4	Plastering with C.M.1:3 for 12mm thick including curing etc complete.	9.00	sq.m	107.00	sq.m	963.00
5	Colour washing two coats over one coat of white washing	9.00	sq.m	30.00	sq.m	270.00
6	Supply and fixing ISLB 400mm of 56.9 kg/m for 3.7 m length for screen well	220.00	kg.	65.00	kg.	14300.00

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
7	Supply and fixing ISLB 400mm of 56.9 kg/m for 7.4 m length for suction well	430.00	kg.	65.00	kg.	27950.00
8	Supply and erection of pulley block of 1 tonne capacity with chain for 3.7 m length for screen well	1.00	set	18164.56	set	18164.56
9	Supply and erection of pulley block of 2 tonnes capacity with chain for 10 m length for suction well	1.00	set	30377.46	set	30377.46
10	Painting two coats with superior quality of ready mixed paints of chocolate colour, light green or grey colour or any other approved colour over ISLB (for new iron work two coats).	9.00	sq.m	82.00	sq.m	738.00
Sub total Bill 5						101380.90
BILL 6 : CONSTRUCTION OF VALVE CHAMBERS						
1	Excavation in hard stiff clay, stiff black cotton, hard red earth, shales, muram, gravel stoney earth and earth mixed with small size boulders as per SS 20B with initial lead of 10m and lift of 2.0m etc. complete.	51.1	cu.m	40.00	cu.m	2044.00
2	Supplying and filling sand for foundation and basement including watering, consolidating, ramming etc. complete.	2.7	cu.m	437.00	cu.m	1179.90
3	P.C.C 1:3:6 using 40mm gauge hard broken stone jelly including laying in layers of not more than 15cm thick including ramming curing etc complete	2.7	cu.m	2710.00	cu.m	7317.00
4	Stock brick work with second class bricks in CM 1:5 for 23cm thick wall including curing etc., complete.	11.4	cu.m	4356.00	cu.m	49658.40
5	Providing form work with centering for soffits of reinforced cement concrete slabs or plain surfaces including strutting upto 3m high.	0.90	sq.m	581.00	sq.m	522.90
6	Supplying and fixing C.I.steps.	11	Nos.	347.00	each	3817.00
7	Plastering with C.M.1:3 for 12mm thick including curing etc complete.	114.0	sq.m	107.00	sq.m	12198.00
8	Cement concrete 1:2:4 using 20mm gauge hard broken stone jelly for plain cement concrete works including laying, ramming, curing etc complete	0.10	cu.m	3510.00	cu.m	351.00
Sub total Bill 6						77088.20

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
BILL 7 : INTER CONNECTION WORK BETWEEN LAST MANHOLE & SCREEN WELL AND BETWEEN SCREEN WELL TO SUCTION WELL						
INTER CONNECTION WORK BETWEEN LAST MANHOLE & SCREEN WELL						
1	Supply, laying, jointing and testing of C.I. Pipe of 700 mm dia including testing of C.I pipes, earth work excavation in hard stiff clay, stiff black cotton, hard red earth and earth mixed with small size boulders and hard gravelly soil, depositing the earth on banks with initial lead of 10m, lowering into the trenches and aligning, refilling with excavated soil, watering and ramming to consolidation etc., complete at an average depth of 6.5 m	5.00	m	32113.98	m	160569.90
2	C.C 1:2:4 using 12-20mm gauge hard broken stone jelly for PCC works including laying in layers of not more than 15 cm, thick, ramming, curing etc. complete. For End concrete	0.60	cum	3479.00	cum	2087.40
INTER CONNECTION WORK BETWEEN SCREEN WELL TO SUCTION WELL						
3	Supply, laying, jointing and testing of C.I. Pipe class B of 700 mm dia including testing of C.I pipes, earth work excavation in hard stiff clay, stiff black cotton, hard red earth and earth mixed with small size boulders and hard gravelly soil, depositing the earth on banks with initial lead of 10m, lowering into the trenches and aligning, refilling with excavated soil, watering and ramming to consolidation etc., complete at an average depth of 6.5m	5.00	m	32113.98	m	160569.90
4	C.C 1:2:4 using 12-20mm gauge hard broken stone jelly for PCC works including laying in layers of not more than 15 cm, thick, ramming, curing etc. complete. For End concrete	0.60	cum	3479.00	cum	2087.40
Sub total Bill 7						325314.60

