

Audyogik Kendra Vikas Nigam, Rewa (M.P.)

“New Collectrate Building”, Room No.12, Rewa, MP

Tender Document For Percentage Rate only

Office of the – Managing Director, “New Collectrate Building”, Room
No.12, Rewa, MP

NIT Number and Date	:	<u>2083 to 2085 dated 25/01/2018</u>
Agreement Number and Date	:	
Name of work	:	Construction of industrial Infrastructural Development Works for Upgradation of Industrial Area, At Udyog Vihar churatha, Dist. Rewa, M.P. SECOND CALL
Name of the Contractor	:	
Probable Amount of Contract		
(Rs. in Figure)	:	1894.49 Lacs
(Rs. in Words)	:	Eighteen Crore Ninty Four Lakhs forty eight thousand nine hundred and sixty six.
Contract Amount		
(Rs. in Figure)	:	
(Rs. in Words)	:	
Stipulated Period of Completion	:	12 months including the rainy season

(Tender Document)

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SECTION 1

Notice Inviting e-Tenders

Audyogik Kendra Vikas Nigam, Rewa (M.P.)

“New Collectrate Building”, Room No.12, Rewa, MP

N.I.T. No.2083 to 2085

Date:-25-01-2018

Online percentage rate bids for the following works are invited from registered contractors and firms of repute fulfilling registration criteria:

S. No./Pkg/Code	Work	District(s)	Probable Amount (Rs. in lakh)	Completion Period (months)
1	Construction of industrial Infrastructural Development Works for Upgradation of Industrial Area, At Udyog Vihar churatha, Dist. Rewa, M.P.	Dist.- Rewa	1894.49	12 months including the rainy season

1. Interested bidders can view the NIT on website www.mpakvnrewa.com
2. The Bid Document can be purchased only online from **29-01-2018 17:30 to 12-02-2018 17:30**
3. Amendments to NIT, if any, would be published on the website only, and not in the newspaper.

Managing Director

Notice Inviting Tender

Audyogik Kendra Vikas Nigam, Rewa (M.P.)

Office of the – Managing Director,
“New Collectrate Building”, Room No.12, Rewa, MP

N.I.T. No. 2083 to 2085

Date: -25-01-2018

Online percentage rate bids for the following works are invited from registered contractors and firms of repute fulfilling registration criteria:

S. No./ Pkg/ Code	Name of work	District(s)	Probable Amount of Contract (Rs. in Lakh)	Earnest Money Deposit (EMD) (In Rupees)	Cost of Bid Document (In Rupees)	Category of Contractor	Period of Completion (In Months)
1	Construction of industrial Infrastructural Development Works for Upgradation of Industrial Area, At Udyog Vihar churatha, Dist. Rewa, M.P.	Dist.- Rewa	1894.49	19,00,000/-	30,000/-	Centralised MP PWD REGISTER ED	12 months including the rainy season

1. All details relating to the Bid Document(s) can be viewed and downloaded free of cost on the website.
2. Bid Document can be purchased after making online payment of portal fees through Credit/Debit/Cash Card/internet banking.
3. At the time of submission of the Bid the eligible bidder shall be required to:
 - i) pay the cost of Bid Document;
 - ii) Deposit the Earnest Money;
 - iii) Submit a checklist, and
 - iv) Submit an affidavit.

Details can be seen in the Bid Data Sheet.

4. ELIGIBILITY FOR BIDDERS:

- A. At the time of submission of the Bid, the bidder should have a valid registration with the Government of Madhya Pradesh, PWD in the appropriate class. However, such bidders who are not registered with the Government of Madhya Pradesh and are eligible for registration can also submit their bids after having applied for registration with the appropriate authority.
 - B. The bidder would be required to have valid registration at the time of the signing of the Contract.
 - C. Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the earnest money deposit.
5. Pre-qualification – Prequalification conditions, wherever applicable, are given in the Bid Data Sheet.
 6. Special Eligibility - Special Eligibility Conditions, if any, are given in the Bid Data Sheet.
 7. The Bid Document can be purchased only online from **29-01-2018 17:30 to 12-02-2018 17:30**
Other key dates may be seen in bid data sheet.
 8. Amendments to NIT, if any, would be published on the website only, and not in the newspaper.
 9. GST Registration certificate is mandatory and is part of minimum eligibility criteria.

Managing Director

SECTION 2

INSTRUCTIONS TO BIDDERS (ITB)

A. GENERAL

1. Scope of Bid

The detailed description of work hereinafter referred as 'work', is given in the Bid Data Sheet.

2. General Quality of Work:

The work shall have to be executed in accordance with the technical specifications specified in the Bid Data sheet/Contract Data, and shall have to meet high standards of workmanship, safety and security of workmen and works.

3. Procedure for Participation in E-Tendering

The procedure for participation in e-tendering is given in the Bid Data Sheet.

4. One bid per bidder

4.1 The bidder can be an individual entity or a joint venture (if permitted as per Bid Data Sheet). In case the J.V. is permitted, the requirement of a joint venture shall be as per the Bid Data Sheet.

4.2 No bidder shall be entitled to submit more than one bid whether jointly or severally. If he does so, all bids wherein the bidder has participated shall stand disqualified.

5. Cost of Bidding

The bidder shall bear all costs associated with the preparation and submission of his bid, and no claim whatsoever for the same shall lie on the Government.

6. Site visit and Examination of Works

The bidder is advised to visit and inspect the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the work. All costs in this respect shall have to be borne by the bidder.

B. BID DOCUMENTS

7. Content of Bid documents

The Bid Document comprises the following documents:

1. NIT with all amendments.
 2. Instructions to Bidders, Bid Data Sheet with all Annexure
 3. Conditions of Contract:
 - i. Part I General Conditions of Contract and the Contract Data with all Annexure and
 - ii. Part II Special Conditions of Contract.
 4. Specifications
 5. Drawings
 6. Priced Bill of Quantities
 7. Technical and Financial Bid
 8. Letter of Acceptance
 9. Agreement, and
 10. Any other document(s), as specified.
8. The bidder is expected to examine carefully all instructions, conditions of the contract, the contract data, forms, terms and specifications, bill of quantities, forms and drawings in the Bid Document. Bidder shall be solely responsible for his failure to do so.
9. Pre-Bid Meeting (where applicable)

Wherever the Bid Data Sheet provides for the pre-bid meeting:

- 9.1 Details of venue, date and time would be mentioned in the Bid Data Sheet. Any change in the schedule of the pre-bid meeting would be communicated on the website only, and intimation to bidders would not be given separately.
- 9.2 Any prospective bidder may raise his queries and/or seek clarifications in writing before or during the pre-bid meeting. The purpose of such meeting is to clarify issues and answer questions on any matter that may be raised at that stage. The Employer may, at his option, give such clarifications as are felt necessary.
- 9.3 Minutes of the pre-bid meeting including the gist of the questions raised and the responses given together with any response prepared after the meeting will be hosted on the website.

9.4 Pursuant to the pre-bid meeting if the Employer deems it necessary to amend the Bid
The document, it shall be done by issuing an amendment to the online NIT.

10. Amendment of Bid Documents

10.1 Before the deadline for submission of bids, the Employer may amend or modify the Bid
Documents by the publication of the same on the website.

10.2 All amendments shall form part of the Bid Document.

10.3 The Employer may, at its discretion, extend the last date for submission of bids by the
publication of the same on the website.

C. Preparation of Bid

11. The bidders have to prepare their bids online, encrypt their Bid Data in the Bid Forms and
submit Bid Seals (Hashes) of all the envelopes and documents related to the Bid required to be
uploaded as per the time schedule mentioned in the key dates of the Notice Inviting e-Tenders
after signing of the same by the Digital Signature of their authorized representative.

