

IRRIGATION DEPARTMENT
GOVERNMENT OF UTTAR PRADESH



TENDER

For

कार्य का नाम:

नेण्डर संख्या सं०:— 01/अ०अ०/2017-18

लाट संख्या: 01 से 43 तक।

Northern Division Ganga Canal
Roorkee

Ganga Nahar Sanchalan Mandal
Meerut

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CREDENTIALS OF TENDERER

(To be filled by the Tenderer)

- 1- Name of Tenderer :-

- 2- Permanent Address :-

- 3- Present Postal Address :-

- 4- State if you are approved Contractor
Of the C.P.W.D. State P.W.D. state
Irrigation Department, Railway and/
Or M.E.S., and if so copy of class
Certificate No. should be attached.

- 5- Particular of previous contract
Successfully executed should be
Entered in the form below :-

S.No.	Name of Department	Name & Description of work	Value Rs.	Period of execution	
				From	To

- 6- Reference/Certificate from your
Bankers about your financial position
Should be attached.

- 7- List of machinery and equipment

Which you intend to use on this
Work to be given in attached Proforma-I

8- In case tenderer is a firm, enclose
Photostate/attested copy of partnership
Deed & Certificate or registration of firm

9- Certificate :

- a) I/We am/are not debarred from tendering or contracts of central/state Govt. Department.
- b) I/We, hereby certify that information given above is correct, if at any stage, it is found to be incorrect, I/We understand that the contract will be liable to be terminated/rescinded and action could be taken against me/us by the department.

Signature of Tenderer

CERTIFICATE OF RELATIONSHIP

To,

The Executive Engineer,
Northern Division Ganga Canal,
Roorkee.

Sir,

It is certified that except the person noted below, none of my relative is employed in Irrigation Department, Uttar Pradesh.

Name	Designation	Place of Posting
------	-------------	------------------

.....
Contractor
Full Address.....
.....
.....

NB :- The following comes under the definition of relationship :-

- 1- Father, Mother, Sister, Brother, Brother-in-law, Daughter, Father-in-law, Mother in law, first cousin of self or wife. The list is illustrative and not exhaustive.

Contractor

DECLARATION

We

.....
.....
.....

..... hereby declare that no work shall be taken in hand by me or by my authorize agent unless a proper work order in writing is issued to me by Executive Engineer/S.D.O. In case of default on my part, I fully understand that my security deposits will be forfeited and our name will be removed from the list of approved contractor.

Date

.....

Contractor's Signature

Full Address

.....

.....

AGREEMENT

Tender invited by
Tender of
Tender Notice No & Date

Name of Tenderer
.....

In consideration of the Governor of Uttar Pradesh having treated the tenderer to be an eligible person whose tender may be considered, the tenderer hereby agreed the condition that the proposals in response to the above invitation shall not be withdrawn with in three months from the date of opening of the tender, also to the condition that if thereafter the tenderer does withdraw his proposal within the said period the earnest money deposited by him may be forfeited to the Government of Uttar Pradesh in description of the latter. And the tenderer hereby also declares that if subsequent to the submission of his tender the tenderer alters or modifies the contents of his tender which are not acceptable to the department then the tenderer shall, for the purpose of the aforesaid conditions, be deemed to have withdrawn his proposal

Signed this Day of
Signed by Tenderer

To, individual, who is proprietor of a firm should furnish the description of the party as under :-

Shri S/O. Shri
R/o.
Carryihng on business under the firms name of M./s.

In case of a partnership firm the description of the party should be as under :-

M/s. a firm within
the meaning of the Indian partnership act and having their office at Are consisting of the
following partnersbn :

- 1- ShriS/O..... R/O.
- 2- Shri.....S/O..... R/O.
- 3- ShriS/O..... R/O.

Proforma No-1

Details of Machinery & Equipment Immediately Available with the Tenderer for use on this work

Name of Tenderer :

S.N.	Name of Equipment	No of Unit	Kind and make	Capacity	Age and condition	Present location	Remark
1	2	3	4	5	6	7	8

Signature of Tenderer

PUBLIC WORKS DEPARTMENT, UTTAR PRADESH

Northern Division Ganga Canal, Roorkee

Name of Work :

Name of Contractor :

**GENERAL RULES AND DIRECTIONS FOR THE
GUIDANCE OF CONTRACTORS**

1. All work proposed for execution by contract will be notified in a form of invitation to tender pasted on a board hung up in the office of and signed

Sub Divisional Officer

by the

Executive Engineer

This form will state the work to be carried out, as well as the date for submitting and opening Tenders, and the time allowed for carrying out the work also the amount of earnest money to be deposited with the tender and amount of security deposit to be deposited by the successful tender and the percentages if any to be deducted from bill. this set of contract documents consisting or copies of drawing and details of the proposed work specification schedule of quantities of various items of work and a form of the printed conditions of contract together with the form of tender to be used, signed for the purpose of identification by the Sub-Divisional Officer.

..... approved by the authorized by the competent officer to

Executive Engineer

make the contractor shall be available for public inspection at the office to Sub Divisional Officer

..... during the office hours

Executive Engineer

2. In the event of the tender being submitted by a firm it must be signed separately by each member thereof, or in the event of the absence of any partner it must be signed on his behalf by a person holding a power of attorney authorizing him to do so.

3. Blank tender document can be obtained from the office of the Engineer during office hours on any working day between 11.00 to 16.00 hours on payment of their cost which shall into be refundable. The sale of tender documents comprising of Notice in invitation of tender along with corrigendum issued if any. general rules & direction for the guidance of contractors for submitting tenders tender for work terms and conditions of contract special condition of contract, technical specification and general arrangement drawings shall be stopped at 13.00 hours on the date of opening of the tenders.

The tender will be opened publicly on at hrs in the presence of those tenderers or their authorised representative who may choose to be present. The tender shall be opened by the Executive Engineer or his authorised representative in the office of the Executive Engineer tender received after the specified time as mentioned above shall not be entertained.

Tender must be accompanied with earnest money of Rs. in the form of Postal Saving Pass Book NSC, NPC or deposit receipts of any scheduled bank duly pledge to the Executive Engineer Earnest money in cash or by cheque shall not be accepted. Tenders without earnest money shall not be considered and shall not be included in the comparative statement.

5. Each tenderer should carefully examine the conditions of contract drawings and specifications visit the side of works and fully satisfy acquaint himself about the nature and location of the work configuration of the ground, spring level sub-surface conditions, character and quantity of materials to be encountered the character of equipment and facilities needed preliminary to and during the execution of work leads and lifts involved & general and local conditions which may, in anyway effect the work or the cost thereof.

6. Tenders documents duly signed by the contractor shall be submitted in a seaied cover. The name of the work and name of tenderer with full address shall be written on the out side left corner of the envelops.

7. The tenderers are hereby informed that they have to tender rates for each and every item contained in the scheduled of quantities and bips as per conditions of this otherwise their tender will not be considered.
8. Tendered rates shall be legibly, written in ink in English or in Hindi and in Indian currency both in figures and words. In case of any discrepancy, the rates in works shall govern. Erasures and delete over writings are strictly prohibited. All corrections must be initialed and acted by the tenderers.
9. In consider at in of Govt. having treated the tenderer to be an eligible person whose tender may be considered the tender shall agree to the conditions that the proposal in response to the invitation shall not be with by the tender within four months from the date of opening the tender and also to the condition that if thereafter the tender does withdraw his proposal within the said period the earnest money deposited by him may be forfeited to the Governor of UP in the discretion of the later.

Note :

10. If subsequent to the submission of the tender any tenderer demands after or modifies the contents of his tender which are not acceptable by the department for the purpose of these conditions the tenderer shall be deemed to have withdrawn bid.

if a tenderer, who is exampled from furnishing earnest money, withdraws his proposal within the said period the may in the discretion of the Govt. of UP be debarred from tendering for a period of one year reckoned from the date of opening of the tender.

The tenderer has to submit an agreement on a stamp paper amounting to Rs. five only with a revenue stamp along with his tender in accordance with the proforma available at Annexure-1

11. The accepting authority shall have the right to reject any or all tenerers without assigning any reasons.
12. Tenderers shall clearly specify in the tender whether of act any of their relative are employed in the UP Irrigation Department. The name designation and place of positing of such relative would tender the earnest money/security deposit of the tenderer liable to be forfeited and the contract if executed liable to be rescinded.

13. In taking a decision of the tender due consideration shall be given to tenderen's previous experience in having handled works of nature and magnitude his organizational know how the equipment and machinery available with the tenderer his financial capacity as well as the existing commitments of tenderer which he shall furnish in the performa enclosed in tender documents as Annexure II-III.

14. The person or the persons whose tender is accepted (herein after called the contractor) shall within one week after his or their tender has been accepted deposit with Government of UP (hereinafter called the Government) such sum as will with the earnest money deposited with the tender amount of Rs. 10% of the cost of tender.

15. Unless the person whose tender is accepted deposits the security money and signs the agreement within seven days as per para 14 above when he is required to do so the earnest money deposited by him shall be forfeited and acceptance of tender with drawn unless the period is extended by mutual agreement.

16. The earnest money received with other tenders shall be refunded to tenderer's only after the tender has been finally decided.

17. The amount of the earnest money should ordinarily be

a)	When the amount of the tender does not exceed	Rs. 2000	Rs. 50
b)	When exceeding Rs. 2000 and not exceeding	Rs. 5000	Rs. 100
c)	When exceeding Rs. 5000 and not exceeding	Rs. 10000	Rs. 200
d)	For each additional Rs. 5000 or portion of further sum of	Rs. 50000	Rs. 100

Such earnest money shall be deposited by the contractor in Government treasury or sub-Treassury as laid down in paragraph 340 (b) (1) 345 and 366 (b)of the financial Hand book Volume V Part i. Account Rules and the receipted treasury challan attached to the tender.

NOTE :The officer calling for tender may in special cases where it would be inconvenient for tenderers to deposit money into Government treasury relax the rule and permit contractors to deposit earnest money with him if case or currency natal up to a limit of Rs. 100instead of into a treasury. Such deposits should be treated as "Public Works Department deposit."

TENDERS FOR WORKS

"Hereby tender for the execution for the Governor of UP of the work specified in the under written memorandum within the time specified in each memorandum at the rate specified therein and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in rule I thereof and in clause 2 of the conditions of contract and with such materials as are provided for by and in all other respects in accordance with such conditions so far as applicable.