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
BILL 8 : CONSTRUCTION OF PANEL CUM OFFICE BLOCK - 9 m x 4 m Size						
1	Earth work excavation in all kinds of soils except hard rock requiring blasting including of shoring strutting and bailing out water wherever necessary refilling the sides of foundation with excavated earth in layers of 15cm thick well rammed and consolidated depositing surplus earth within in compound in places, clearing and levelling the site with initial lead of 10mts. and lift of 2m etc. complete.	25.00	cum	80.00	cum	2000.00
2	Supplying and filling with sand for foundation and basement as per standard specification.	18.00	cum	437.00	cum	7866.00
3	C.C 1:3:6 using 40mm gauge hard broken stone jelly for PCC works including laying in layers of not more than 15 cm, thick, ramming, curing etc. complete.	4.00	cum	2710.00	cum	10840.00
4	Providing formwork with centering for soffits of reinforced cement concrete slabs or plain surface including strutting upto 3.0m high etc complete complying with standard specifications for well kerb and steining. i) upto 3m high.	71.00	sq.m	581.00	sq.m	41251.00
	ii) Above 3m to 4m	56.00	sq.m	637.00	sq.m	35672.00
5	RCC work with 1:1.5:3 using 20mm size H.B.Stone jelly for RCC works excluding cost of steel reinforcement, centring, shuttering and cost of steel reinforcement but including laying in position, compacting, curing, finishing, etc., complete.					
	i)Upto 1.5m	14.00	cum	4575.00	cum	64050.00
	ii) 1.5m to 4.5m	10.00	cum	4617.70	cum	46177.00
6	Sun shade laying CC1:2:4 for RCC sun shade works useing 20mm HBG jelly 100mm thick at wall end and 80mm thick at free end and projecting 900mm from wall face moulded along with RCC lintels and tailed into full thickness of wall where there no lintels excluduing cost of steel reinforcement but including shuttering, compacting, curing and finishing etc. complete.	10.00	m	1148.00	m	11480.00

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Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
7	Supplying, fabricating and laying in position MS or RTS rods for RCC works including cost of steel, binding wire, cutting, cranking and tying in position with binding wire assembly etc., complete.	2800.00	Kg	58.00	Kg	162400.00
8	Stock brick work in cement mortar 1:4 using second class bricks including curring etc. complete for 23 cm thick wall.					
(i)	upto 1.5m from G.L.	8.00	cum	4436.00	cum	35488.00
(ii)	Ground floor	14.00	cum	4464.30	cum	62500.20
iii)	Parapet wall	4.00	cum	5380.00	cum	21520.00
9	Plastering with C.M 1:4 for 12mm thick including curing etc. complete	260.00	sq.m	98.00	sq.m	25480.00
10	Special ceiling plastering 10mm thick with C.M. 1:3 for RCC slabs and beams, columns, roof slabs and sun shade	40.00	sq.m	107.00	sq.m	4280.00
11	Flooring 100mm thick base concrete in C.M. 1:4:10 using 40mm B.G. jelly including laying, ramming, curing etc. complete complete	30.00	sq.m	222.00	sq.m	6660.00
12	Granolithic flooring 25mm thick with cement concrete 1:2:4 using 3-10 mm chips and top surface rendered smooth with cement including thread lining and 25mm dia G.I. pipe of necessary length for water outlet curing, etc. complete.	40.00	sq.m	204.00	sq.m	8160.00
13	Terrace flooring with two course of pressed tiles 15x15x1.2 cm using cement mortar 1:3 mixed with crude oil 10% by weight of cement and pointed with same oiled mortar	40.00	sq.m	377.00	sq.m	15080.00
14	Weathering course concrete with broken brick jelly 20mm guage in pure slacked lime over RCC roof slab in proportion of 32:12 (no sand to be sued) well beaten with wooden beaters to be required depth of 80mm thick and giving rerquired slope and thickness to roof as required etc. complete.	4.00	cum	1947.00	cum	7788.00