12. Documents comprising the Bid

The bid submitted online by the bidder shall be in the following parts:

Part 1 – This shall be known as Online Envelope A and would apply for all bids. Online
Envelop A shall contain the following as per details are given in the Bid Data Sheet:

- i) Registration number or proof of application for registration and organizational
details in the format given in the Bid Data Sheet. (Annexure -H)
- ii) Copy of Payment Receipt of the cost of Bid Document;
- iii) Earnest Money; and
- iv) An affidavit duly notarized.

Part 2 – This shall be known as Online Envelope B and required to be submitted only in
works where pre-qualification conditions and/or special eligibility conditions are stipulated
in the Bid Data Sheet. Online Envelop B shall contain a self-certified sheet duly supported
by documents to demonstrate fulfillment of pre-qualification conditions.

Part 3 – This shall be known as Online Envelope C and would apply to all bids.

Envelop C shall contain financial offer in the prescribed format enclosed with the Bid Data
Sheet.

13. Language

The bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be in English or Hindi. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English. In such case, for the purposes of interpretation of the bid, such translation shall govern.

14. Technical Proposal

14.1 Only, in case of bids with pre-qualification conditions defined in the Bid Data Sheet, the Technical Proposal shall comprise of formats and requirements given in the Bid Data Sheet.

14.2 All the documents/ information enclosed in the Technical Proposal should be self-attested and certified by the bidder. The Bidder shall be liable for forfeiture of his earnest money deposit if any document/information are found false/ fake/ untrue before acceptance of bid. If it is found after acceptance of the bid, the bid sanctioning authority may at his discretion forfeit his performance security/ guarantee, security deposit, enlistment deposit and take any other suitable action.

15. Financial Bid

- I. The bidder shall have to quote rates in a format referred in Bid Data Sheet, in overall percentage, and not item wise. If the bid is in absolute amount, the overall percentage would be arrived at in relation to the probable amount of contract given in NIT. The overall percentage rate would apply to all items of work.
- II. The percentage shall be quoted in figures as well as in words. If any difference in figures and words is found, lower of the two shall be taken as valid and correct.
- III. The bidder shall have to quote rates inclusive of all duties, taxes, royalties and other levies; and the Employer shall not be liable for the same.
- IV. The material along with the units and rates, which shall be issued, if any, by the department to the contractor, is mentioned in the Bid Data Sheet.

16. Period of Validity of Bids

The bids shall remain valid for a period specified in the Bid Data Sheet after the date of “close for bidding” as prescribed by the Employer. The validity of the bid can be extended by mutual consent in writing.

17. Earnest Money Deposit (EMD)

17.1 The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD), in the amount specified in the Bid Data Sheet.

17.2 The EMD shall be in the form of Fixed Deposit Receipt of a scheduled commercial bank, issued in favor of the name given in the Bid Data Sheet. The Fixed Deposit Receipt shall be valid for six months or more after the last date of receipt of bids. However, another form(s) of EMD may be allowed by the Employer by mentioning it in the Bid Data Sheet.

17.3 Bid not accompanied by EMD shall be liable for rejection as non-responsive.

17.4 EMD of bidders whose bids are not accepted will be returned within ten working days of the decision on the bid.

17.5 EMD of the successful Bidder will be discharged when the Bidder has signed the Agreement after furnishing the required Performance Security.

17.6 Failure to sign the contract by the selected bidder, within the specified period, for whatsoever reason, shall result in forfeiture of the earnest money deposit.

D. Submission of Bid

18. The bidder is required to submit online bid duly signed digitally, and Envelop 'A' in physical form also at the place prescribed in the Bid Data Sheet.

E. Opening and Evaluation of Bid

19. Procedure

19.1 Envelope 'A' shall be opened first online at the time and date notified and its contents shall be checked. In cases where Envelop 'A' does not contain all requisite documents, such bid shall be treated as non-responsive, and Envelop B and/or C of such bid shall not be opened.

19.2 Wherever Envelop 'B' (Technical Bid) is required to be submitted, the same shall be opened online at the time and date notified. The bidder shall have the freedom to witness the opening of the Envelop 'B'. Envelop 'C' (Financial Bid) of bidders who are not qualified for Technical Bid (Envelop 'B') shall not be opened.

19.3 Envelope 'C' (Financial Bid) shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Envelop 'C'

- 19.4 After opening Envelop 'C' all responsive bids shall be compared to determine the lowest evaluated bid.
- 19.5 The Employer reserves the right to accept or reject any bid and to annul the bidding process and reject all the bids at any time prior to contract award, without incurring any liability. In all such cases, reasons shall be recorded.
- 19.6 The Employer reserves the right of accepting the bid for the whole work or for a distinct part of it.
20. Confidentiality
- 20.1 Information relating to examination, evaluation, comparison and recommendation of contract award shall not be disclosed to bidders or any other person not officially concerned with such process until a final decision on the bid.
- 20.2 Any attempt by a bidder to influence the Employer in the evaluation of the bids or contract award decisions may result in the rejection of his bid.

F. Award of Contract

21. Award of Contract
- The Employer shall notify the successful bidder by issuing a 'Letter of Acceptance' (LOA) that his bid has been accepted.
22. Performance Security
- 22.1 Prior to the signing of the Contract the bidder to whom LOA has been issued shall have to furnish performance security of the amount in the form and for the duration, etc. as specified in the Bid Data Sheet.
- 22.2 Additional performance security, if applicable, is mentioned in the Bid Data Sheet and shall be in the form and for the duration, etc. similar to Performance Security.
23. Signing of Contract Agreement
- 23.1 The successful bidder shall have to furnish Performance Security and Additional Performance Security, if any, and sign the contract agreement within 15 days of issue of LOA.
- 23.2 The signing of contract agreement shall be reckoned as intimation to commencement

of work. No separate work order shall be issued by the Employer to the contractor for the commencement of work.

- 23.3 In the event of failure of the successful bidder to submit Performance Security and Additional Performance Security, if any or sign the Contract Agreement, his EMD shall stand forfeited without prejudice to the right of the employer for taking any other action against the bidder.

24. Corrupt Practices

The Employer requires that bidders observe the highest standard of ethics during the procurement and execution of contracts. In pursuance of this policy, the Employer:

- i. may reject the bid for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract; and
- ii. may debar the bidder declaring ineligible, either indefinitely or for a stated period of time, to participate in bids, if it at any time determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a contract.

For the purposes of this provision, the terms set forth above are defined as follows:

- a. “corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
- b. “fraudulent practice” means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- c. “coercive practice” means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- d. “collusive practice” means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

[End of ITB]

BID DATA SHEET			
General			
Sr. No.	Particulars	Data	
1	Office Inviting Tender	Audyogik Kendra Vikas, Nigam, Rewa (M.P.)	
2	NIT No.	2083 to 2085	
3	Date of NIT	25-01-2018	
4	Bid document download available from date & time	29-01-2018 17:30	12-02-2018 17:30-
5	Website link	http://www.mpeproc.gov.in	
Section 1 - NIT			
NIT	Particulars	Data	
Clause			
Reference			
2	Portal Fees	As notified in E-Tendering Website	
3	Cost of Bid Document	Rs. 30,000/-	
	Cost of Bid Document Payable at	Online	
	Cost of Bid Document In favour of	Managing Director, Audyogik Kendra Vikas Nigam, Rewa (M.P.)	
4	Affidavit format	Annexure B	
5	Pre-qualifications required	Yes	
	If Yes, details	Annexure C	
6	Special Eligibility	No	
	If Yes, details	Annexure D	
7	Key Dates	Annexure A	
Section 2 - ITB			
Clause Reference	Particulars	Data	
1	Name of work	Construction of industrial Infrastructural Development Works for Upgradation of Industrial Area, At Udyog Vihar, churatha, Dist. Rewa, M.P.	
2	Specifications	Annexure - E	