CONDITION OF CONTRACT

Further deposit

CLAUSE 1 - The person or persons whose tender is accepted (herein after called the "Contractor") shall within one week after his or their tender has been accepted, deposit with the Government of Uttar Pradesh (herein after called the Government") either in cash or in securities as provided in paragraph 614 and 615 of the financial hand book volume VI such sum as will the earnest money deposited with the tender amount to Rupees and where any security so deposited is not payable to bearer the contractor shall endorse or transfer it to the said Government in such a manner that the sum represented by it can be realized without the or assistance of the contractor.

Deduction from payment

The contractor shall also permit Government at the time of making any payment to him for work done under the contract to deduct percent of all moneys so payable on account of security deposit until deduction along with the sum already deposited as earnest money to be adjusted in the last deductions with amount :-

(i) In the case of works estimated to cost upto Rs. 1,00,000/- to 10% of the estimated cost

(ii) In the case of works estimated to cost more than Rs. 1,00,000 & upto Rs. 2,00,000/- to 10% on the first 10,000/- & 7½ % on the balance and

(iii) In the case of works estimated to cost more than Rs. 2,00,000/- to 10% on the first Rs. 1,00,000/- 7½% on the next Rs. 1,00,000/- and 5% on the balance unless he is/they are exempted from payment of security deposit if individual case or has/have deposited the out of the security at the rate of fixed Deposit or Guarantee Bounds of any scheduled Bank in India.

(G.O. number 5479/SaKha/81-231-3/81/N-79 Dt. 5-11-82)

Security Deposit

If the security is furnished in the form of guarantee bounds the contractor undertakes to renew or to furnish fresh guarantee to cover the period of time extension of any and failure on his part to do so shall be construed as a breach of his contract and without prejudice to any other remedy provided in these conditions the Engineer-in-charge shall have right to withheld the payment and the entire security amount any moneys becoming payable to the contractor and the amount of security money shall if not withheld on account of breach of contract if be refunded after month of the date of completion of the work or after payment of the final bill which ever is later subject to the condition that in case of the building work of the first rainy season comprising of months of June, July, August and September is not fully covered within the period of month mentioned above the amount of security money will into be with held on account of breach of contract be founded after the expiry of the first rainy season comprising of the months mentioned above or after the payment of the final bill which ever is later.

Provided that in case the payment of the final bill is not made within month of the completion of the work 75% of the amount of the security money can be refunded with the prior approval of the authority next higher to the person accepting the contract on behalf of the Government.

All compensation or other sums of money payable by the contractor may be deducted from or realized by the sale of a sufficient part of his security deposit or from the interest arising there from or from any sums which may be due or may become due to the contractor by Government or on account what so ever and the event of his security deposit being reduced by reason of any such deduction or sales as aforesaid the contractor shall within 10 days thereafter make good in cash or Government Securities endorsed as aforesaid any sum or sums which may have been deducted from or raised by the sale of security deposit or any part thereof.

Without prejudice to any other remedy provided by law the Government may recover all dues here under from the contractor as arrears of land ravened (G.O. No A-2-2242/X-83-17-(5)71 Dt. 23-12-83)

EXPLANATION - For the purpose of this clause if the work is under this contract includes construction reconstruction or repair of any structure having roof over it the whole work will be classed as building work.

Compensation for delay

Clause 2A- Time is the essence of the contract. The Contractor shall commence and shall complete the work covered by the tender on the date fixed by the Executive Engineer for the commencement and completion of such work and shall in interval between those dates keep the work upto the schedules of quantities and dates shown in the Progress statement to be signed by the contractor and attached to the tender. If the work falls in arrears of the Progress statement either in quantity or in time. then for everyday that the work is so in arrears the contractor shall be liable to pay as compensation as amount equal to one percent or such smaller amount as the Executive Engineer (whose decision in writing shall be final) may decide on the estimated cost of cost whole work : Provided always that the entire amount of compensation to be paid under the provisions of this clause shall not exceed ten per cent of the estimated cost of the work as shown in the tender.

Action by which whole

of security deposit is forfeited Clause 2-B : To be used instead of 2-A when the latter is from the nature of work impracticable)

{Clause 2-B : to be used instead of 2-A when the latter is failed to complete the work within the period specified in the tender. Such period shall be reckoned from the date on which the order to commence work is giver to the contractor. The contractor shall at all times during such period proceed with the work with due diligence and he shall pay as compensation as amount equal to one percent or such smaller amount as the Engineer (whose decision in writing shall be final) may decide on the amount of the estimated cost of the whole work as shown in the tender for every day that the work remains uncompleted or unfinished after the proper dates And further in order to ensure good progress during the execution of the work the contractor shall be bound in all cases in which the time allowed of any work exceeds one month to complete one fourth of the value or quantity (as the Engineer may determine) of the whole of the work before one fourth of the whole time allowed under the contract elapsed one half of the value or quantity (as the Engineer may determine) of this work before three fourths of such time has elapsed. If the contractor fails to comply with this conditions he shall be liable to ape as compensation an amount equal to one percent or such smaller amount as the Engineer (whose decision in writing shall be final) may decide on the said estimated cost of the whole work for the every day that the quantity of work remains incomplete. Provided always that the entire amount of the compensation to be paid under the provisions of this clause shall not exceed ten percent on the estimated cost of the work as shown in the tender.

Clause 3- (i) In any case in which under any clause or clauses of his contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit (whether paid in one sum or deducted by installments) the Engineer shall have power to adopt such of the following courses as he may deem best

a) He may rescind the contract by giving the contractor notice of rescission signed by the Executive Engineer and may then take the whole of the contractor's security deposit for the use of the Government as compensation for the loss caused by the contractor's default.

Contractor remains liable to pay compensation if action not taken under clause 3b)

He may, after giving the contractor day's notice in writing of his intention to do so, measure up to work done by the contractor and then employ and pay laborers and supply or procure materials and carry out all or any part of the work himself on behalf of Government debiting the contractor with the actual cost and crediting him at the contract rates with the value of the work so done and may postpone till completion of the work so taken over assessment of the compensation to be paid by the contractor. If any work is taken over by the Engineer the

certificate in writing of the Executive Engineer or of the Sub Divisional Officer as to its cost and value shall be final and conclusive against the contractor.

c) He may, after giving the contractor day's notice in writing of his intention to do so, measure up the work done by the contractor, take the work out of his hands and give a contract for its completion to another contractor and may postpone till the completion of the work the assessment of the compensation to be paid by the original contractor. If the Engineer elects to give the completion of the work to another contractor the original contractor shall pay any expenses which may be incurred in excess of the sum which would have been paid to him if the whole work had been carried out by him and a certificate in writing of the Executive Engineer or of the Sub Divisional Officer shall be final and conclusive as against the regional contractor as to the amount of any such expenses.

ii) if the Engineer does not desire to do so the work the contractor shall not be entitled to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on account of or with a view to execution of the work or the performance of the contract and shall not be entitled to recover or be work or be paid or be given credit for any sum for any work therefore actually performed by him under this contract unless and until the Executive Engineer or the Sub Divisional Officer acting under his order shall have certified in writing the performance of such work and the value thereof the contractor shall only be entitled to be paid the value as to certified.

iii) If upon any occasion the Engineer abstains from exercising the powers given to him by this clause such abstention shall not prevent him from exercising such power upon a subsequent occasion if the contractor again makes default nor shall such abstention absolve the contractor from liability to pay compensation for any default which he may have made.

Power to take possession of or require removal of or sell contractor's plant.

Clause 4 - If the Engineer exercise any of the powers given to him by clause 3 he may if he so desires take possession of all or any of tools plant materials and stores in or upon the work or the side thereof and belonging to the contractor or procured by him and intended to be used for the execution of the work or any part thereof and pay or allow the contractor for the same at the contract rate or in the case of these nothing applicable at current market rates to be certified by the Executive Engineer whose certificate thereof shall be final and if the Engineer does not desire to do so. The Executive Engineer may be notice writing to the contractor or his clerk or the work foreman or other authorized agent required him to remove such tools, plants, materials or stores from the premises (withing a time to be specified in such notice) and if the contractor fails to comply with any such requisition the Executive Engineer may remove them at the contractor's expense and at his risk in all respects by auction or private sale and the certificate of the Executive Engineer as to expenses of any such removal and the amount or the proceeds and the expenses of any such sale shall be final and conclusive against the contractor.

Extension of time

Clause 5 - If the contractor desires an extension of the time for completion of the work on the ground of any unavoidable hindrance to its execution having arisen he shall apply in writing to the Engineer within 30 days the existence of such hindrance first becomes known go to him and the Engineer shall if in his opinion (which shall be final) reasonable grounds be shown there for authorize such extension of time as may in his opinion be necessary or proper.

Final certificates

Clause 6- On completion of the work the contractor shall send a registered notice to the Sub Divisional Officer (thereafter called Engineer-in-charge) giving the date of completion and shall also send a copy of such notice to the Executive Engineer and shall request the Engineer-in-charge to give him a certificate of completion. No such certificate will be given nor shall the work be considered to be complete until the contractor has removed from the premises on which the work has

been executed all scaffolding surplus materials and rubbish and cleaned all wood , door, windows walls floor or other part of any building in upon and about which the work has been executed or of which he may have had possession for the purpose of execution thereof and if the contractor fails to do so on or before the date fixed for completion of work and if the contractor fails to do so on or before the date fixed for completion of work the Engineer-in-charge may do so, and may sell such scaffoldings and materials as have not been removed by the contractor and the contractor shall forthwith pay all expenses so incurred and shall have no claim in respect of any such scaffolding surplus materials as aforesaid except for any sum actually realized by the sale thereof. On completion the work shall be measured by the Engineer-in-charge. whose measurements shall be binding and conclusive against the contractor.

Payment on intermediate certificate to be regarded as advances.

Clause 7 - In the case of work estimated to cost more than rupees on thousand the contractor shall on submitting the bill thereof be entitled to receive a monthly payment proportionate to the part thereof then approved for such purpose by the Engineer-in-charge. whose certificate of approval and passing of the sum so payable shall be final and conclusive against the contractor. But any such payment will only be made as advance to be credited to Government in the final settlement of accounts, with the contractor and not as payment for work completed and passed and the making of any such payment shall not either preclude the Executive Engineer or Sub Divisional Officer from requiring the contractor to remove or reconstruct or retract any work on the ground that such work is bad unsound imperfect or unskilled or prevent by him or conclude determine or affect in any way the powers of the Engineer-in-charge under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contractor. The Engineer-in-charge certificate of the measurement and of the total amount payable for the work shall be final and binding on all parties.