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
15	Best Indian TW cupboard with frames 100x60mm alround and shutters 40mm thick with moulded panels in 20mm thick planks and 4nos of iron hold fasts fixed in CC 1:2:4 using 3-10mm chips 6nos of butt hinges 100mm long including necessary fittings brass padlock 100mm long of suitable size and suitable brass handles, screws etc complete The cupboard will have 4nos of RCC precast slabs 40mm thick and 40mm bearing at sides nearly packed with CM etc. and firmly fixed in position. The RCC work will be 1:2:4 mix using stone jelly 6-10mm gauge with necessary reinforcement and rendered smooth with CM on all faces curing etc complete The rear face of the cupboard will be 50mm thick using country bricks in CM 1:4.	6.00	sq.m	5145.00	sq.m	30870.00
16	Supplying and erecting rolling shutters 76mm, 18 guage of galvanized steel sheet with push and pull tupe or self coiling type operated by operated by pulling hook with top cover including lock arrangements and fixing in position inside or out side etc. complete and painting with priming coat of red oxide with out lock (Payment will be made only for actual opening of shutters)	4.20	sq.m	4028.00	sq.m	16917.60

Signature of Tendere with seal

Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
17	Maufacturing supplying and fixing in position Anodised Alu. Natural colour mat finish with openable type window with extruded Alu. Sections with two panels of size the following sizes with necessary accessories such as rubber beadings best quality of lock handle hinges,stays and fixing 4 mm thick plain / frosted/ pin headed glass including cost of all materials labour for electrical consumption required for drilling holes in RCC columns, beams, masonry wherever necessary with power drill to the extent required and made good to the original conditions after fixing as directed by the Board officers.The Al.Surfaces is to be anodised with matt finish usder electrically condition in accordance with IS11868/1962 specification for an average anodic film thick of not less than 15 microns. (All materials should be got approved by the Site Engineer before fixing in position)	7.20	sq.m	3162.00	sq.m	22766.40
18	Supplying, fabricating and fixing in position of Alumi.Anod.natural colour matt finish door half glazed and half PLB board using 12 mm thick PLB board and 5.5 mm thick glazed door using rectangular Alu.Box section of following sizes for frame and shutter with necessary accessories such as rubber beading, Al. Clips, Best double action floor springs, Aluminium Handles on both sides,floor stopper,Tower bolt, Locks and glass including all materials,Labour, power consumption charges required for fabrication if necessary chipping, dismantling making necessary holes in RCC Coloums, Beams or Masonry wherever necessary with power drill to the extent required and made good to the original conditions after fixing etc.,complete. The Alumi. surface must be anodised with matt finish under electrically controlled condition in accordance with IS specification 1868 / 1962 of Anodic filthickness of not less than 15 Microns (Fifteen) for all sections.All the materials should be got approved by the Site Engineer before fixing as directed.	2.10	sq.m	5969.00	sq.m	12534.90

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Work Schedule

Name of work: Improvement works to existing Chetpet sewage pumping station – Civil works in Area VIII