3	Procedure for participation in e-tendering	Annexure – F
BID DATA SHEET		
Clause Reference	Particulars	Data
4	Whether Joint Venture is allowed	<u>Yes</u>
9	Pre-bid meeting to be held If Yes, Date, Time and Place	NO Date: Time From: Place: Managing Director, Audyogik Kendra Vikas Nigam, Rewa (M.P.)
12	Envelope –A Containing (i) Certificate of Registration number or proof of application for registration and organizational details as per Annexure H (ii) Copy of Payment Receipt of Bid Document cost (iii) EMD (iv) An affidavit duly notarized as per Annexure – B should reach in the physical form	<u>19-02-2018 17:30 only speed post /registered post</u> At the office of the Managing Director, Audyogik Kendra Vikas Nigam, Rewa (M.P.)
14	Envelope-B Technical Proposal	Annexure – 1 and Annexure – I (Format I-1 to I-5)
15	Envelope-C Financial Bid	Annexure- J
	Materials to be issued by the department	NIL
16	Period of Validity of Bid	180 Days
17	Earnest Money Deposit	Rs. 19,00,000/-
	Forms of Earnest Money Deposit	(i) FDR (ii) Demand draft of scheduled commercial bank (iii) Bank Guarantee
	EMD valid for a period of	6months after the last date of receipt of bids
	FDR must be drawn in favor	Managing Director, Audyogik Kendra Vikas Nigam, Rewa (M.P.)

	of	
21	Letter of Acceptance (LoA)	Annexure – L
22	Amount of Performance Security	5% of contract amount (Agreement amount)
	Additional Performance Security, if any	A. If bid of the successful bidder is found to be more than 15%(Fifteen Percent) below the Probable amount of contract, then the bidder shall have to deposit additional performance security equal to the difference of amount quoted by the bidder beyond below 15% and 15% below Probable amount of contract amount i.e. Quoted percentage by the bidder (Beyond below 15%) minus 15% of the contract amount. For e.g. if the bidder has quoted 17% below the Probable amount of contract (PAC) then the additional performance Security will have to be deposited by the bidder equal to = (17%-15%) x Probable amount of contract.
	Performance security in the format	Annexure – M
	Performance Security in favour of	Managing Director, Audyogik Kendra Vikas Nigam, Rewa (M.P.)
	Performance security valid up to	3 months from the date of expiry of Defect Liability Period

Annexure A

(See clause 1, 7 of Section 1 – NIT)

KEY DATES

S. No.	Works Department Stage	Bidder's Stage	Start		Expiry		Envelopes
			Date	Time	Date	Time	
1		Purchase of Tender – Online	29-01-2018	17.30	12-02-2018	17.30	
2		Bid Submission – Online	29-01-2018	17:31	15-02-2018	17.30	
3	Mandatory submission Open (Envelope-A)		20-02-2018	10.30	20-02-2018	17.30	Envelope-A
4	Technical Proposal open (PQ Envelope-B)		21-02-2018	10.30	21-02-2018	17.30	Envelope-B
5	Financial Bid open (Envelope-C)		23-02-2018	10.30	23-02-2018	17.30	Envelope-C

Original term deposit receipt of earnest money deposit, demand draft for the cost of bid document and affidavit shall be submitted by the bidder so as to reach the office as prescribed in Bid Data Sheet, at least one calendar day before specified start time and date in key dates for opening of technical proposal as per Key dates in Bid Data Sheet.

Annexure – B
(See clause 3 of Section 1 – NIT)

|| AFFIDAVIT ||
(To be Contained in Envelope A)
(On Non-Judicial Stamp of Rs. 100)

I/we _____ who is/ are
_____ (status in the firm/ company) and competent for submission of the
affidavit on behalf of M/S _____ (contractor) do solemnly affirm an oath and
state that:

I/we am/are fully satisfied with the correctness of the certificates/records submitted in
support of the following information in bid documents which are being submitted in response to
notice inviting e-tender No. _____
for _____ (name of work) dated _____ issued by the
_____ (name of the department).

I/we am/ are fully responsible for the correctness of following self-certified information/
documents and certificates:

1. That the self-certified information given in the bid document is fully true and authentic.
2. That:
 - a. Term deposit receipt deposited as earnest money, a demand draft for the cost of bid document and other relevant documents provided by the Bank are authentic.
 - b. I n f o r m a t i o n regarding financial qualification and annual turnover is correct.
 - c. Information regarding various technical qualifications is correct.
 - d. The Bidder has at present not been backlisted by any Govt., Semi Govt., PSU organization.
3. No close relative of the undersigned and our firm/company is working in the department.

OR

Following close relatives are working in the department:

Name _____ Post _____ Present Posting _____

Signature with Seal of the Deponent (bidder)

I/ We, _____ above deponent, do hereby certify that the facts mentioned in above
paras 1 to 4 are correct to the best of my knowledge and belief.

Verified today _____ (dated) at _____ (place).

Signature with Seal of the Deponent (bidder)

Note: Affidavit duly notarized in original shall reach at least one calendar day before the opening
of the bid.

Annexure – C

(See clause 5 of Section 1 -NIT)

PRE- QUALIFICATIONS CRITERIA

The bidder should have:

A. Financial

- i. Experience of having successfully executed/completed:
 - a) Three similar works, each costing not less than the amount equal to 20% of the probable amount of contract during the last 5 financial years; or
 - b) two similar works, each costing not less than the amount equal to 30% of the probable amount of contract during the last 5 financial years;

Or

 - c) one similar work of aggregate cost not less than the amount equal to 50% of the probable amount of contract during the last 5 financial years;

Note:

1.0 Similar works: Means the following;

- a) Integrated infrastructure project consisting of Cement Concrete Road Works and Water Supply & Electrical Works(Street Light) under single contract (100% of the cost of work done will be taken into the consideration for financial qualification) Or
- b) Project Works consisting of Cement Concrete Road Works and Water Supply works under a single contract (only 90% of the cost of work done will be taken into the consideration for financial qualification.) Or
- c) Project Works consisting of Cement Concrete Road Works and Electrical works(street light), under single contract (only 90% of the cost of work done will be taken into the consideration for financial qualification)
- d) Project Works consisting of only cement concrete Road works under single contract (only 80% of the cost of works done will be taken into consideration.

Note: Cement Concrete Roads means M30/M40 cement concrete roads, the experience certificates should clearly show the grade of cement concrete Roads as M30 or M40 executed with paver, otherwise the experience certificate shall not be considered.

Certificates issued by the principal employer (Not below the rank Executive Engineer rank) should be submitted for each executed similar work.

- ii. A v e r a g e annual construction turnover on the construction works not less than 50% of the probable amount of contract during the last 3 financial years, If the bidder has not got audited his account for the financial year 2016-17, then in that case five financial year may be reckoned from 2011-12 to 2015-16, Attach Audited copy of Balance sheets and TDS certificates in proof of the same.

- iii. Executed similar items of work in any one financial year during the last 7 financial years, which should not be less than the minimum, the physical requirement as prescribed in Clause “B” of the prequalification criteria (Annexure -C), if any, fixed for the work.
- iv. Bid Capacity – Bidder shall be allotted work up to his available Bid Capacity, Not less than PAC, which shall be worked out as given in format I-2 of Annexure I.
- v. The applicant/Firm should not have incurred any loss in consecutive two years during the last five years ending 31st March 2017, duly certified by the Chartered Accountant.
- vi. The bidder should not have been blacklisted by any Central /State Government institutions. An undertaking (Self -Certificate) in this regard that the bidder hasn't been blacklisted by any central/ state government institutions must be submitted.

B. Joint Venture: No.

C. Base Year Escalations

The base year shall be taken as the financial year 2016-17

Following enhancement factors will be used for the costs of works executed as per para(I) and the financial figure as para (II) to a common base value for works completed.

Financial Year Multiplying Factor

2016-17	1.10
2015-16	1.21
2014-15	1.33
2013-14	1.46
2012-13	1.61

Bidders should indicate actual figures of costs and amount for the works executed by them without accounting for the above-mentioned factors.

D. Physical

Execution of similar items of during the last 5 financial years should not be less than the minimum physical requirement fixed for the work.