Inability to complete the work

Clause 8 - If the contractor abandons, or is unable to complete the work the Engineer may certify in writing the value of the work done by and conclusive against the contractor and he will not be paid more than the value of such work as so certified irrespective of the contract rate.

Lump sum in estimates

Clause 9 - When the estimate on which a tender is made includes lump sum in respect of parts of the work the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for other such item of work unless the part of the work in question is not in the opinion of the Engineer in charge capable of measurement in which case the Engineer in charge may pay such lump sum as he may determine to be the value thereof and the certificate in writing of the Engineer in charge shall be final and conclusive against the contractor as to the basis upon which payment is to be made in such case and as the amount to be paid.

Bill to be submitted Monthly

Clause 10 - Every month on or before a date to be fixed by the Engineer-in-charge the contractor shall if so required submit a bill for all works executed by him during the previous month and the Engineer in charge shall take or cause to be taken all measurement necessary for checking the contractor's bill and adjusting his claim as speedily as possible, If the contractor does not submit his bill within the time so fixed the Engineer-in-charge may after giving the contractor day's notice in writing measure or depute some one to measure such work in presence of the contractor whose signature on the list of measurements shall be sufficient authority to the Engineer-in-charge to draw up a bill based on such measurement and any bill so drawn up shall be binding on the contractor. If the contractor fails to attend when such measurements are taken such measurements shall be binding on

him and if he attend but refuses to sign the list of measurements the matter shall be referred to immediate superior of the Engineer-in-charge whose decision shall be binding on the contractor.

Bill to be on printed forms

Clause 11 - The contractor shall submit all bills on the printed form which will be supplied to him at the office of the Engineer-in-charge and all items in such bills shall be charged at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in tender at the rates hereinafter provided for such work.

Stores supplied by Government

Clause 12 - If the specification or the estimate or the estimate of the work provided for the sue of any special description of materials to be supplied from the Engineer-in-charge stores Or if it is required that the contractor shall use certain stores to be provided by the Engineer-in-charge (such materials and stores and the prices to be charged thereof as herein after mentioned being so far as practicable and for the convenience of the contractor specified in the schedules hereto annexed but not so as in any way to control the meaning or effect of this contract) the contractor shall be supplied with such materials and stores as may from time to time be required by him for the purpose of the contract but only for such purpose and he shall pay for the same at the rates specified in the said schedule or if no rates are specified at the cost price as defined in clause 13 thereof.

All materials so supplied to the contractor will become the property of the contractor but shall not on any account be removed from the site of the work until the whole work is certified to be complete by the Executive Engineer, except with the written permission of the Executive Engineer and shall at all times be open to inspection by the Engineer-in-charge. The Executive Engineer shall, however have the option to take over any such materials, if unused at the time of completion or termination of the contract at the specified issue rate or the current market rate which ever is less

Clause 13 - All articles required by the contractor for the construction of the work and which the contractor is to supply himself, shall be obtained by the contractor from the firms which the Directors of Industries has made arrangement and if for the supply of any articles no such arrangements have been made, any such articles supplied by the contractor shall conform to such specification and or tests, if any/or sincerely may be prescribed by the Directors of Industries in consultation with the consuming department.

Store imported from Europe to be obtained from Government.

Clause 14 - The contractor shall obtain from the stores of the Engineer-in-charge all such imported stores or materials as may be required in nay considerable in connection therewith. The value of such stores and articles as may be supplied to the contractor by the Engineer-in-charge will be debited to the contractor in his account at the rates shown in the schedules attached to the contract and if they are not entered in the schedules they will debited at the cost price, which for the purpose of this contract shall include the cost of carriage and all other expenses whatever which shall have been incurred in obtaining delivery for the same at the stores aforesaid. The Executive Engineer may issue materials to a contractor from existing stock if he asked for any excess of those enter in the schedules. In such case the price charges will be stock rate or the market rate whichever is greater.

Work to be executed in accordance with specification drawing orders, etc.

Clause 15 - The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner and in every respect in strict accordance with the specification both as regards materials and otherwise. The contractor shall also conform exactly, fully and faithfully to design drawing and instruction in writing relating to the work signed by the Engineer-in-charge and lodge

in his office and the contractor shall be entitled to inspect the same during office hours and may at his own expense have copies of the specifications and of all such designs, drawing and instructions and aforesaid made for his own use.

Alterations, specification and designs

Clause 16 - The Engineer-in-charge shall have power to make such alteration or addition to the original specifications, drawings, designs and instruction as may appears to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instruction which, may be given to him writing signed by the Engineer-in-charge and such alterations shall not invalidate the contract; and any additional work which the contractor may be so directed to do shall be carried out by the contractor on the same condition in all respect on which he agreed to the main work and at the same rates as are specified in the tender for the main work. The time for completion of the work shall be extended in the proportion that additional work bears to the original contract work and the certificate of the Engineer-in-charge shall be conclusive as to such proportions. If the additional work includes any items for which no rate is specified hereunder then the contractor shall carry out the work at the rate entered in the schedules of Rates of the District but if the schedules does not contain any rate for such work then the contractor shall not begin such work until a rate in respect of such work has been settled by mutual agreement between him and the Engineer-in-charge with the approval of the officer accepting the contract and if they are unable to agree upon a rate within two weeks from the date when the contractor received the order, the Engineer-in-charge may be a notice in writing cancel the ruder for such work and carry it out in such manner as he may think best. In the event of a dispute the decision of the Superintending Engineer shall be final and binding on the contractor.

No compensation or alteration in or restriction of work to be carried out.

Clause 17 - The Executive Engineer action on the written order of his immediate superior may at any time by notice in writing to the contractor either stop the work all together or reduce or cut in down. If the work is stopped altogether, the contractor will only be paid for work done and expenses legitimately incurred by him on or preparation for the execution of the work up to the date on which such notice is received by him such expenses shall be assessed by the Executive Engineer, whose decision shall be final and binding on the contractor. If the work is cut down the contractor will be paid for the work as so cut down but in neither case will be paid any compensation whatsoever for the loss of profit which he might have if he had been allowed to complete all work included in the tender.

Action and compensation payable in case of hand work.

Clause 18 - If the Engineer-in-charge is satisfied that the construction of any part of the work is faulty or that materials used in the same are inferior to those for which the specification provided or that any materials or articles provided by the contractor are not in accordance with the contract, has may not with standing that such work materials or articles may have been passed, certified or paid for, serve the contractor with notice in writing specifying the work materials or articles of which he complaints and requiring the contractor to remedy such defects or to replace such materials or articles within a specified period of time.

If the contractor fails to comply, in all respect with the requirement of any such notice within ten days after the expiration of the period specified in that notice the Engineer-in-charge may himself remedy such defects or as the case may be replace such materials or articles and contractor shall pay all expenses incurred by the Engineer-in-charge in so doing and the certificate in writing of the Engineer-in-charge as to the amount of any such expenses shall be final and binding upon the contractor.

Clause 19 - All works under or in course of execution or executed in pursuance of the contract shall at all times be open for inspection and supervision by the Engineer-in-charge and his subordinates and the contractor shall at

all times during the usual working hours, and on any other occasion of which he shall have had reasonable notice either himself be present to receive orders and instructions, or have responsible agent duly accredited in writing present for that purpose. Orders given to any such agent have the same effect as order given to the contractor himself.

Clause 19-A No laborer below the age of 12 years shall be employed on the work

Clause 19-B The contractor shall pay to his laborer a fair wages.

Clause 19-C The contractor before the commences work shall (a) post in conspicuous place on the work a notice giving the rates of wages have been certified as fair but the Executive Engineer and (b) send the copy of the notice to the Executive Engineer.

Clause 19-D- The contractor shall be bound and shall be responsible to comply with the provisions of the labour laws in force in state of Uttar Pradesh including the minimum wages Act of any enactment in supervision, extension or modification thereof which may be passed at any times from time to time by a competitive legislative body and may effect in the state of Uttar Pradesh and the Rules and Regulations made there under or any amendments or modifications thereof for the time being in force. All expenses in connection with the compliance of such laws and rules shall be borne by the contractor and the contractor shall neither demand nor claim shall be entitle to any additional payment for the reason that he failed to take into account any such expenses in his tender or that nay subsequent amendments in such laws or rules have changed basis on which he worked out such expenses while submitting his tender.

In every case in which by virtue of the provisions of the labour laws in force in the State of Uttar Pradesh and the rules and regulations made there under the Government is obliged to pay any sum in the execution of the work, Government will recover from the contractor the amount so paid and without prejudice to other rights of the Government the Government shall be at liberty to recover such amount or any part thereof by deducting it either from the security money deposited by the contractor or to his credit under clause I of theses conditions or deform any other sum due by Government to the contractor whether under this contract or otherwise.

Contractor or responsible agent to be present.

Clause 20 - In order that the work may be measured and the correct dimensions thereon taken the contractor shall not cover up any part of the same or otherwise place it beyond reach of measurement until he has either obtained the consent in writing of the Engineer-in-charge or his subordinate-in-charge of the work or until he has given to the Engineer-in-charge or such subordinate five days's notice in writing that the work is ready for measurement. If the contractor covers up any work or places it beyond reach of the measurement without such consent and before the expiration of the period of such notice. the contractor shall either as he may lector strip such work at his won expense in order that it may be measured or shall forfeit the price of such work and of the materials used in its construction.

Vide G.O. No. 1381-IBD-50/XXIII-IB-89_B-W dated May 26, 1

Notice to be given before work is covered up.

Clause 21 - All works to be executed under the contract shall be executed under the direction and subject to the approval in all respect of the Engineer-in-charge for the time being who shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried on.

Direction of work

Clause 22- Except where otherwise specified in the contract the decision of the Engineer for the time being shall be final conclusive and binding on all parties to the contract upon all question relating to the meeting of the specifications, designs, drawings and instructions herein before mentioned. The decision of such Engineer as to the quality of workmanship or materials used on the work or as to any other question claim right matter or thing whatsoever in any way

arising out of or relating to the contract design, drawing specification, estimates, instruction, order of these conditions or otherwise concerning the works or the execution of failure to execute the same whether arising during their progress of the work or after the completion or abandonment of the contract by the contractor shall also be final and conclusive and binding on the contractor.