Contract No.:CNT/SEW/GOTN/CMCDM/2305D/2013-14

SI No	Description of work	Qty	Unit	Rate Rs.P	Per	Amount Rs.P
19	Supplying and fixing M.S. grills for window and gate including one coat of primer with red lead etc. complete as directed.	175.00	kg	65.00	kg.	11375.00
20	Colour washing two coats	256.00	sq.m	20.00	sq.m	5120.00
21	White washing two coats	38.00	sq.m	13.00	sq.m	494.00
22	Painting two coats with superior quality of ready mixed paints of chocolate colour, light green or grey colour or any other approved colour over painting with primary coat (red lead) on new iron work	11.00	sq.m	116.00	sq.m	1276.00
23	Supplying, and fixing 100mm down fall pipe including cost of 100mm AC pipe, shoe bend, bracket and teek wood plugs, grating etc. complete with door arrangements	21.00	m	196.00	m	4116.00
24	Refilling with excavated surplus earth	14.00	cum	14.10	cum	197.40
					Sub total Bill 8	674359.50
					Total (Bill 1+Bill 2+ Bill 3+ Bill 4 + Bill 5+ Bill 6+ Bill 7 +Bill 8)	6861311.60

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Name of work: Improvement works to existing Chetpet Sewage Pumping Station – Civil Works

Contract No: CNT/SEW/GOTN/CMCDM/2305D/2013-14

MILE STONE

Sl. No	Description of work	Milestone Period			
			I	II	III
		Total	3 months	6 months	9 months
1	Construction of Screen well and Construction of suction well of 6m dia	100%	40%	100%	-----
2.	Construction of Grit Pit and Silt raiser arrangements	100%	40%	100%	-----
3.	Construction of Column and erection of Beam and Construction of Valve Chambers	100%	-----	50%	100%
4.	Interconnection work between last manhole & Screen well and between Screen well to Suction Well	100%	-----	50%	100%
5.	Construction of Panel cum Office Block - 9 m x 4 m Size	100%	50%	100%	-----

The Liquidated damages for the whole of the works are **Rs.3430/- per day** and that milestone are as under.

LIQUIDATED DAMAGES

- I Mile Stone - Rs.1305/- per day
- II Mile Stone - Rs.2000/- per day
- III Mile Stone - Rs.125/- per day

Signature of the tenderer with seal

Name of work: Improvement works to existing Chetpet Sewage Pumping Station – Civil Works

Contract No: CNT/SEW/GOTN/CMCDM/2305D/2013-14

UNDERTAKING

ADDITIONAL CONDITIONS FOR THE CLEANING AND MAINTENANCE OF SEWERAGE SYSTEM (INCLUDING SEPTIC TANKS)

I / We aged
about years, S/o
residing at

am / are aware of the direction of the Hon'ble High Court of Madras in its order dated 20.11.2008 in W.P. NO. 24403/2008 and the orders of the Government of Tamil Nadu in G.O.(Ms) No.293, M.A & W.S (MW) Department, dated 26.11.2010, regarding the ban on manual scavenging and on the entry of sanitary workers into the sewerage system of septic tank. I undertake to abide by the said directions of the High Court and Government Order in this regard. All cleaning and maintenance operations shall be done only through mechanical devices.

I / We shall not allow sanitary workers to enter into the sewerage system / septic tank for cleaning or maintenance operations except in the 4 circumstances permitted in the orders of the High Court in W.P. No. 24403, dated 20.11.2008. I am aware that even in these 4 circumstances, I should allow the workers to enter only with adequate safety gadgets and under the supervision of a qualified staff, and only after duly observing all safety precautions including testing for the presence of toxic gases.

I / We am/are aware that violation of the said directions of the Hon'ble High Court and the G.O. will attract punishment under section 14 of the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993.

I / We shall not allow sanitary workers to enter into the sewerage system / septic tank for cleaning or maintenance operations except in the 4 circumstances permitted in the orders of the High Court in W.P. NO. 24403/2008, dated 20.11.2008 as follows:

- 1) For the removal of concrete / FRP manhole door which gets damaged due to the heavy vehicular traffic and often falls inside the manhole causing obstructions / blocks

Signature of the tenderer with seal

Name of work: Improvement works to existing Chetpet Sewage Pumping Station – Civil Works

Contract No: CNT/SEW/GOTN/CMCDM/2305D/2013-14

in the sewer and which results in the blockage of sewerage system, and where mechanical equipments cannot be put into operation.