S. No.	Particulars	Quantity	Period
	Mandatory Physical qualification required	Yes	During The Last 5 Financial Years
1	Const. of Cement Concrete Road of Grade M40/M30, With Paver for govt/Semi Govt. Department	3000 cum	

Note: Cement Concrete Roads means M30/M40 cement concrete roads, the experience certificates should clearly show the grade of cement concrete Roads as M30 orM40 executed with paver, otherwise the experience certificate shall not be considered.

Note:

- 1) Last Five Financial year means , 2012-13, 2013-14, 2014-15, 2015-16, 2016-17.
- 2) Certificates issued by the principal employer (N o t below the rank Executive Engineer rank) should be submitted as proof in support of the above physical requirement.

Annexure – D

(See clause 6 of Section 1 -NIT)

SPECIAL ELIGIBILITY CRITERIA

No Special Eligibility Criteria are required.

Note: Above c r i t e r i a are indicative, subject to s u i t a b l e stipulations by t h e departments and specific bid.

ANNEXURE - E

(See clause 2 of Section 2 –ITB & Clause 10 of GCC)

Specifications

1. MoRTH Specification (Vth Revision) for Road and Bridge Works.
2. CPWD Specification.
3. Central Public Health and Environmental Engineering Organization (CPHEEO) Specification/Manual for Water Supply & Treatment Works.
4. Central Public Health and Environmental Engineering Organization (CPHEEO) Specification/Manual for Sewerage and Sewage Treatment Systems
5. PWD E & M Specification for Electrical Works.
6. MP MKVV Co. Specification for Electrical Works
7. Specifications as mentioned in the Schedule of Rates of following SOR's as amended up to date of date of issue on NIT;
 - a. Schedule of rates for building works in PWD, MP. (w.e.f 01-08-2014),
 - b. S c h e d u l e of rates for Road & Bridge works in PWD, MP. (w.e.f 29-08-2017),
 - c. Unified Schedule of rates for Water s upply& Sewerage works in PHE, MP.- (w.e.f 01.06.2016)
 - d. S c h e d u l e of rates for E & M works in PWD, MP. (w.e.f 1-8-2014),
 - e. Schedule of rates for Electrical works in MP PKVV Co. (w.e.f 2016-17),

The provisions of general/ special conditions of the contract, those specified elsewhere in the bid document, as well as execution drawings and notes, or other specifications issued in writing by the Employer shall form part of the technical specifications of this work.

Annexure -F

(See clause 3 of section 2-ITB)

Procedure for Participation in e-Tendering

1. Registration of Bidders on e-Tendering System:

All the PWD registered bidders are already registered on the new e-procurement portal <https://www.mpeproc.gov.in>. The user id will be the contractor ID provided to them by MP Online. The password for the new portal has been sent to the bidders registered email ID. For more details may contact M/s. Tata Consultancy Services Corporate Block, 5th floor, DB City BHOPAL-462011 email id: eproc_helpdesk@mpsdc.gov.in. Helpdesk phone numbers are available on the website.

2. Digital Certificate:

The bids submitted online should be signed electronically with a Class III Digital Certificate to establish the identity of the bidder submitting the bid online. The bidders may obtain Class III Digital Certificate issued by an approved Certifying Authority authorized by the Controller of Certifying Authorities, Government of India. A Class III Digital Certificate is issued upon receipt of mandatory identity proofs along with an application. Only upon the receipt of the required documents, a Digital Certificate can be issued. For details please visit cca.gov.in.

Note:

- i. It may take up to 7 working days for issuance of Class III Digital Certificate; hence the bidders are advised to obtain the certificate at the earliest. Those bidders who already have valid Class III Digital Certificate need not obtain another Digital Certificate for the same. The bidders may obtain more information and the Application Form required to be submitted for the issuance of Digital Certificate from [CCA. GOV. IN](http://CCA.GOV.IN)
- ii. Bids can be submitted till bid submission end date. The bidder will require digital signature while bidding submission.

The digital certificate issued to the Authorized User of a Partnership firm / Private Limited Company / Public Limited Company and used for online bidding will be considered as equivalent to a no-objection certificate/power of attorney to that user.

In case of Partnership firm, the majority of the partners have to authorize a specific individual through Authority Letter signed by a majority of the partners of the firm.

In case of Private Limited Company, Public Limited Company, the Managing Director has

to authorize a specific individual through Authority Letter. Unless the certificate is revoked, it will be assumed to represent the adequate authority of the specific individual to bid on behalf of the organization for online bids as per information Technology Act 2000. This Authorized User will be required to obtain a Digital Certificate. The Digital Signature executed through the use of Digital Certificate of this Authorized User will be binding on the firm. It shall be the responsibility of Management / Partners of the concerned firm to inform the Certifying Authority, if the Authorized User changes, and apply for a fresh Digital Certificate for the new Authorized User.

3. Set Up for Bidder's Computer System:

In order for a bidder to operate on the e-tendering System, the Computer System of the bidder is required to be set up for Operating System, Internet Connectivity, Utilities, Fonts, etc. The details are available at <https://www.mpeproc.gov.in>

4. Key Dates:

The bidders are strictly advised to follow the time schedule (Key Dates) of the bid on their side for tasks and responsibilities to participate in the bid, as all the stages of each bid are locked before the start time and date and after the end time and date for the relevant stage of the bid as set by the Department.

5. Preparation and Submission of Bids

The bidders have to prepare their bids online, encrypt their bid Data in the Bid forms and submit Bid of all the envelopes and documents related to the Bid required to be uploaded as per the time schedule mentioned in the key dates of the Notice inviting e-Tenders after signing of the same by the Digital Signature of their authorized representative.

6. Purchase of Bid Document

For purchasing of the bid document bidders have to pay Service Charge online ONLY which is Rs. [as per Bid Date Sheet]. Cost of bid document is separately mentioned in the Detailed NIT. The Bid Document shall be available for purchase to concerned eligible bidders immediately after the online release of the bids and to scheduled time and date as set on the key dates.

The payment for the cost of bid document shall be made online through Debit/Credit card, Net banking or NeFT Challan through the payment gateway provided on the portal.

7. Withdrawal, Substitution, and Modification of Bids

The bidder can withdraw and modify the bid until Bid submission end date.

Annexure -G
(See clause 4 of section 2-ITB)

JOINT VENTURE (J.V.)

If J.V. is allowed following conditions and requirements must be fulfilled:-

1. Bids submitted by a joint venture of two firms as partners shall comply with the following requirements subjected to :
 - a) Bidding by Joint Venture is acceptable. In case of joint venture partners should meet at least 100% of combinedly technical and financially requirements.
 - **The cost of work less than amount equal to 20% shall not be considered e.g. If one partner completed work valuing 12% and second partner completed 8% combindaly 20% shall be not considered.**
 - b) one of the partners shall be nominated as being Lead Partner, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of the all the partners;
 - c) the bid and, in case of a successful bid, the Agreement, shall be signed so as to be legally binding on all partners;
 - d) The partner in charge shall be authorized to incur liabilities and receive instructions for and
 - a. on behalf of any and all partners of the joint venture and the entire execution of the contract, including payment, shall be done exclusively with the partner in charge;
 - b. all partners of the joint venture shall be liable to jointly and severally for the execution of contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization mentioned under (c) above, as well as in the bid and in the Agreement (in case of a successful bid);
 - c. The joint venture agreement should indicate precisely the role of all members of JV in respect of planning, design, construction equipment, key personnel, work execution, and financing of the project. All members of JV should have active participation in execution during the currency of the contract. This should not be varied/modified subsequently without prior approval of the employer;
 - d. The joint venture agreement should be registered, so as to be legally valid and binding on all partners; and
 - e. A copy of the joint venture agreement entered in to by the partners shall be submitted with the bid.
 - e) The performance security of a joint venture shall be in the name of the partner Lead Partner/Joint Venture.
 - f) Attach the power of attorney of the partners authorizing the Bid signatory (is) on behalf o the joint venture.
 - g) Attach the agreement among all partners of the joint venture (and which is legally binding on all partners), which shows the requirements as indicated in the Instructions of Bidders’.
 - h) Furnish details of participation proposed in the joint venture as below:

DETAILS OF PARTICIPATION IN THE JOINT VENTURE

PARTICIPATION DETAILS	FIRM 'A' (Lead Partner)	FIRM 'B'
Financial		
Name of the Banker(s)		
Planning		
Construction Equipment		
Key Personnel		
Execution of Work (Give details on contribution of each)		

Annexure -H

(See clause 12 of section 2-ITB & clause 4 of GCC)

ORGANIZATIONAL DETAILS

(To be Contained in Envelope-A)

S. No.	Particulars	Details
1	Registration number issued by Centralized Registration System of Govt. of M.P. of Proof of application for registration.	(If applicable, scanned copy of application for registration to be uploaded)
2	Valid Registration of bidder inappropriate class through Centralized Registration of Govt. of M.P.	Registration No..... Date (Scanned copy of Registration to be uploaded)
3	Name of Organization/Individual/Proprietary Firm/ Partnership Firm	
4	Entity of Organization Individual/Proprietary Firm/Partnership Firm (Registered under Partnership Act)/Limited Company (Registered under the Companies Act-1956)/Corporation/Joint Venture	
5	Address of Communication	
6	Telephone Number with STD Code	
7	Fax Number with STD Code	
8	Mobile Number	
9	E-mail Address for all communications	
10	Details of Authorized Representative	
10	Name	
11	Designation	
12	Postal Address	
13	Telephone Number with STD Code	
14	Fax Number with STD Code	
15	Mobile Number	
16	E-mail Address	
17	GST Registration No: (Attach GST Registration certificate)	

Note: In case of partnership firm and limited company certified copy of partnership deed/Articles of Association and Memorandum of Association along with registration certificate of the company shall have to be enclosed.

Signature of Bidder with Seal

Date:

Annexure -I
(See clause 14 of section 2 -ITB)

Envelope – B, Technical Proposal

Technical Proposal shall comprise the following documents:

S. No.	Particulars	Details to be submitted
1	Experience – Financial & Physical	Annexure –I (Format: 1-1)
2	Annual Turnover	Annexure –I (Format: 1-2)
3	List of technical personnel for the key positions	Annexure –I (Format: 1-3)
4	List of Key equipment's /machines for quality control labs	Annexure –I (Format: 1-4)
5	List of Key equipment/machines for construction work	Annexure –I (Format: 1-5)

Note:

1. Technical Proposal should be uploaded duly page numbered and indexed.
2. Technical Proposal uploaded otherwise will not be considered.
3. At the time of submission of a bid, the bidder should have a valid registration with the employee's provident fund organization, Ministry of labor for Employment, Govt. of India, and the bidder should have a Valid PF code or he has to submit at the time of the agreement.

Annexure –I (Format: I-1)
(See clause 14 of section 2 -ITB)

FINANCIAL & PHYSICAL EXPERIENCE DETAILS

A. Financial Requirement:

The bidder should have executed/completed either of the below:

- a) three similar works each costing not less than the amount equal to 20% of the probable amount of contract during the last 5 financial years; or
- b) two similar works each costing not less than the amount equal to 30% of the probable amount of contract during the last 5 financial years; or
- c) one similar work of aggregate cost not less than the amount equal to 50% of the probable amount of contract during the last 5 financial years;

Note:

1.0 Similar works: Means the following;

Note:

1.0 Similar works: Means the following;

- a) Integrated infrastructure project consisting of Cement Concrete Road Works and Water Supply & Electrical Works(Street Light) under single contract (100% of the cost of work done will be taken into the consideration for financial qualification)Or
- b) Project Works consisting of Cement Concrete Road Works and Water Supply works under a single contract (only 90% of the cost of work done will be taken into the consideration for financial qualification.)Or
- c) Project Works consisting of Cement Concrete Road Works and Electrical works(street light), under single contract (only 90% of the cost of work done will be taken into the consideration for financial qualification)
- d) Project Works consisting of only cement concrete Road works under single contract (only 80% of the cost of works done will be taken into consideration.

Note: Cement Concrete Roads means M30/M40 cement concrete roads, the experience certificates should clearly show the grade of cement concrete Roads as M30 orM40 executed with paver, otherwise the experience certificate shall not be considered.

To be filled in by the contractor:

- i. Details of successfully completed similar works shall be furnished in the following format.
- ii. Certificate duly signed by the employer shall also be enclosed for each completed similar work.

Agreement Number & Year	Name of work	Date of Work Order	Date of Completion	Amount of Contract	Employer's Name and Address

Existing commitments – (Value of ‘C’ for Bid Capacity formula)

Agreement Number & Year	Name of work	Date of Work Order	Date of Completion	Amount of Contract	Amount of balance work	Employer's Name and Address

**Bid
 Capacity**

Applicants who meet the minimum qualifying criteria in the evaluation as stated above are to be evaluated further for bid capacity as under

$$\text{Bid Capacity} = (1.5 A \times B) - C$$

Where

A= Maximum value of civil engineering works executed in any one year during the last five year (10% weight per year shall be given to bring the value of work executed at present price level)

B= Proposed contract period in years.

C= Amount of work in hand at present.

D. Physical

Execution of similar items of during the last 5 financial years should not be less than the minimum physical requirement fixed for the work.

S. No.	Particulars	Quantity	Period
	Mandatory Physical qualification required	Yes	During The Last 5 Financial Years
1	Const. of Cement Concrete Road of Grade M40/M30, With Paver for govt/Semi Govt. Department	3000 cum	

Note: Cement Concrete Roads means M30/M40 cement concrete roads, the experience certificates should clearly show the grade of cement concrete Roads as M30 or M40 executed with paver, otherwise the experience certificate shall not be considered.

Note:

- 1) Last Five Financial year means, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17
- 2) Certificates issued by the principal employer (N o t below the rank Executive Engineer rank)
Should be submitted as proof in support of the above physical requirement.

Annexure –I (Format: I-2)

(See clause 14 of section 2 -ITB)

ANNUAL TURN OVER

Requirement:

Average annual construction turnover on the construction works not less than 50% of the probable amount of contract during the last 5 financial years;

To be filled in by the contractor:

Financial Year	Payments received for contracts in progress of completed
1. 2012 – 2013	
2. 2013 – 2014	
3. 2014 – 2015	
4. 2015--2016	
5. 2016--2017	

Note:

- i. The annual turnover of construction should be certified by the Chartered Accountant.
- ii. Audited balance sheet including all related notes, and income statements for the above financial years to be enclosed, and TDS certificates in proof of the same.

Bid Capacity

Applicants who meet the minimum qualifying criteria in the evaluation as stated above are to be evaluated further for bid capacity as under:

$$\text{Bid Capacity} = (1.5 A \times B) - C$$

Where

A= Maximum value of civil engineering works executed in any one year during the last five year (10% weight per year shall be given to bring the value of work executed at present price level)

B= Proposed contract period in years.

C= Amount of work in hand at present.