Decision of Engineer to be final contractor liable for damages done and for imperfections for three months for certificate

Clause 23 - If the contractor or his work people or servants shall break deface injure or destroy any part of building in which they may be working or any building, road, fence, enclosure or grass land or cultivated ground contiguous to the premises on which the work or any part of it is being executed or if any damage shall happen to the work while in progress from any cause due to the negligence of responsibility (the decision of the Executive Engineer shall be final) the contractor shall at his own expense make good such damage or in default the Engineer-in-charge may cause the same to be made good and the contractor shall pay any expense so incurred and the certificate of the Engineer-in-charge as to the amount of such expenses shall be final and binding on the contractor.

Contractor to supply plant ladder, scaffolding etc.

Clause 24 - The contractor shall supply at his own cost all materials (except such special materials if any as may in accordance with the contract be supplied from the Engineer-in-charge's stores), plant, tools, appliances, implements, ladder, cordage, tackle, scaffolding and temporary works requisite or proper for the proper execution of the work, whether original, altered or substituted and whether including in the specification or other documents forming part of the contract or referred to in these conditions or not or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-charge as to any matter as to require and shall pay for the carriage of all such things to and from the work. The contractor shall also supply without charge workmen with the means and material necessary for the purpose of setting out of works and for counting weighing and assisting in the measurement or examination of the work or materials at any time. If the contractor shall pay the cost of the same as certified by the Engineer-in-charge whose certificate shall be final. The contractor shall also provide all necessary fencing and lights required to protect the public from accident and shall bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and shall also pay any damages and costs which may be awarded in any such suit action or proceedings to any such person or which may with the consent of the contractor be paid to compromise any claim by any such person.

Female labour not to be employed

Clause 25 - The contractor shall not employ female labour in the execution of the work or any part thereof within the limits of a cantonment.

Work not to sub-let

Clause 26 - The contractor shall not assign or sublet the contract without the written approval of the Engineer and if the contractor does or attempts so to do or becomes insolvent or commences any insolvency proceedings or makes attempts to make any composition with his creditors or if he or any of his servants or agents either directly or indirectly gives offers or promises any bribe, gratuity, gift, loan, perquisite, required or advantage pecuniary or otherwise to any public officer or person in the employ of the Government in any way relating to his office or employments or if any such officer or shall become in any way directly or indirectly interested in the contract without having first obtained the permission in

writing of the Government the Engineer may there upon by notice in writing rescind the contract and the security deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of the Government and the same consequences shall ensue as if the contract had been of the Government and the same consequences shall ensue as if the contract has been rescinded under clause-3 thereof and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

Sum payable by way of compensation be considered as reasonable compensation without reference to actual loss.

Clause 27 - Any sum payable by the contractor as compensation under any of these conditions shall be deemed to be reasonable compensation for the act or default in respect of which the same becomes payable without proof of the actual amount of damage or loss sustained.

Changes in constitution of firm

Clause 28 - In the case of a tender by partners the contractor shall state the name of the members of the firm and shall notify to the Engineer-in-charge any change in the constitution of the firm as soon as such change occurs.

Action where no specification

Clause 29 - In the absence of any class of work for which there is no such specification as is mentioned in the rule I such work shall be carried out in accordance with the district specification and if there is no district specification the work shall be carried out in all respects in accordance with instructions and requirements of the Engineer-in-charge.

Definition of work

Clause 30 - In these conditions unless there is something in the subject or context repugnant to such an interpretation the expression works mean the work to be done or executed under the contract or whether such work is permanent or temporary and whether it is original, altered, substituted or additional.

Contractor's percentage whether applied to net gross amount of bills (Strike out this clause in the case of an item rate contract)

Clause 31 - The additions and deductions on account of the percentage referred to at page 3 of the accepted tender will be calculated on the gross and not the net amount of the bills for the work done.

Compensation to workmen

Clause 32 - (1) In every case in which by virtue of the provisions of section 12 sub section (10) of the Workmen's Compensation Act 1932 Government is obliged to pay compensation to a workman employed by the contractor or by any sub contractor from his in execution of the work Government will recover from the contractor the amount of the compensation so paid and without prejudice to the rights of the Government under section 12, sub section (2) of the said Act, Government shall be at liberty to recover such amount or any part thereof by deducting it either from the security money deposited by the contractor or to his credit under clause I of these conditions or from any other sum due by the Government to the contractor whether under this contract or otherwise.

(2) Government shall not be bound to contest any claim made against it under section 12, sub section (1) of the said Act, except on the written request of the contractor and upon his giving to the Government full security for all costs for which Government might become liable in consequence of contesting the claim.

Clause 33 - Notwithstanding anything stipulated in the aforesaid clause Government shall have power to retain any sum due to the contractor(s) and set off all claims against him(them) whether arising out of the particular contract or out of any other transaction or contract held by him (them) alone or in partnership with others.

Clause 34 - All disputes in respect of this contract arising between contractor and the department will be put to the Superintending Engineer and his division shall be final and legally binding on both parties.

Clause 35 - Quantities are liable to variations on other sides without entitling the contractor to compensation on his account.

Clause 36 - Contractor shall himself make proper living accommodation water and sanitary arrangement etc for labour which ordinarily should be arranged through Employment Exchanged will give preference Ex-serviceman. He will have to remove any undesirables if order by the department.

Clause 37 - Claims not preferred within 48 hours of occurrence are liable to be rejected.

Clause 38 - No extra payment shall be made to the contractor for making profits and nausea in connection with the executing of work as per G.O. No. 355-3-B/6 XXIII-IB II dated 22-6-66

Clause 39 - During the course of construction if any emergency is forwarded due to any clause or claim of work the contractor shall send a registered notice to the Executive Engineer in charge within a fortnight of the origin of the claims. If he fails to do so on if he postpones of such claims till the completion of works he will be entitled to on compensation.

Clause 40 - The contractor shall not influence the workman directly or indirectly labour borne on the Muster Rool or by any other contractor by paying higher wages or providing extra facilities without the permission of the Executive Engineer and if does so contrary to the above will be responsible of the Executive Engineer as to the amount of such damage shall be final and binding on both parties.

Clause 41 - this agreement is subject to the standard specification the clearance of size shall be done by contractor at his own expenses.

Clause 42 - Income tax at the rate of 2% shall be deducted from the bill in terms of sub section (i) section 194(o) of Income tax Act XVI of 1972

Clause 43 - The contractor agrees to persuades all his labour and other Employees including casual labour employed by him to adopt family planning trochaics (including vasectomy and tube Tony) on lines with policies and programmed announced by the State Government from time to time in relation to the State Government from time to time in relation to the Sate Government so far as may be applicable and to furnish to Engineer in charge monthly report in this behalf.

No. 5032/76-23CE/1975-76 dated at Sept. 1976)

Schedules showing (approximate) materials to be supplied from Public Works Stores for works contracted to be executed and the rates at which they are to be charged for, vide clause 12 of Conditions.

Particulars	Rate at which the materials will be charged to the contractor			Place of delivery
	Unit	Rs.	P.	

Signature of Contractor

Signature of Sub-Divisional Officer

Executive Engineer

General Conditions of Contract

1.0 DEFINITIONS :

1.01 For the purpose of these specifications comprising of conditions of contract, technical provisions and annexures thereto and including list of corrections and amendments, the following words shall have the meaning herein assigned to them :

- a) The 'Government' shall mean the Government of Uttar Pradesh.
- b) The 'Governor' shall mean the administrative head of the State of Uttar Pradesh.
- c) The 'Engineer-in-Charge' shall be the Assistant Engineer/Executive Engineer-in-charge of works. The Engineer-in-charge may delegate any of his power to his authorized representatives. Wherever the word "Engineer-in-Charge" occurs in the list of the contract, it would be taken to imply the Engineer-in-Charge as aforesaid or his authorized representative or representatives as the case may be.
- d) The "Contractor" shall mean ... and shall include his legal representative, successors and assignees.
- e) The words "Specification" shall mean collectively all terms and stipulations contained in the conditions of contract, technical provisions and annexures, connections and amendments to the specifications.
- f) The words "Drawing" shall mean collective, all accompanying general drawings as well as detailed drawings which may be issued by the Engineer-in-charges from time to time during the period of construction.
- g) "Rate" or "Tendered Rates" shall mean the rates as entered in the "Schedule of quantities of bids" by the contractor and as accepted by the Government or its authorized representative.
- h) "Department" shall mean Irrigation Department, Uttar Pradesh.
- i) The word "Work Site" or "Site" shall mean the site of proposed works as detailed in the specifications or any other place where works are to be executed under the contract and such land in the vicinity of works as may be notified by the Engineer-in-charge at the work site.
- j) The words used in the contract in singular number shall be interpreted to include plural number & vice versa.

1.01 All work shall be carried out in accordance with U.P. Irrigation Department, entailed specifications, published under the order of Chief Engineer Department U.P. except in so far as they may be modified or supplemented by the specifications mentioned herein. In case, there is any inconsistency between the two, the specifications mentioned herein shall prevail. Specification number quoted herein refer to those given in the above mentioned book. In case, the specifications of any work is not given either in U.P.I.D. detailed specifications or the specifications mentioned therein the work shall be carried out in all respects in accordance with the instructions of Engineer-in-charge from time to time.

1.02 The Contractor shall not do any work other than that mentioned in the agreement without the written orders of the Engineer-in-charge. No claim, whatsoever, shall be entertained for any unauthorized work.

1.03 No claim shall be entertained by the Government in respect of any theft, loss or damage due to accident occurred for any reason whatsoever. The contractor shall be responsible for the safety of the materials issued to him for the work.

1.04 No claim shall be entertained for idle labour for any reason whatsoever.

1.05 The hours of work for the labour employed by the contractor shall subject to approval of the Engineer-in-charge. In case of emergent work the contractor may be called upon to continue the work round the clock. He will not be entitled to any extra rate on this account.