- 2) For the purpose of inter-linking the newly laid sewer main with the existing sewer main, where it will be wholly necessary to block the main sewer main in the servicing manhole. Entry of sanitary workers on such occasions has to be necessarily permitted, in as much as it is stated that large size sewer i.e. where the diameter is more than 300 mm, blocking the sewer main from the top of the manhole is not possible and only the sanitary worker has to enter the manhole and that too with necessary safety gadgets for blocking the sewer temporarily.
- 3) For the removal of submersible pump sets fixed at the bottom of the suction wells, which goes out of order, for which the sanitary worker has to enter the well again with necessary safety gadgets after emptying the sewage from the well in order to remove the pumpset. It is made clear that before allowing any sanitary worker to enter on such occasions, steps should be taken to see that the sewage is totally emptied and thereby further ensure that no poisonous gas remains in the sewage line.
- 4) For the reconstruction of the manhole of rectification of the sewer main due to any damage caused by sinking of man hole covers / sewer line when the sewage pipe line gets blocked or gets obstructed, which results in the system getting surcharged. Here again, before allowing any sanitary worker to enter the sewer line, it is essential that sewage line is emptied by blocking the manholes in the system on either side of the sinking manholes / damaged manholes.

Even in the above four instances, I / We will allow the workers to enter only with adequate safety gadgets and under the supervision of a qualified staff, and only after duly observing all safety precautions including testing for the presence of toxic gases with a gas detector. Naked flame method of testing the presence of poisonous gases is hazardous and should be strictly avoided.

- a. Even in the non-exceptional circumstances, consideration of safety of the workers shall be paramount and the contractor shall ensure the same.

Signature of the tenderer with seal

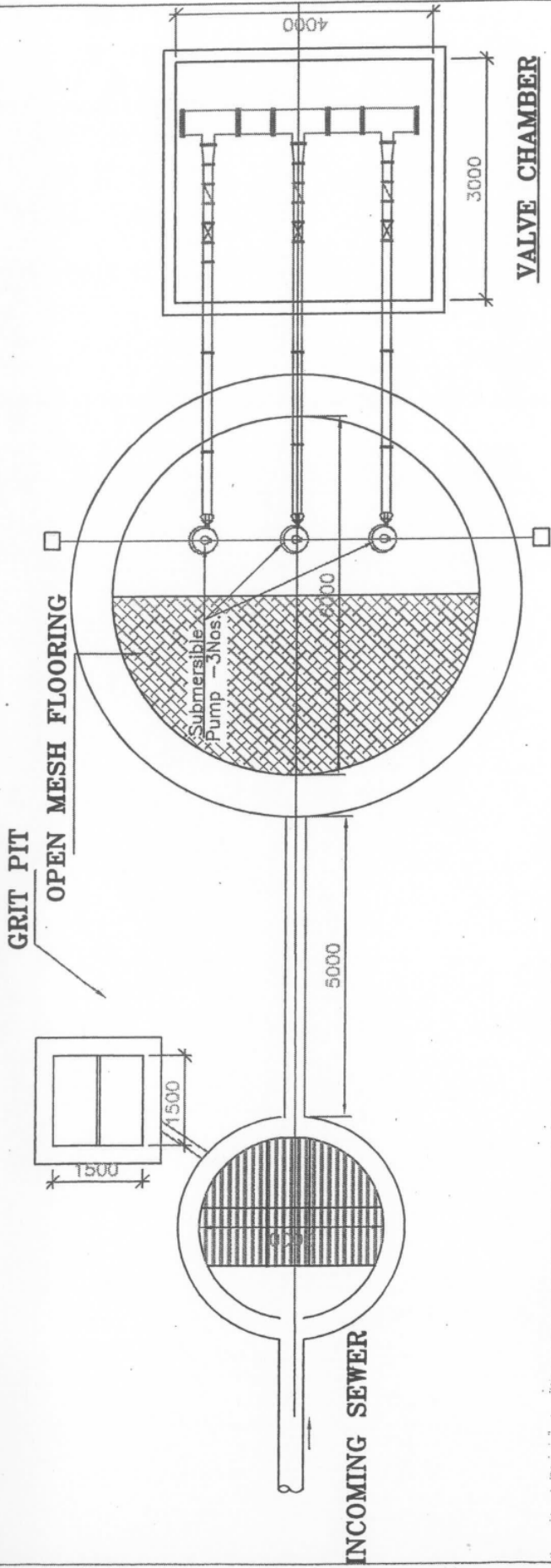
Name of work: Improvement works to existing Chetpet Sewage Pumping Station – Civil Works