Annexure –I (Format: I-3)
(See clause 14 of section 2 –ITB & Clause 6 of GCC)

List of Technical Personnel for the Key Positions

Minimum requirement							Available with the bidder						
S. No.	Key Position	Minimum requirement	Qualification	Age Limit	Similar workexperience	Total WorkExperience	S. No.	Name of Personnel	Key Position	Qualification	Age	Similar workexperience	Total work Experience
1	Project Manager	1	B.E. Civil	60	7	15							
2	Quality Control & Testing Engineer	1	Dip. Civil	50	5	12							
3	Quantity Surveyor	1	Dip. Civil	50	5	10							
4	Electrical Engg.	1	BE in Electrical	50	5	10							

Annexure –I (Format: I-4)
(See clause 14 of section 2 -ITB)

List of Key Equipment/Machines for Quality Control Labs

Minimum requirement			Available with the bidder	
S. No.	Name of Equipment/ Machinery	Quantity	Name of Equipment/ Machinery	Quantity
i) General				
a)	Oven - Electrically operated, thermostatically controlled, range 200°C sensitivity 1°C	1 No.		
b)	Balance 20 kg capacity – self-indicating type	1 No.		
c)	Electronic Balance 5 kg capacity accuracy 0.5 gm	2 Nos.		
d)	Thermometers: Mercury-in-glass thermometer range 0° to 250°C Mercury-in-steel thermometer with 30 cm stem, range up to 300°C	4 Nos.		
e)	Kerosene or gas stove or electric hot plate	1 No.		
f)	Glasswares, spatulas, wire gauzes, steel scales, measuring tape, casseroles, karahis, enameled trays of assorted sizes, pestle-mortar, porcelain dishes, gunny bags, plastic bags, chemicals, digging tools like pickaxes, shovels etc.	As required		
g)	Set of IS Sieves with lid and pan: 450 mm diameter: 75mm, 63 mm, 53 mm, 45mm, 37.5 mm, 26.5 mm, 22.4mm, 19mm, 13.2 mm, 11.2mm, 9.5 mm, 6.7 mm and 4.75 mm size 200 mm diameter: 2.36 mm, 2.0 mm, 1.18 mm, 600 microns, 425 microns, 300 microns, 150 microns and 75 micron	1 set 2 sets		
h)	Water testing kit	1 set		
i)	First aid box	1 set		
ii) For soils and aggregates				
a)	Riffle Box	1 No.		
b)	Atterberg Limits (liquid and plastic limits) determination apparatus	1 set		
c)	Compaction Test Equipment both 2.5 kg and 4.5 kg rammers (Light and Heavy compact efforts)	1 set		
d)	Dry Bulk Density Test apparatus (sand pouring cylinder, tray, can etc.) complete	1 set		
e)	Speedy Moisture Meter complete with chemicals	1 set		
f)	Post hole auger with extensions	1 set		
g)	Core cutter apparatus 10 cm dia, 10/15	1 set		

Minimum requirement			Available with the bidder	
S. No.	Name of Equipment/ Machinery	Quantity	Name of Equipment/ Machinery	Quantity
	cm height, complete with dolly, rammer etc.			
h)	Aggregate Impact Value Test apparatus/ Los Angeles Abrasion Test apparatus	1 set		
i)	Flakiness and Elongation Test Gauges	1 set		
j)	Standard measures of 30, 15 and 3 liters capacity along with standard tamping rod	1 set		
k)	California Bearing Ratio test apparatus	1 set		
l)	Unconfined compression test apparatus	1 set		
iii) For Cement and Cement Concrete				
a)	Vicat apparatus for testing setting times	1 set		
b)	Slump testing apparatus	4 sets		
c)	Compression and Flexural strength testing machine of 200 tonne capacity with additional dial for flexural testing	1 No.		
d)	Needle Vibrator	2 Nos.		
e)	Air Meter	1 No.		
f)	Vibrating hammer for vibrating dry mix as for Dry Lean Cement concrete sub-base	1 No.		

List of Key Equipment's/Machines for Construction Work

Minimum requirement			Available with the bidder	
S. No.	Name of Equipment/ Machinery	Quantity	Name of Equipment/ Machinery	Quantity
1	Motor Grader (Clearing/Spreading/GSB) (200/50 Cum/hour)	1		
2	Slip Form/ fixed form Concrete Paver	1		
3	Tandem Vibratory Roller (12-15 tones)	1		
4	Vibratory roller of width 1m for edge compaction (8-10 tones)	1		
5	Soil Compactor (8-10 tones)	1		
6	Water Browsers (10-12 Kilo liters)	1		
7	Tipper / Trucks (8-10 tones)	10		
8	Road Marking Machine (For Thermoplastic) (100 Sqm/hour)	1		
9	Excavators (1.25 Cum)	1		
10	Total Station and Auto Level	2		
11	Loader (2-3 cum)	1		
12	Generator	1		
13	Concrete Batching and Mixing Plant,	1		
14	Transit Mixer	3		

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Annexure – J
(See clause 14 of section 2 –ITB)

FINANCIAL BID
(To Be Contained in Envelope-C)

NAME OF WORK

I/We hereby bid for the execution of above work within the time specified at the rate (in figures) (in words) percent below/above or at par based on the Bill of Quantities and item wise rates given therein all respects and in accordance with the specifications, designs, drawings and instructions in writing in all respect in accordance with such conditions so far as applicable. I/We have visited the site of work and am/are fully aware of all the difficulties and conditions likely to affect the carrying out the work. I/We have fully acquainted myself/ourselves about the conditions in regard to accessibility of site and quarries/kilns, nature and the extent of ground, working conditions including stacking of materials, installation of tools and plant conditions effecting accommodation and movement of labor etc. required for the satisfactory execution of the contract.

Should this bid be accepted, I/We hereby agree to abide by and fulfill all the terms and provisions of the said conditions of contract annexed hereto so far as applicable, or default thereof to forfeit and pay to the Governor of Madhya Pradesh or his successors in office the sums of money mentioned in the said conditions.

Note:

- I Only one rate of percentage above or below or at par based on the Bill of Quantities and item wise rates given therein shall be quoted.
- iii. The percentage shall be quoted in figures as well as in words. If any difference in figures and words is found lower between the two shall be taken as valid and correct rate. If the bidder is not ready to accept such valid and correct rate and declines to furnish performance security and sign the agreement his earnest deposit shall be forfeited.
- iv. In case of the percentage “above” or “below” is not given by a bidder his bid shall be treated as non-responsive.
- v. All duties, taxes and other levies payable by the bidder shall be included in the percentage quoted by the bidder, only GST as applicable shall be paid extra on executed amount of contract/works.

Signature of Bidder

Name of Bidder

The above bid is hereby accepted by mean on behalf of MPAKVN(REWA) dated the

..... day of 20.....

Signature of Officer by whom accepted.

.....

Annexure – K
(See clause 15 of Section 2 -ITB)

NO MATERIALS WILL BE ISSUED BY THE DEPARTMENT

Annexure - L
(See clause 21 of Section 2 -ITB)

LETTER OF ACCEPTANCE (LOA)

No. _____

Dated: _____

To

M/s _____
(Name and address of the contractor)

Subject: _____
(Name of the work as appearing in the bid for the work)

Dear Sir (s),

Your bid for the work mentioned above has been accepted on behalf of the M.D., AKVN (REWA) M.P. Ltd. at your bided percentage ___below/above or at par the Bill of Quantities and item wise rates given therein.

You are requested to submit within 15 (Fifteen) days from the date of issue of this letter:

- a. The performance security/performance guarantee of Rs. _____ (in figures)
(Rupees _____ in words only).

The performance security shall be in the shape of term deposit receipt/bank guarantee of any nationalized/scheduled commercial bank valid up to three months after the expiry of defects liability period.

- b. Sign the contract agreement.

Please note that the time allowed for carrying out the work as entered in the bid is months including/excluding rainy season, shall be reckoned from the date of signing the contract agreement.

Signing the contract agreement shall be reckoned as an intimation of the commencement of work and no separate letter for the commencement of work is required. Therefore, after signing of the agreement, you are directed to contact the Engineer-in-charge for taking the possession of the site and necessary instructions to start the work.

Yours faithfully,

Executive Engineer

Annexure – M
(See clause 22 of section 2 –ITB)

PERFORMANCE SECURITY

To

..... (Name of Employer)
..... (address of employer)
.....

WHEREAS _____ [name and address of Contractor]
(Hereinafter called "the Contractor") has undertaken, in pursuance of Letter of Acceptance No. _____
dated _____ to execute _____ [name of Contract and a brief description of Works]
(hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish
you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance
with his obligation in accordance with the contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of
the Contractor, up to a total of _____ [amount of guarantee]* _____ (in words), such sum
being payable in the types and proportions of currencies in which the contract Price is payable, and we
undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums
within the limits of _____ [amount of guarantee] as aforesaid without your needing to prove
or to show grounds or reasons for your demand for the sum specified therein.