- 1.06 Claims for any cause whatsoever shall be preferred in writing by the contractor to the Engineer-in-charge within 3 days of occurrence of the event due to which the claim is being preferred.
- 1.07 No Claim shall be entertained by the Govt. in respect of any theft, loss or damage due to accident occurring for any reason whatsoever. The contractor shall be responsible for the safety of the material issued to him for the work.
- 1.08 The work shall not be deemed to have been completed unless the contractor makes the site clean to the satisfaction of the Engineer-in-charge. Site clearance shall include clearance of all debris etc. and disposal of same as per instructions of the Engineer-in-charge and dressing of ground around the work in suitable slopes for drainage. The contractor shall not be entitled for any payment on this account.
- 1.09 The contractor shall work amicably and cooperate with other contractors working side by side and shall carry out his work without disturbance to them.
- 1.10 If different ratio of cement and aggregated in cement concrete or mortar is ordered by the Engineer-in-charge, the rate provided in the agreement shall be altered by the difference in cost of cement only, calculated at the stock issue rate of cement.
- 1.11 For this purpose the consumption of cement shall be calculated as per schedule of consumption appended with the agreement.
- 1.12 Any valuable found at the site of work, (e.g. coins, fossils, relics or other articles of value) shall immediately be delivered to the Engineer-in-charge and shall be the property of the Government.
- 1.13 The contractor shall be provided with material for the work as per the terms and conditions given in schedule". All material except those mentioned in schedule "B" shall be arranged by the contractor himself and shall subject to the approval of the Engineer-in-charge. The consumption of material supplied by the Department shall be as per schedule.
- 1.14 All equipments, tools and plants, needed for the work shall be arranged by the contractor himself. Equipment to the extent available with the Govt. may be loaned to the contractor at the rates and conditions contained in schedule "D". Failure to supply such equipment on the part of the Govt. will not entitle the contractor for any claim or compensation.
- 1.15 2.3% Income Tax shall be deducted from every running bill of the gross amount of the bill i.e. including cost of material etc. under section 194C of Income Tax Act, 1972.
- 1.16 If Subsequent to the submission of his tender the tenderer amends-alter or modifies the contents of his tender which are not acceptable to the Govt, then the tenderer shall for the purpose of the aforesaid condition, be deemed to have withdrawn his proposal & the earnest money deposited by him may be forfeited.
- 1.17 The Engineer-in-charge shall have the right to take possession of, or use any completed part of work. Such possession or use shall not be deemed as taking over the work in accordance with the contract.
- 1.18 If any work executed under this contract does not conform to the specifications of this contract and if in the opinion of the Engineer-in-charge the work is substandard but not the Engineer-in-charge may accept such work as a substandard work at his decision. In case the Engineer-in-charge decides to accept any work or part there of substandard work, the payment in respect of such works shall be made at the reduced rates as determined by the Engineer-in-charge.
- 1.19 All the works during the progress and after the completion shall subject to technical audit. Any defects of materials or workmanship pointed out during such audit and established as such shall be rectified by the contractor at his own cost. Any recovery or reduction in rates, considered necessary shall be made

from the subsequent bills or securities of the contractor even if the work has been accepted by the Engineer-in-charge .

- 1.20 Extra item amount shall not be paid to the contractor for the work under water.
- 1.21 Unit of rates as shown in the bill of quantities should be carefully noted, as rates given by the contractor shall remain unaltered and no change on any account shall be entertained after the tenders have been opened.
- 1.21 No subcontracting of the work by the contractor will be allowed.
- 1.22 The contractor shall be responsible for the damages done to any property or any injuries to any person caused by him or by any body in his employment.
- 1.23 No claim for interest for damages will be entertained by the Government with respect to any money or balance which may be lying with the government owing to any dispute, differences, or misunderstanding between the Engineer-in-charge on one hand and the contractor the other hand or with respect to any delay on part of the Engineer-in-charge in making the periodical and final payments or in any other respect whatsoever.
- 1.24 Any defiance of the instructions of the Engineer-in-charge on the part of contractor will render the contractor liable to action under clause 3 of the conditions of contract (Form-111) annexed herewith.
- 1.25 Any find on the site of the work such as relics or articles of antiquity or other value or any hoards, materials etc shall be absolute property of the government and shall be handed over intact by the contractor to the Engineer-in-charge.
- 1.26 If the contractor dies or commits any act of bankruptcy or being a corporation commences to wind up except for reconstitution purpose, or carry on its business under receiver, the executor, successors or other representative in law of the estate of the contractor or any such receiver, liquidator or any person in whom the contract may become vested, shall forthwith give notice thereof in writing to the Government and shall for one month during which he shall take all reasonable steps to prevent stoppage of the work have the option of carrying out the contract subject to his or their providing such guarantees as may be required by the Government .
- 1.27 The Engineer-in-charge shall have the right to object to the employment or presence of any representative agent, labour or any other person of the contractor from work and work site for incompetence, negligence, misconduct and if considered undesirable in the interest of the work.
- 2.01 All materials arranged by the contractor shall be subject to approval by the Engineer-in-charge.
- 2.02 No claim for interest or damage will be entertained by the Government with respect to any money or balance which may be lying with the Government or may become due owing to any dispute, difference or misunderstanding between the Engineer-in-charge on the one hand and the contractor on the other hand or with respect to any delay on the part of the Engineer-in-charge in making periodical or final payment or in any other respect whatsoever.

Rates :

- 2.03 The rate shall include the cost of all labour, materials and T&P involved in all the operations described above. Rate shall be per Job per No.
- 2.04 Fabrication, supply and fixing steel rollers, gears, shafts and chequered plates etc.
- 2.05 The work consists of installation, supply and fixing of steel rollers in position at work site in the jurisdiction of Northern Division Ganga Canal, Roorkee as directed by Engineer-in-charge.

- 2.06 The electric welding work required for fabrication and fixing shall be done according to standard specification or as directed by Engineer-in-charge.
- 2.07 Fabrication work may also be done at work site. The welding set and other equipment required for fabrication and fixing of Rollers, Gears and Shafts etc shall be arranged by the contractor at his own cost.
- 2.08 Electric power may be supplied at work site free of cost as required by the contractor. The electric cable welding machine shall be arranged fixed by the contractor at his own cost. No claim for non-supply of electric power or power failure shall be entertained.
- 2.09 The steel required shall be purchased by the contractor from market.
- 2.10 The fabrication of rollers, chequered plate shall be done as per drawing attached. The size of steel rollers and design may change if so desired by Engineer-in-charge. The contractor will fabricate the rollers accordingly for which nothing extra shall be paid.
- 2.11 The rollers, gears, shafts, chequered plate etc fitted in gates of suitable size as decided by Engineer-in-charge.
- 2.12 The Strengthening of rollers gurdur shall be done by welded required shape in size plate by electric welding. The welding shall be done in full length on perimeter of the area which comes in contact with the two metails gurdur where they are to be jointed together.
- 2.13 In repairing of redicon and latching delatching arry all the parts must be used any standrad manufacture company and material also used standrad quality on as directed by Engineer-in-charge at site.
- 2.14 The servo coat in applying on the steel wire ropes after proper cleaning by wire brush.
- 2.15 The lubricants as gears, oil, servo coat must conform to the specified provisions.

Measurement and Payment :

- 2.16 The payment shall be done by actual measurement. The fabricated components shall be actual counted at work site. The measurement shall be recorded in measurement book by the Junior Engineer in presence of contractor or his authorised representative who will sign the measurements in token of his acceptance.
- 2.17The rate shall be quoted per Job as per Nos. including all cost of material, all taxes, fabrication charges, as per design, cost of welding rods and T&P required to complete the work, fixing in proper alignment and position by welding.
- 2.18The work proposed in the wetted parimeter of the channel shall be completed during closer period by the contractor incomplete work can not be paid.
- 2.19The work proposed in the wetted perimeter shall be completed in all the burst conditions by the contractor under aggrement rates. Nothing shall be paid extra (other than mentioned) for arrangements for the execution of contract works.
- 2.20Tenderars are advised for site visite before quoting their rates.

Executive Engineer
Northern Division Ganga Canal
Roorkee

T.S.

PAYING IN POSITION 8 SWG G.I. WIRE CRATES OF SIZE 3.00M X 1.50M X 1.0 M INCLUDING FILLING OF BOULDERS IN G.I. WIRE CRATES AND TYING OF THE CRATE, AFTER FILLING BOULDERS.

- 1- The work covered under this item shall include supplying and making G.I.wire crates of size 3.00m x 1.50m x 1.00m having openings of 15cms. x 15cms., carriage of the same up to the work site and laying the same in position filling boulder and tying properly after filling boulders.
- 2- The work shall be carried out as per I.D. Specifications.
- 3- G.I. wire of 8 SWG gauge shall be used.
- 4- Wire must be well Galvanized.
- 5- Wire mesh shall be of 15x15cms size opening.
- 6- The weight of wire crate shall be 35.10kgs, which shall be verified by Engineer-in-charge.
- 7- The boulders must be hard, sound and free from cracks.
- 8- Boulder size lesser than 15 cms shall not be used.
- 9- Wire crates shall be tied well after filling boulders.
- 10- Tendered rates shall include all cost of material, labour, T&P required for completion of work.
- 11- Measurements shall be in number of crates laid in position.

BOULDER FILLING BELOW CRATE

- 1- The boulders shall be as per condition mentioned above.
- 2- The boulders shall be packed as solidly and compatibly.
- 3- Measurement shall be taken as site of work and voids @ 10% shall be deducted.
- 4- The TENDERED RATES shall include the handling labour, T&P and filling including cost of boulder.
- 5- The boulders shall be stacked at site of work by the contractor at his own cost and shall be used after measurement taken by the representative of the Engineer-in-charge.

Rates : The TENDERED RATES shall include the cost of handling, labour, T&P for laying and placing them in position including cost of boulders.

Measurement of Filling Boulder

The quantity payable to the contractor shall be measured on the basis of actual measurement in CUBIC METRES (M³) as laid at site and deduction @ 10% for voids shall be made.

R.B.M. (Shoal/Shingle)

- 1- The work shall be carried out as per I.D. Specifications.
- 2- R.B.M./Shoal, Shingle shall be dug from the areas and in depth as directed by the Engineer-in-charge, prior to start of work and during Excavation.
- 3- The R.B.M. (Shoal/Shingle) consists of sand, shingle, clay etc. in Mixed Strata. It may be dry or wet. No extra rate shall be admissible for Execution of wet R.B.M. or under water.
- 4- All the work must be finished to the entire satisfaction of the Engineer-in-charge within the period of contract.
- 5- The contractor shall not be entitled to any claim in case of any change of quantity and reach of work.
- 6- The rates entered in the agreement are for complete work. Suitable rates shall be made, if the work is left incomplete or if only the easier portion of the work are carried out, the decision of the Executive Engineer in such cases shall be final and binding on the contractor.
- 7- Quantity and reach shown in Tender can be reduced as per site conditions. Nothing shall be paid extra for this change. The quantity of work done shall be Measured in CuM.
- 8- The initial measurement of pits and depression shall be measured or as directed by the Engineer-in-charge. The contractor shall start the work after obtaining the written permission by the Engineer-in-charge.
- 9- The rates includes labour, tools and Plants, required for execution and disposal of the material as per plan if required. The rates should be quoted in CuM.
- 10- Measurement shall be taken in Cubic Meter.
- 11- The tendered rates shall include excavation of shoal/shingle including all leads and lifts, leveling and dressing and proper disposal.