Contract No: CNT/SEW/GOTN/CMCDM/2305D/2013-14

- b. I / We will indemnify the employer for any loss or damage caused by his negligence or by his non-observance / violations of any labour laws.
- c. I / We will take out insurance policies under the Workmen's Compensation Act, 1923 for all the workers engaged by him and a photocopy of the insurance policy should be furnished to the employer. The policy should be kept alive till completion of the contract.
- d. I / We will impart safety education to all his workers and train them in the use of safety gadgets.

Signature of the Contractor
with seal

Signature of the tenderer with seal



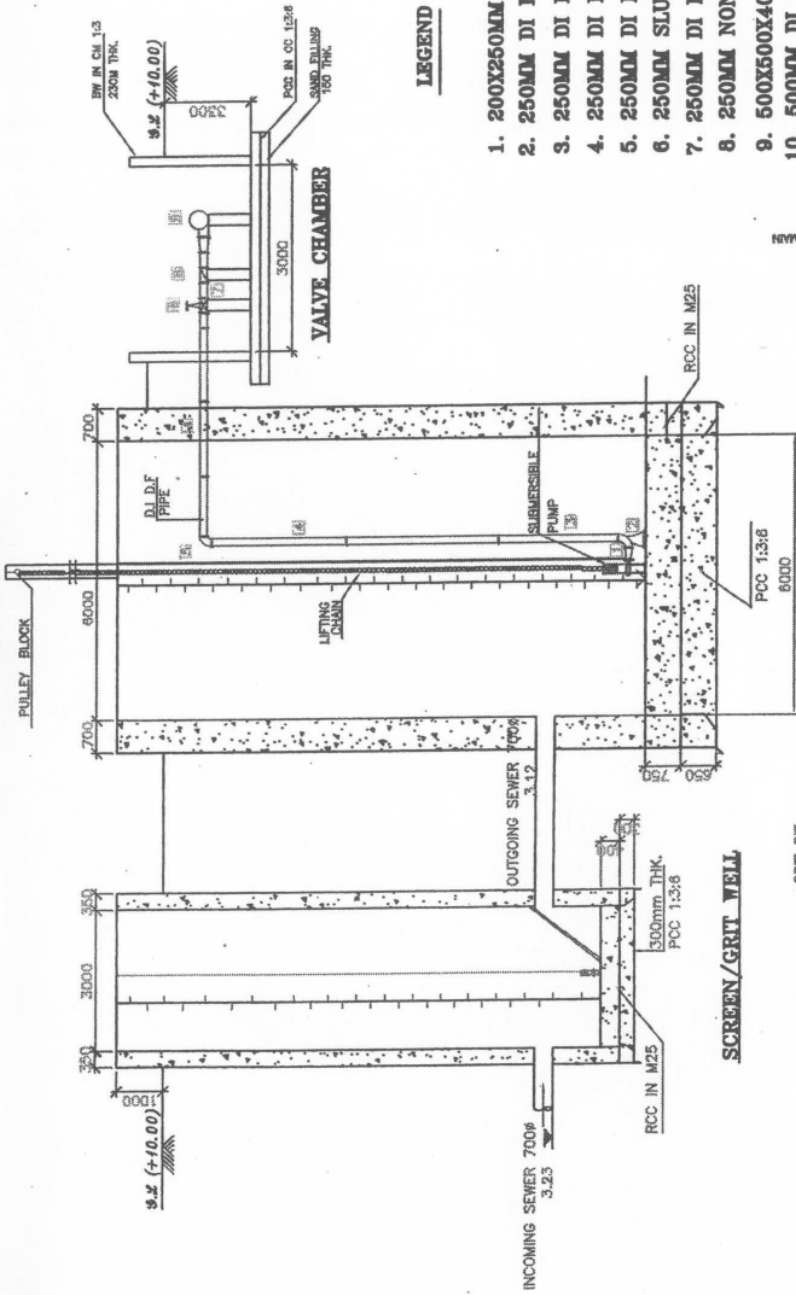
PUMP HOUSE
9.00m x 4.00m

SITEPLAN OF CHETPET PUMPING STATION

S. S. Prasad
18/11/12
PWS

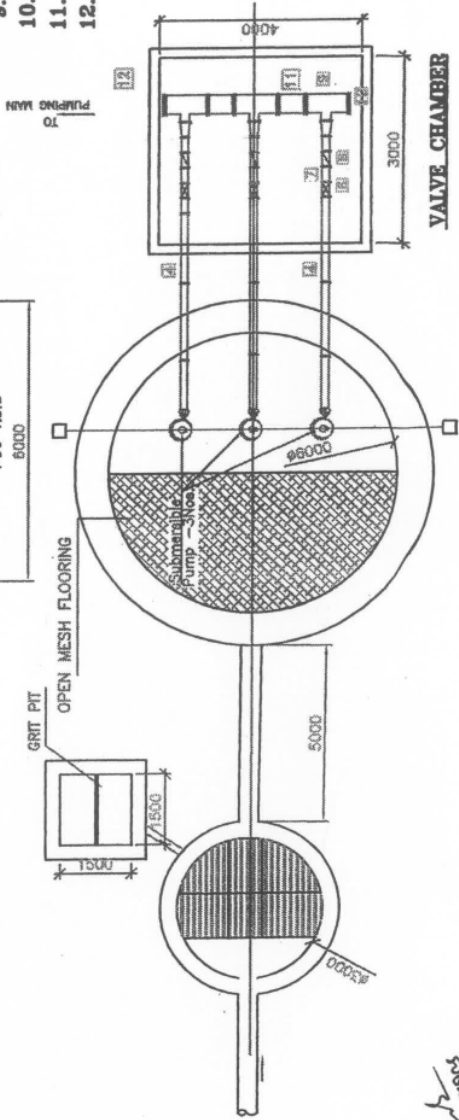
26/105

SUCTION WELL



LEGEND

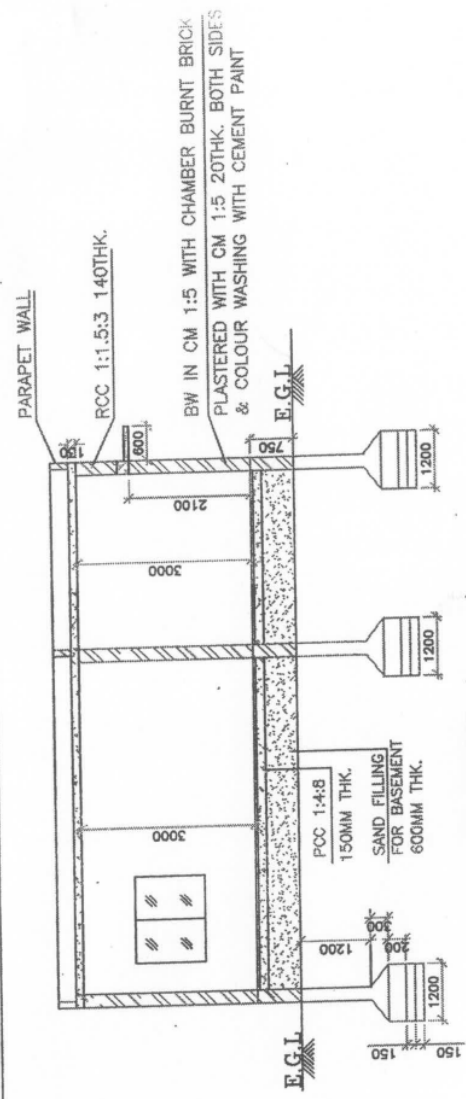
1. 200X250MM DI D/F TAPER
2. 250MM DI D/F 90DEG DUCKFOOTBEND
3. 250MM DI D/F PIPE - 2.0M LG
4. 250MM DI D/F PIPE - 1.0M LG
5. 250MM DI D/F 90 DEGREE BEND
6. 250MM SLUICE VALVE
7. 250MM DI D/F PIPE - 0.5M LG