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

We further agree that no change or addition to or other modification of the terms of the Contract of
the Works to be performed thereunder or of any of the Contract documents which may be made between you
and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive
notice of any such change, addition or modification.

This guarantee shall be valid until 3 (three) months from the date of expiry of the Defect Liability
Period.

Signature, Name, and Seal of the guarantor _____

Name of Bank _____

Address _____

Phone No., Fax No., E-mail Address, of Signing Authority _____

Date _____

An amount shall be inserted by the Guarantor, representing the percentage the Contract Price specified in the
Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.

SECTION 3

Conditions of Contract Part – I General Conditions of Contract (GCC)

Table of Clauses of GCC

Clause No.	Particulars	Clause No.	Particulars
	A. General	21	Payments for Variations and/ or Extra Quantities
1	Definitions	22	No compensation for alterations in or Restriction of work to be carried out.
2	Interpretations and Documents	23	No Interest Payable
3	Language and Law	24	Recovery from Contractors
4	Communications	25	Tax
5	Subcontracting	26	Check Measurements
6	Personnel	27	Termination by Engineer-in-Charge
7	Force Majeure	28	Payment upon Termination
8	Contractor's Risks	29	Performance Security
9	Liability For Accidents to Person	30	Security Deposit
10	Contractor to Construct the Works	31	Price Adjustment
11	Discoveries	32	Mobilization and Construction Machinery Advance
12	Dispute Resolution system	33	Secured Advance
	B. Time Control	34	Payment Certificates
13	Programme		E. Finishing the Contract
14	Extension of Time	35	Completion Certificate
15	Compensation for Delay	36	Final Account
16	Contractor's quoted percentage		F. Other Conditions of Contract
	C. Quality Control	37	Currencies
17	Tests	38	Labour
18	Correction of Defects noticed during the Defect Liability Period	39	Compliance with Labour Regulations
	D. Cost Control	40	Audit and Technical Examination
19	Variations – Change in Original Specifications, Designs, Drawings etc.	41	Death or Permanent Invalidity of Contractor
20	Extra Items	42	Jurisdiction

A. General

1. DEFINITIONS

- 1.1 Bill of quantities means the priced and completed bill of quantities forming part of the Bid.
- 1.2 Chief Engineer means Chief Engineer of the MPTRIFAC, Bhopal.
- 1.3 Completion: means completion of the work as certified by the Engineer-in-charge, accordance with the provision of the agreement.
- 1.4 Contract: means the contract between the Employer and the Contractor to execute, complete and/or maintain the work. The agreement is a synonym of Contract and carries the same meaning wherever used.
- 1.5 Contract Data means the documents and other information which comprise of the contract.
- 1.6 Contractor: means a person or legal entity whose bid to carry out the work has been accepted by the Employer.
- 1.7 Contractor's bid: means the completed bid document submitted by the Contractor to the Employer.
- 1.8 Contract amount: means the amount of contract works out on the basis of accepted bid.
- 1.9 Completion of work: means completion of the entire contracted work. Exhaustion of quantity of any particular item mentioned in the bid document shall not imply completion of work or any component thereof.
- 1.10 Day: means the calendar day
- 1.11 Defect: means any part of the work not completed in accordance with the specifications included in the contract.
- 1.12 Department: AKVN REWA M.P. Ltd. which adopts this document.
- 1.13 Drawing: means drawings including calculations and other information provided or approved by Engineer-in-charge.
- 1.14 Employer: means the party as defined in the contract data, who employs the contractor to carry out the work. The employer may delegate any or all functions to a person or body nominated by him for specified functions. The word employer/ Government /Department wherever used denote the employer.
- 1.15 Engineer means the person named in the contract data.
- 1.16 Engineer in charge: means the person named in the contract data.

- 1.17 Equipment: means the Contractor's machinery and vehicles brought temporarily to the site for execution of work.
- 1.18 Government means Government of Madhya Pradesh.
- 1.19 In Writing: means communicated in a written form and delivered against receipt.
- 1.20 Material means all supplies, including consumables, used by the contractor for the incorporation in the work.
- 1.21 Superintending Engineer means Superintending Engineer-in-Charge of the AKVN REWA M.P. Ltd.
- 1.22 Stipulated period of completion: means the period in which the contractor is required to complete the work. The stipulated period is specified in the contract data.
- 1.23 Specification: means the specification of the work included in the contract and any modification or addition made or approved by the Engineer-in-charge.
- 1.24 Start Date: means the date of signing of an agreement for the work.
- 1.25 Subcontractor: means a person or corporate body who has a contract with the contractor, duly authorized to carry out a part of construction work under the contract.
- 1.26 Temporary work: means work, design, constructed, installed and removed by the contractor that are needed for construction or installation of the work.
- 1.27 Tender/Bid, Tenderer/Bidder: are the synonyms and carry the same meaning wherever used.
- 1.28 Variation: means any change in the work which is instructed or approved as a variation under the contract.
- 1.29 Work: The expression “work” or “works” where used in these conditions shall unless there be something either in the subject or context repugnant to such construction be construed and taken to mean the work by virtue of contract, contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional.
- 1.30 AKVN(REWA): Audyogik Kendra Vikas Nigam, Rewa (M.P.). Which adopts this document.

2. INTERPRETATIONS AND DOCUMENTS

2.1 Interpretations

In all the contract, except where the context requires or otherwise;

- a. words indicating one gender include all genders;
- b. Words indicating the singular also include the plural and vice versa
- c. Provisions including the word “agree”, “agreed” or “agreement” require the agreement to be recorded in writing.
- d. “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

2.2 Documents Forming Part of Contract:

1. NIT with all amendments
2. Instructions to Bidders (ITF, Bid Data Sheet with all Annexures)
3. Conditions of Contract:
 - i. Part I General Conditions of Contract and Contract Data; with all annexure
 - ii. Part II Special Conditions of Contract.
4. Specifications
5. Drawings
6. Bill of Quantities
7. Technical and Financial Bid
8. Agreement
9. Any other document(s), as specified.

3. Language and Law

The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Communications

All certificates, notice or instruction to be given to the Contractor by the Employer/Engineer shall be sent to the address or contact details given by Contractor in [Annexure H of ITB]. The address and contact details communication with the Employer/Engineer shall be as per the details are given in the Contract Data. Communication between parties that are referred to in the conditions shall be in writing. The notice sent by facsimile (fax) or other electronic (email) shall also be effective on confirmation of the transmission. The notice sent by registered post or speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service. In case of any change in address for communication, the same shall be immediately notified to Engineer-in-Charge.

5. Subcontracting

Sub Contracting shall be permitted for contracts of value more than amount in the Contract Data with following conditions.

- a. The Contractor may subcontract up to 25 percent of the contract price with the approval of the Employer in writing, but will not assign the subcontracting shall not alter the Contractor's obligations.

- b. The following shall not form part of subcontracting:
 - i. The hiring of labor through a labor contractor
 - ii. The purchase of materials to be incorporated into the works.
 - iii. The hiring of plant & machinery.
 - c. The sub-contractor will have to be registered in the appropriate category in the centralized registration system for contractors of the GoMP.
6. Personnel
- 6.1 The Contractor shall employ for the construction work and routine maintenance the technical personnel as provided in the Annexure I-3 of Bid Data Sheet, if applicable. If the Contractor fails to deploy required number of technical staff, recovery, as specified in the Contract Data, will be made from the contractor.
- 6.2 If the Engineer asks the Contractor to remove a person who is a member of Contractor's staff or the workforce, stating the reasons, the Contractor shall ensure that the person leaves the site within three days and has no further connection with the works in the contract.

7. Force Majeure

7.1 The term "Force Majeure" means an exceptional event or circumstance:

- (a) Which is beyond a Party's control?
- (b) Which such Party could not reasonably have provided against before entering into the Contract,
- (c) Which, having arisen, such Party could not reasonably have avoided or overcome, and
- (d) Which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- (i) War, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) Rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
- (iii) Riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,

- (iv) Munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (v) Natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

7.2 In the event of either party being rendered unable by force majeure to perform any duty or discharge any responsibility arising out of the contract, the relative obligation of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties.