Providing & Filling RBM in Scoured Portion

- 1- RBM shall be river bed material well uniformly graded.
- 2- RBM shall be free from any impurities, organic material, silt or earth and any other weeds and chemical impurities.
- 3- The Sub- grade before laying the river bed material should be firm and if necessary lightly tamped or compacted. The RBM should be placed & tamped in such a manner that mixing of river bed material with base material may not occur.
- 4- Clean river bed material should have sufficient water content (3-10%) during placement and placement method shall be such that segregation is prevented.
- 5- Quantities of RBM for payments shall be based on finished section as per drawing. No voids shall be deducted.
- 6- The tendered rate shall include local carriage, handling, all leads and lifts, labour, all taxes, royalty, tools and plants required for proper completion of work including cost of material with carriage and stacking near work site as per direction of Engineer –in - charge.

Providing and Filling Earth in E.C, Bags and placing in position for making bund.

Good earth for filling in EC Bags shall be transported to site of work from the spoils of UGC near Jwalapur. Before filling, it shall be cleaned of all trees, bushes, vegetation, roots, rubbish etc. The earth shall be filled in EC bags properly and sewing their mouth with sutli and then placed as site for making bund including all leads and lifts.

The rates quoted shall include the cost of all labour and materials, including cost of carriage of good earth, cost of EC bags cost of sutli, labour and T&P required for filling and placing at site for making bund.

Providing and Filling Good Earth in Bund

Good earth for making bund shall be crated from the spoils of Upper Ganga Canal near Jwalapur to site of work. The earth shall be free from all types of trees, roots, bushes, vegetation, rubbish etc. The earth shall be laid in 25cm. thick layers between two rows of earth filled EC bags. The earth so placed in layers shall be compacted manually.

The tendered rate for this item shall include cost of earth, carriage, filling, compaction and all T&P and

labour etc required for completion of earth

Dewatering

1- All pumping of water for dewatering of foundation pit required for excavation and for placing of concrete below subsoil water level in floors and foundations etc and all other works performed in connection with dewatering shall be done by the contractor. This item of work covers all operations necessary for all the time, to keep the spring level adequately low to ensure the proper execution of works and also to ensure safety to works already constructed. It will inter alia include installation, operation, maintenance of pumping sets of suitable type, capacity and adequate in number for drawl of water from the area of construction, erection and maintenance of drawing flumes, pipe lines etc for disposal of the pumped out water installation and maintenance of electric lines etc. All other ancillary works also be included in this item of work.

2- **Magnitude of Dewatering**

Nothing can be said about the magnitude of pumping and the type of devices needed for drawl of water. The quantities of item of dewatering as given in schedule of bids are approximate and may vary to any extent on lower of higher side.

3- **In fructuous pumping to be Avoided**

a) To avoid in fructuous pumping dewatering operations are to be carried out with the approval of Engineer-in-charge and only when there is adequate and reasonable construction activity to warrant dewatering of the work area. In this respect the decision of the Engineer-in-charge shall be final and binding on the contractor.

b) The contractor will limit the pumping of subsoil water to the minimum commensurate with the working site conditions required for the execution of work. Similarly to have maximum efficiency the Horse Power of the Pumping sets should be commensurate with the discharge being lifted. If, at any stage or time the contractor is found resorting to over pumping or using sets of Horse Power greater

than actually required for proper working. The cost of Pumping efforts in excess of requirement, as determined by the Engineer-in-charge, will be disallowed to the contractor by suitably reducing the measurements, the decision of the Engineer-in-charges in this regard will be final and binding on the contractor and no claim whatsoever on this account will be entertained.

c) **Stand by Deesel Pumping Sets**

The contractor shall procure, install and always keep in readiness stand by diesel pumping sets of suitable capacity, adequate in number and at suitable locations to be used during power failure/shout downs so that the work is not materially dislocated or effected and to avoid damage to work, equipment and other installation and materials etc.

4- **Measurements and Payments**

- a) The payments for dewatering of foundations shall be made on the basis of Log Book indicating the running KwH of Pumps.
- b) The contractor shall employ diesel pumping sets for dewatering.
- c) For running the diesel pumping sets the contractor shall himself arrange for all POL at his won cost. He shall maintain proper books in such details as the Engineer-in-charge may require of running of diesel pumping sets for each shift of working and the same shall be got verified by the authorized representative of the Engineer-in-charge. Copies of log book entries made as specified here-in-before shall be submitted to the Engineer-in-Charge. No payment shall be made for the un-verified entries in the log books.
- d) The contractor shall have to complete all the works speedily which need dewatering operations. In case, the dewatering is carried out beyond the genuine requirement, it will be disallowed and will not be paid for the contractor.
- e) The contractor shall also be bound to carry out additional dewatering at his won coat, which has to be carried out due to the negligence on the part of the contractor.

25MM Thick Chequered Cement Plaster 1:3 CM

- 1- The work shall be carried out as per ID Specifications. The mortar shall consist of one part of cement and three parts of sand by volume. The thickness of the plaster shall be 25mm.
- 2- The depth of the groove to be cut on the plaster as per direction of the Engineer-in-charge. The surface after cutting of the grooves shall be uniform and smooth. The rates shall include cost of all material, labour etc. and shall be quoted per SqM of the surface area.

Raised and Cut Cement Pointing 1:3 CM

- 1- The work shall be carried out as per detailed ID Specification.
- 2- The mortar of one part of cement and three part of sand of FM not less than 1.5 shall be used. The mortar shall be prepared as per direction of Engineer-in-charge.
- 3- **Preparation of surface**
The joint shall be raked out properly. Dust and loose mortar shall be brushed out. Efflorescence if any shall be removed by brushing and scraping. The surface shall then be thoroughly washed with water, cleaned to keep wet before pointing is commenced.
The joints shall be raked not less than 12mm from the surface
- 4- Raised and cut pointing shall project from the wall surface with its edges cut parallel so as to have a uniformly raised band of thickness about 6mm and width 10mm or more as directed by the Engineer-in-charge. The pointing shall be finished smooth and hard.
- 5- **Curing**
The curing shall be done for a period of 7 days. During this period, the pointing shall be suitably protected from all damages.
- 6- **Measurements**
The measurement for this item shall be done in Square Metre of the finished surface.
- 7- **Rates**
The rate shall be for complete work including cost of all material, laobur and T&P proper completion of the work.

Cleaning Jungle

- 1- The Work shall be done in accordance with U.P. Irrigation Department detailed specification No-4 quoted in the book in year 1954. Other items for which there is no standard specification, shall be done as per details given in this document or as per directions of Engineer-In-Charge.
- 2- Quantities given in Schedule "C" are approximate and may vary to any extent that depends upon the site condition and requirement of work. No claim in this regard, what so ever will be entertained.
- 3- It is advised to contractor to see the site before giving Tender.

- 4- Before starting to clean the Jungle in having over growth, the measurement shall be recorded by Junior Engineer concerned in presence of Contractor.
- 5- Within the area described and required as site shall be cleaned away by any means of cutting Jungle as Talvar etc.
- 6- All woods, jungle, bushes and splings shall be cutting down by any sharp edge tools without uprooting.
- 7- All works during clearing shall be filled with earth well rammed and neatly levelled of.
- 8- It is advised to contractor that when he use to clean jungle of inner slopes and berm of canal he should take more care regarding which he should engage such type of labour that can swim very well. For any casualty there will be no responsibility of Department that is the risk of contractor.
- 9- The cutting of Jungle and Bushes shall be disposed of as per direction of Engineer-In-Charge.
- 10- All the Jungle shall be cleared as per measurement recorded, no payment shall be given of remaining quantity.

Strengthening of Bank

Earth work

- 1- Earth Work shall be carried out in accordance with the plan and section of work as per direction of Engineer-in-Charge. The earth shall be used for strengthening Bank of Canal which shall be well compacted by manual.
- 2- The tendered rate for this item shall includes cost of earth, lead, lift, filling, compaction etc.
- 3- Final measurement shall be based on X-sectional measurement and the payment shall be done accordingly.

Earth Work

- 1- Earth Work shall be carried out as per direction of Engineer-in-Charge. The earth shall be used for repair of bunds of Upper Ganga Canal which shall be well compacted and dressed.
- 2- Earth shall be taken beyond 2.00Km from the site of work by power transport.
- 3- The tendered rate for this item shall be includes cost of earth, lead, lift, filling and compaction.
- 4- Final measurement shall be based on pit measurement and the payment shall be done accordingly.

Cement Concrete

SAND :

- 1- Fine aggregate shall be obtained either by screening excavated material or from any otehr natural source or shall be crushed from boulders. The source from which the sand is obtained shall be subjected to the approval of Engineer-in-charge.
- 2- Fine aggregate shall conform to I.D. specification No-8 and relevant I.S. code for fine aggregates.
- 3- Sand to be used shall be clean, sharp coarse and gritty to the touch. It shall be free from excess of mica, silt, slate particles or organic impurities. The sand shall be free from any chemical impurity likely to be injurious to the cement mortar of concrete. Silt content shall not be exceed 5% by wt. In brick work and concreting Ganga sand shall be used with F.M. not less than.

Cement

- 1- Cement required for the work shall be supplied to the contractor at the departmental store as per Schedule "C" in the bags received from the factory. The cement content in one bag shall be taken as fifty Kg.
- 2- The Govt. will not be responsible in any manner. If the cement in bags issued to the contractor form any stores are found to contain less than 50 Kg. of cement per bag. The cost of cement in bags under all circumstances will be charged on the basis of number of bags supplied and at the rates specified here in above irrespective of the actual weight of cement contained in the bags. Under no circumstances the cement arranged from any other source except supplied by the deptt. shall be allowed on works.
- 3- Cement shall be issued at the rate of Rs. 286.00 per bag. Any excess consumption will be recovered at the double rate of Rs. 572.00 per bag. Empty cement bags in the good conditions shall be returned by the contractor to the deptt. unreturned empty cement bages will be recovered at the rate used for other bonafide use such as construction of bench marks, reference pillars of curing etc. shall be recover at the normal rates of the Rs. 286.00 per bag and Rs. 2.00 per empty bag up to the satisfaction of Engineer-in-charge.