8. 250MM NON RETURN VALVE
9. 500X500X400MM DI A/F TEE
10. 500MM DI BLANK FLANGE
11. 500MM DI D/F PIPE - 0.5M LG
12. 500MM DI FL/SPI T.P.



S.V. Pruthi
18/4/12
D.R.G.

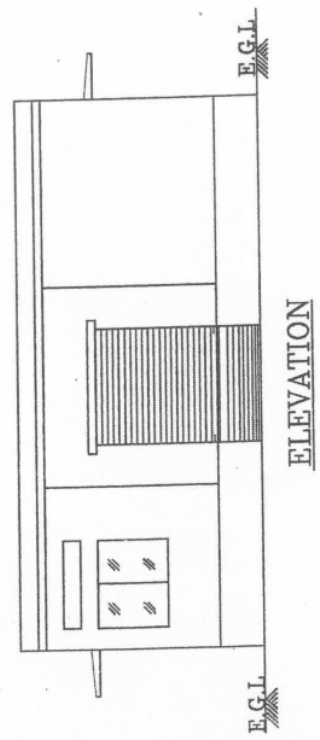
CONSTRUCTION OF PUMPING STATION AND ALLIED WORKS
FOR CHETPET PUMPING STATION

Signature

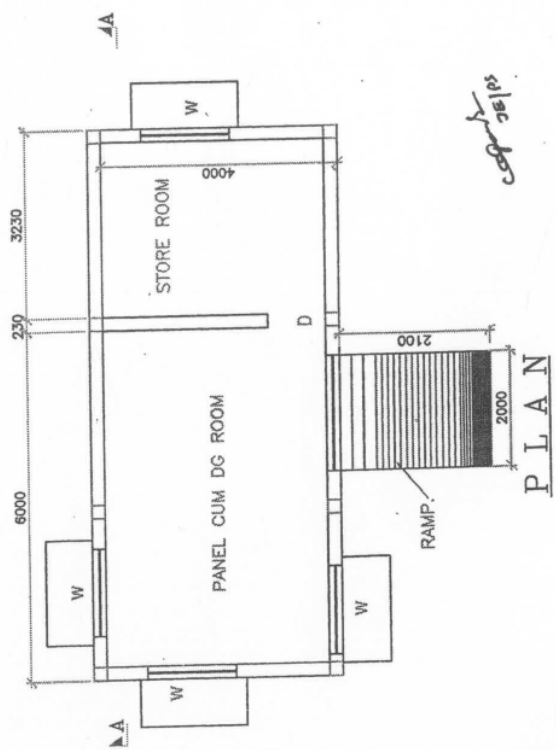


SECTION A - A

LEGEND:-
 ALL DIMENSIONS ARE IN mm.
 D - DOORS 1000x2100
 W - WINDOW 1500x1300
 R.S - ROLLING SHUTTER 2000 X 2100



ELEVATION



PLAN

S. J. - Pray
 18/11/12
 Date

copy 25/12