Bricks :

- 1- The bricks shall be locally best available and their quality shall conform to I.D. specification No-19 and shall be got approved by Engineer-in-charge.

Coarse Aggregates :

- 1- Well graded aggregate crushed or natural 5-20mm shall be used in concrete and shall be free from sand and any organic or objectionable matter.
- 2- It shall be from approved quarry and shall be approved by Engineer-in-charge at the site of work before use.
- 3- It shall conform to I.D. specification No-17 and shall be graded as per I.S. code 383- 1970 of this latest amendment.

Water :

- 1- Water to be used for concreting, mortar, curing of brick work shall be clean and free from injurious material such as alkalis and other organic material.
- 2- This work includes the work of concreting in foundation and all other concrete work.
- 3- The water cement ration shall be kept so as to ensure a plastic and workable mix.
- 4- The concrete shall be laid in the manner and according to the dimensions as shown in drawings.
- 5- The concrete shall be mixed with the help of a concrete mixer or otherwise as directed by the Engineer-in-charge. The concrete mixer shall be arranged by the contractor himself. The concrete once mixed shall be used within 30 minutes of the mixing and any quantity not laid during this period shall be rejected for laying.
- 6- Concrete shall be consolidated to the maximum practicable density by vibrators, so that it is free from pockets of coarse aggregates and entrapped air.
- 7- Concrete shall be saved from any possible injury after its placement. Fresh exposed concrete shall also be saved from the effect of rains etc.
- 8- The work shall be carried out generally as per I.D. specifications No-31 and relevant I.D. codes for concrete work.
- 9- No separate payment shall be made for any forms and scaffolding required for the cement concrete work. The cost of the same shall be deemed to be included in the price rate of various item of cement concrete.
- 10- The rate of this item shall include cost of all material, labour and T&P etc forms and scaffolding required to complete the work as per above specifications.

1st Class Brick Work in 1:3/ 1:4 Cement Mortar

- 1- This work includes brick work in wall and all other brick work masonry.
- 2- The brick used shall be best locally available.
- 3- The brick/tiles shall be soaked in clean water for a period of at least 6 hours immediately before use.
- 4- All the best shaped and most uniformly colored brick/tiles shall be picked out and used for face work.
- 5- The mortar used shall be in the ration of one part of cement to three parts of sand by weight.
- 6- The mortar shall be used within 30 minutes of making it and in case of delay it shall be thrown out as per directions of Engineer-in-charge.
- 7- Proper water cement ration shall be maintained to make the mortar workable.
- 8- Thickness of joints shall not exceed 12.50mm or as specified by the Engineer-in-charge.

- 9- A layer of mortar shall be spread on full width over a suitable length of the lower course. Each brick/tile shall be properly bedded and set home by gently tapping with handle of trowel or wooden mallet. Its inside faces shall be buttered with mortars before the next brick is laid and pressed against it. On completion of course all vertical joints shall be fully filled from the top.
- 10- Fresh work shall be protected from rain by suitable covering and masonry work shall be constantly kept moist on all faces for a minimum period of 10 Days.
- 11- For the construction of wall proper scaffolding shall be designed and constructed to withstand all the live, lead and impact loads which are likely to come on them to ensure the safety of workman using them.
- 12- In no case the height of masonry shall be raised more than 40cm. In a day to above crushing of mortar.
- 13- The tendered rate of this item shall include cost of material, labour and T&P etc required to complete the work as per above specification.

Deep Struck Cement Pointing in 1:3 CM

- 1- This work includes pointing on outer face of brick work and on all other work.
- 2- As a rule pointing shall be done whilst the mortar in the joints is still green and it shall be done by striking off the edge of the original mortar to a slope.
- 3- The mortar used for the pointing shall be in the ratio of one part of cement to three parts of sand by weight. Proper water cement ratio shall be maintained.

- 4- In no case mortar shall be spread over the outer face of the bricks. The bricks must be kept clean, after pointing is completed all mortar shall be washed from the face which shall be kept wet for seven days for cutting.
- 5- The tendered rate shall include cost of all material, labour and T&P etc for proper completion work.

Boulder Filling in Scoured Portion

- 1- The boulder shall be hard, clean, non porous and composed of rough and non laminated.
- 2- Measurement shall be taken at site of work and voids shall be deducted @ 10%
- 3- The Tendered Rates shall include the handling, filling, labour, T&P i/c. cost of boulders.
- 4- The boulder shall be stacked at site of work by the contractor at his own cost and shall be used after measurement taken by the representative of the Engineer-in-Charge.
- 5- Rates : The Tendered Rates shall include the cost of handling, labour, T&P for laying and placing them in position including cost of boulders.
- 6- Measurement of filling boulders : The quantity payable to the contractor shall be measured on the basis of actual measurement in Cubic Metres (M³) as laid at site and deduction for voids @ 10% shall be made.

Boulder Pitching

- 1- The boulder shall be hard, clean, non porous and composed of rough and non laminated.
- 2- The boulder may be quarried either from jakhan or jwalapur and the quality shall be got approved by the Engineer-in-Charge.
- 3- The boulder may be 20 to 40kg weight and minimum size of boulder shall not be less than 150mm but not less than 225mm in any one direction.
- 4- Pitching consisting of specified thickness as directed by Engineer-in-Charge.
- 5- The tender rate shall be for completion of work including collection, cost carriage of material, handling, placing and packing in layer, T&P etc. complete and other incidental charges required for completion of the work satisfactorily as per specification.
- 6- The boulder shall be hand packed and laid systematically and finally to the grade of specified thickness. The packing of the boulder shall be perfectly tight in position leaving minimum voids. The boulder shall be so tightly packed so that no boulder shall be removed by hand.
- 7- The work of boulder pitching shall be measured in CuM and no voids deduction shall be made.

Painting Work

All the painting work should be done on clean surface as per ID Specification.

The surface on which the painting work will be done, will be scraped thoroughly.

The material of paint should be of branded company as per instruction of Engineer-in-charge.

The painting work will be done by skilled painter

Earth work in Excavation

Before commencement of excavation in any reach the contractor shall obtain in writing from the Engineer-in-charge instructions and schedule of quantities in regards to the disposal and utilisation. The contractor shall excavate whatsoever substance may be encountered to the depth of excavation. Excavation to be carried out shall conform strictly to the plans and levels. All roots or other protruding material shall be removed by the contractor at his own cost. Excavation below the prescribed level will not be paid. Excess excavation below required level or on side slopes shall be backfilled at contractor's cost with subgrade material and thoroughly compacted as per direction of Engineer-in-charge. However in case excess excavation is carried out to remove uncompacted loose material under written orders of Engineer-in-charge. Such excess excavation shall be measured and paid under this item. During the excavation of the work the contractor shall be responsible for the maintenance. Any damage to the work already executed shall be made good by him. The Excavated earth will be disposed of upto 500M as per direction issued by Engineer-in-charge in this regard. The rate of this item of work shall be quoted per CuM of earthwork which shall be for complete item of work i.e. inclusive of all operation under this item viz. excavation of any type of earth met with its proper disposal with all leads and lifts, compaction if required, dewatering wherever proper finish and fine dressing.

1:2:4 CEMENT CONCRETE:

Entire surface area of boulder pitching shall be cleared from bushes & thorny jungle.

Jungle shall be disposed of away from the outer toe of the boulder pitching.

Jungle/ bushes shall not be burnt on boulder pitching by the contractor.

Nothing shall be paid extra to the contractor for the clearance of the site.

Damaged boulder pitching shall be repaired by the contractor.

Loose boulder pitching shall be packed or relaid by the contractor on his own cost.

Proportioning of concrete :

The proportion of all the materials entering into the concrete shall be as directed by Engineer-in-charge. Laboratory tests to determine the strength of concrete produced shall be permitted by the Government at frequent intervals. Should those tests indicate the necessity of adding more cement than specified in schedule 'C' depending upon the size, type and gradation of aggregate and structural requirements as determined by the Engineer-in-charge, he will intimate in writing to the contractor the extra quantity of cement to be added in addition to the proportions fixed and the contractor will carry out the instructions. The cost of this additional cement shall be payable to the contractor at Rs. 286.00 per 50 Kg. of cement.

Similarly if on the basis of laboratory test the contractor is required to use less cement than specified in the proportions a corresponding reduction in rate for less consumption of cement will be made at the rate of Rs. 286.00 only per 50 Kg. of Cement.

Concrete mix shall be designed to use the largest size and the maximum amount of coarse aggregate placeable in the various parts of the structure.

LAYING GROUTING IN 1:2:4 CEMENT CONCRETE IN VOIDES OF BOULDER PITCHING FOR GROUTING WORK :

It shall be approved by the Engineer-in-charge at the site of quarry before it is actually carried to site of work and shall conform to I.D. Specification No.-17 and shall be graded as per I.D. Code No.-383 with tolerances allowed.

BATCHING AND MIXING CONCRETE BY WEIGHT/VOLUME:

Batching of ingredients of concrete shall be done by weight/volume for the prescribed mix design. For weight batching, the plant should be able to handle all the grades of coarse aggregates, Fine aggregate, water and cement. The contractor shall maintain a record of the number of batches mixed and all other details required for checking the correctness of the mix as per directions of the Engineer-in-charge. No hand mixing shall be allowed.

PLACING OF CONCRETE :

Concrete shall be done rapidly into the corners and angles of the forms without permitting the material to segregate. The work shall be carried out as per detailed I.D. Specification No.-31 and to the entire satisfaction of the Engineer-in-charge and the method of laying shall be subject to the approval of Engineer-in-charge, so as to make it suitable for receiving fresh layers of concrete. No extra charges shall be payable to the contractor for this work.

CURING AND PROTECTION :

Concrete shall be suitably protected from injury until final acceptance, giving particular care to all corners and edges. All horizontal surfaces shall be continuously kept wet till the time of next pouring or curing required for proper setting of concrete. All water used in curing, shall be free from excessive amount of silt, colouring matter and other impurities which may stain the finished work.

MEASUREMENT AND PAYMENT :

Measurement of concrete for payment will be made only to the lines of structures as indicated in the drawing or as subsequently modified by the Engineer-in-charge. Length & width shall be measured correct to a centimeter and area shall be calculated correct to two places of decimal for the payment of grouting work. The tendered rate shall include the cost of cement, all other ingredients, shuttering, curing, clearance of site from bushes, packing of loose boulders & relaying of damaged pitching including all labour and T & P etc. required for the proper execution of the work.

1:2:4 Cement Concrete with 20 % Plum

Blocks of concrete of size 1.50 M x 1.50 M x 1.00 M will be precasted at the site and will be placed in position as directed by Engineer-in-charge. 1:2:4 Cement concrete shall be prepared as per specifications enclosed for 1:3:6 C.C. Cement concrete placed in three layers for one meter height of C.C. block. Plum of 100-150 mm. size shall be used in three layers of approximate 0.07 m³ each. 20 cm. C.C. cover shall be provided to wards the surface of the block. C.C. Plum block shall be casted as per drawing 1.50 x 1.50 x 1.0 m. Dimensions of C.C. Plum block may be changed as per drawing

& site conditions but height 1.0 m. shall not be changed. No block shall be casted with more than 20 % quantity of Plum. No. Plum shall be visible on surface of the block.

CENTERING & SHUTTERING

Centering & Shuttering used for cement concrete work will conform to the I.S. specifications and directions issued by Engineer-in-charge in this regard. No extra payment will be made to the contractor for this cause.

SOAKING OF BRICKS :

All bricks shall be soaked in clean water in tanks for a period of at least 12 hours immediately before use & the contractor shall provide tanks of sufficient capacity to admit simultaneous immersion of two day's supply of bricks for the work at its normal rate of progress.

Mortar shall consist of Portland cement and sand as per specifications mixed by volume in the proportion 1:4 or as per mix design or as directed by the Engineer-in-charge. Mortar should be mixed by manual labour or by mixer. For hand mixing sand and cement shall be measured separately giving the required quantity by volume. Dry sand and cement shall be stacked on a pucca platform and the required quantity of both shall be mixed dry properly. Afterwards it shall be mixed by adding clear water to have workable consistency and mixing thoroughly by turning several times to obtain uniform colour.

LAYING :

All the best shaped and most uniformly coloured bricks shall be picked out and used for face work. No mortar joint shall exceed 10 mm. in thickness and the joints shall be filled with mortar fully. Bricks shall be laid with frogs upward except in the top course. Vertical joints in alternate course shall come directly over one other. Each brick shall be set with horizontal and vertical joints full of mortar. No damaged or broken bricks shall be used in any part of the work except such as are cut to size for closing a course. The face of brick work shall be cleaned and subsequently kept cleaned of all mortar.

CURING :

During construction brick work shall be protected from the effect of sun, frost and rain by provision of suitable covering. The brick work shall be kept wet for a period of atleast 16 days after laying.

MEASUREMENT AND PAYMENT :

Measurement of brick work shall be made of the actual masonry placed between the lines shown on the drawing or as directed by the Engineer-in-charge and shall be paid at the unit price provided in the schedule of bids.

RATE :

Tendered rate shall include cost of all materials, labour, T & P, centering and shuttering, all taxes etc. and shall be for complete finished work in cubic meter.

Plastering Cement Mortar

The joint of the brick work shall be raked out to depth of 18 mm and surface of the all shall be washed and kept wet for two days before plastering. The materials of mortar, cement and sand shall be of standard specification. The thickness of plastering shall be as specified. The work shall be tested frequently with a straight edge and plum bob.

Curing shall be started as soon as the plaster has hardened sufficiently not to be damaged when watered.

White Washing and Snowcem Washing

The surface of the application should be dry and thoroughly clean from dust and dirt. The wash shall be applied with moonj or jute brush vertically and horizontally alternately. In old surface the surface should be cleaned and repaired with cement mortar where necessary and allowed to dry before white washing applied. Only fresh snowcem should be used.

Before application the surface should be cleaned to remove loose dust or dirt by use of soft wire brush. The surface shall then be wetted by sprinkling with water.

After a day or two a second coat of snowcem of similar preparation should be applied on the wetted surface with care to give a uniform and good finished appearance.

Wet (Shoal / Silt) Excavation

- 1- The work shall be carried out as per I.D. Specifications.
- 2- Wet (Shoal / Silt) Excavation consists of sand, shingle, clay etc. in Mixed Strata. It may be dry or wet. No extra rate shall be paid to the contractor.
- 3- All the work must be finished to the entire satisfaction of the Engineer-in-charge within the stipulated period of contract.
- 4- The contractor shall not be entitled to any claim in case of any change of quantity and reach of work.
- 5- The rates entered in the agreement are for complete work. Deduction shall be made, if the work is left incomplete or if only the easier portion of the work are carried out, the decision of the Executive Engineer in such cases shall be final and binding on the contractor.
- 6- Quantity and reach shown in Tender can be reduced as per site conditions. Nothing shall be paid extra for this change. The quantity of work done shall be Measured in CuM.
- 7- The contractor shall start the work after obtaining the written permission by the Engineer-in-charge.
- 8- The rates includes labour, tools and Plants, required for execution and disposal of the material as per plan if required. The rates should be quoted in CuM.
- 9- Measurement shall be taken in Cubic Meter.
- 10- The tendered rates shall include excavation of shoal/shingle including all leads and lifts, leveling and dressing and proper disposal.
- 11- Ramps made by contractor for transportation of excavated material shall be finished by the contractor after completion of internal work.
- 12- Disposal of excavated material shall be done as per direction of Engineer In Charge.

R.C.C. Pipe 6" Dia & 4" Dia

- 1- R.C.C. Pipe shall be provided by the Department from Govt. Store at Dudhiya bund (Hwr)
- 2- Recovery of pipe & collar shall be made from the contractor on Stock issue rates.
- 3- Unused pipe/ collar shall be returned by the contractor in good condition otherwise the recovery at the double rate of the stock issue rates shall be made from the bill of the contractor.
- 4- Pipe of size 4" dia or 6" dia shall be fixed by the contractor at site according to outlet register .
- 5- Pipe fixed by the contractor which is not sanctioned as be outlet register shall be replaced by the contractor on his own cost.
- 6- Joint to joint pipes shall be made with proper size of collar & leak proof.

25 MM Thick Ornamental Cement Plaster 1:3 CM

- 1- The work shall be carried out as per ID Specifications. The mortar shall consist of one part of cement and three parts of sand by volume. The thickness of the plaster shall be 25 mm.
- 2- The depth of the groove to be cut on the plaster as per direction of the Engineer-in- charge. The surface after cutting of the grooves shall be uniform and smooth. The rates shall include cost of all material, labour etc. and be quoted per SqM of the surface area.

तकनीकी विशिष्टताएं एवं शर्तें

1. ठेकेदार को निविदा उल्लिखित कार्य विभागीय ड्राइंग, आई0डी0 स्पेसिफिकेशन्स तकनीकी शर्तों एवं समय समय पर इंजीनियर इन्चार्ज द्वारा दिये गये निर्देशों के अनुसार बाँध के गेटो के यांत्रिक अनुरक्षण एवं मरम्मत के कार्य साइट पर कराने होंगे।
2. निविदा में उल्लिखित कार्य को सम्पादित कराने हेतु आवश्यक समस्त टी0 एण्ड पी0 जैसे –ग्रीसगन वैल्डिंग मशीन, ड्रिलिंग मशीन, ग्राइण्डर, गैस कटिंगसैट, गैस सहित बियरिंग पुलर चैनपुली ब्लॉक, जनरेटिंग सैट व अन्य वांछित जिक्स एण्ड फिक्चर्स व टूल्स स्केफोल्डिंग, आवश्यक सन्ड्रीज आदिका प्रबंध ठेकेदार को साइट पर स्वयं के खर्च पर करना होगा।
3. निविदा में उल्लिखित कार्यों को सम्पादन हेतु प्रयोग में आने वाली समस्त सामग्री व रॉ मैटीरियल निर्धारित मानक/आई0 एस0 कोड के अनुसार प्रबंध कराने के उपरान्त इंजीनियर इन्चार्ज से चैक करने के बाद कार्य के सम्पादन में प्रयोग किया जायेगा।
4. उक्त कार्य हेतु ठेकेदार के अनुभवी दक्ष एवं कार्यकुशल रिगर्स मैकेनिक /फिटर बैल्डर गैस कटर तथा हैल्पर आदि लगाने होंगे जो कि बाँध की विभिन्न ऊँचाईयों पर झूले से लटक कर कार्य करने की दक्षता एवं क्षमता रखते हो।
5. कार्य की गुणवत्ता एवं वर्कमैनशिप उच्च स्तर की बनाये रखनी होगी।
6. कार्य के सम्पादन के दौरान किसी भी प्रकार की दुर्घटना एवं सामान्य की चोरी आदि की जिम्मेदारी ठेकेदार को वहन करनी होगी।
7. ठेकेदार को विभाग द्वारा निर्गत सामग्री की सुरक्षा एवं साइट पर दुलाई (लोडिंग –अनलोडिंग) आदि स्वयं के खर्च पर करनी होगी। यदि सामग्री में कोई क्षति होती है तो इसकी प्रतिपूर्ति कराने की जिम्मेदारी ठेकेदार की होगी।
8. विभाग द्वारा निर्गत सामग्री की अधिक खपत होने पर अथवा चोरी की दशा में ठेकेदार से सामान के विभागीय इश्यू रेट के दुगने मूल्य की दर से उसके बिल की बसूली की जायेगी।
9. उक्त कार्य के प्रयोग आने वाले नट बोल्ट आदि आई0एस0 कोड-1364 के अनुसार प्रबंध करके लगाने होंगे।
10. टी-100 के स्थान पर इंगल आईरन 65X65X8एमएम का टी बनाकर भी लगाया जा सकता है।
11. प्लेट आईरन 40X6एमएम ड्राइंग के अनुसार ही लगानी होगी।
12. ठेकेदार को बैल्डिंग कार्य आई0एस0कोड 823व 9595-1960 के अनुसार आई0 एस0 मार्क क्वालिटी के बैल्डिंग रॉड प्रबंध करके सम्पादित करना होगा।
13. सम्पादित कार्यों की चैकिंग /टैस्टिंग ठेकेदार को अपनी उपस्थित में सुचारु रूप से करानी होगी। उक्त प्रक्रिया के दौरान यदि कोई भी कमी पायी जाती है तो इस कमी को ठेकेदार को अपने स्वयं खर्च पर ठीक कराना होगा। कार्य संतोषजनक पाये जाने पर भुगतान किया जायेगा।
14. पेन्टिंग कार्य के लिए आव यक पेन्ट निर्धारित मानक के अनुसार उच्च गुणवत्ता के भालीमार/बर्जर एं गियन पेन्ट का ही प्रयोग ठेकेदार द्वारा अपने खर्च पर लगाना होगा।

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