7.3 For the period of extension granted to the Contractor due to Force Majeure the price adjustment clause shall apply but the penalty clause shall not apply, it is clarified that this subclause shall not give eligibility for the price adjustment to contracts which are otherwise not subject to the benefit of price adjustment clause.

7.4 The time for performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such clause lasts. Should the delay caused by force majeure exceed twelve months, the parties to the contract shall be at liberty to foreclose the contract after holding mutual discussions.

8. Contractor's Risks

8.1 All risks of loss or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.

8.2 All risks and consequences arising from the inaccuracies or falseness of the documents, drawing, designs, other documents and/or information submitted by the contractor shall be the responsibility of the Contractor alone, notwithstanding the fact that the designs/ drawings or other documents have been approved by the department.

9. Liability for Accidents to Person

The contractor shall be deemed to have indemnified and saved harmless Government against all action, suits, claims, demands, costs etc. arising connection with injuries suffered by any persons employed by the contractor or his subcontractor for the works whether under the General law or under workman's compensation Act, or any other statute in force at the time of dealing with question of the liability of employees for the injuries suffered by employees and to have taken steps properly to ensure against any claim thereunder.

10. Contractor to Construct the Works

10.1 The Contractor shall construct, install and maintain the Works in accordance with the Specifications and Drawings as specified in the Contract Data.

- 10.2 In the case of any class of work for which there is no such specification as is mentioned in Contract Data, such work shall be carried out in accordance with the instructions and requirement of the Engineer-in-Charge.
- 10.3 The contractor shall supply and take upon himself the entire responsibility of the sufficiency of the scaffolding, timbering, machinery, tools, and implements, and generally of all means used for the fulfillment of this contract whether such means may or may not be approved or recommended by the Engineer.
11. Discoveries
- Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.
12. Dispute Resolution System
- 12.1 No dispute can be raised except before the Competent Authority as defined in Contract Data in writing giving a full description and grounds of dispute. It is clarified that merely recording protest while accepting measurement and/or payment shall not be taken as raising a dispute.
- 12.2 No dispute can be raised after 45 days of its first occurrence. Any dispute raised after the expiry of 45 days of its first occurrence shall not be entertained and the Employer shall not be liable for claims arising out of such dispute.
- 12.3 The Competent Authority shall decide the matter within 45 days.
- 12.4 Appeal against the order of the Competent Authority can be preferred within 30 days to the Appellate Authority as defined in the Contract data. The Appellate Authority shall decide the dispute within 45 days.
- 12.5 Appeal against the order of the Appellate Authority can be preferred before the Madhya Pradesh Arbitration Tribunal constituted Madhya Pradesh Madhyastham Adhikaran Adhinyam, 1983.
- 12.6 The Contractor shall have to continue execution of the Works with due diligence notwithstanding the pendency of a dispute before any authority or forum.

B. Time Control

13. Programme
- 13.1 Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements, order, and timing for all the activities for the construction of works.

- 13.2 The program shall be supported with all the details regarding key personnel, equipment, and machinery proposed to be deployed in the works for its execution. The contractor shall submit the list of equipment and machinery being brought to the site, the list of key personnel being deployed, the list of machinery/equipment being placed in field laboratory and the location of field laboratory along with the Programme.
 - 13.3 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.
 - 13.4 The Contractor shall submit to the Engineer for approval an update Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within the period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
 - 13.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations.
14. Extension of Time
 - 14.1 If the Contractor desires an extension of time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other grounds, he shall apply, in writing, to the Engineer-in-Charge, on account of which he desires such extension. Engineer-in-Charge shall forward the aforesaid application to the Competent Authority as prescribed.
 - 14.2 The competent authority shall grant such extension at each such occasion within a period of 30 days of receipt of application from the contractor and shall not wait for finality of work. Such extensions shall be granted in accordance with provisions under clause-15 of this agreement.
 - 14.3 In case the work is already in progress, the Contractor shall proceed with the execution of the works, including maintenance thereof, pending of the decision of the competent authority as aforesaid with all due diligence.
15. Compensation for Delay
 - 15.1 The time allowed for carrying out the works, as entered in the agreement, shall be strictly observed by the Contractor.
 - 15.2 The time allowed for execution of the contract shall commence from the date of signing of the agreement. It is clarified that the need for issue of the work order is dispensed with.

- 15.3 In the event milestones are laid down in the Contract Data for execution of the works, the contractor shall have to ensure strict adherence to the same.
 - 15.4 Failure of the Contractor to adhere to the timelines and/or milestones shall attract such liquidated damages as is laid down in the Contract Data.
 - 15.5 In the event of delay in execution of the Works as per the timelines mentioned on the Contract Data the Engineer-in-Charge shall retain from the bills of the Contractor amount equal to the liquidated damages leviable until the Contractor make such delays good. However, the Engineer-in-Charge shall accept bankable security in lieu of retaining such amount.
 - 15.6 If the Contractor is given an extension of time after liquidated damages have been paid, the Engineer-in-Charge shall correct any overpayment of liquidated damages by the Contractor in the next payment certificate.
 - 15.7 In the event the Contractor fails to make good the delay until completion of the stipulated contract period (including the extension of time) the sum so retained shall be adjusted against the liquidated damages levied.
16. Contractor's quoted percentage
- The Contractor's quoted percentage rate referred to in the "Bid for works" will be deducted/ added from/ to the net amount of the bill after deducting the cost of material supplied by the department.

17. Tests

C. Quality Control

- 17.1 The Contractor shall be responsible for:
- a. Carrying out the tests prescribed in specifications, and
 - b. For the correctness of the test results, whether performed in his laboratory or elsewhere.
 - c. At least 20% test of the material of prescribed frequencies should be carried out by Engineering College/MPPWD/NABL accredited Lab as directed by Engineer-in-Charge. The charges for the same shall pay by the contractor. If the contractor does not maintain the required tests, the department shall get the tests done by the approved agencies and shall recover the charges of material testing from the contractor.
 - d. For Cement Concrete Roads 20% payment shall be withheld, which shall be released after satisfactory core cutting test results, the payment of core cutting test shall be paid by Contractor, and the same can be deducted from the running bills of the contractor.
- 17.2 The contractor shall have to establish field laboratory within the time specified and having such equipment's as are specified in the Contract Data.
- 17.3 Failure of the Contractor to establish laboratory shall attract such penalty as is specified in the Contract Data.

18. Correction of Defects noticed during the Defect Liability Period

- 18.1 The Defect Liability Period of work in the contract shall be as per the Contract Data.
- 18.2 The Contractor shall promptly rectify all defects pointed out by the Engineer well before the end of the Defect Liability Period. The Defect Liability Period shall automatically stand extended until the defect is rectified.
- 18.3 If the Contractor has not corrected a Defect pertaining to the Defect Liability Period to the satisfaction of the Engineer, within the time specified by the Engineer, the Engineer will assess the cost of having the Defect corrected, and the cost of correction of the Defect shall be recovered from the Performance Security or any amount due or that may become due to the contractor and other available securities.

D. Cost Control

19. Variations – Change in original Specifications, Designs, and Drawings etc.

- 19.1 The Engineer-in-Charge shall have the power to make any alterations, omissions or additions to or substitutions in the original specifications, drawings, designs and instructions that may appear to him to be necessary during the progress of the work and the contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Engineer-in-Charge and such alterations, omission, additions or substitutions shall not invalidate the contract and any altered, additional or substituted work, which the contractor may be directed to do in the manner above specified, as part of the work, shall be carried out by the contractor on the same conditions in all respects on which he agrees to do the main work.
- 19.2 The time for the completion of the work shall be adjusted in the proportion that the altered, additional or substituted work bears to the original contract work and the certificate of the Engineer-in-Charge shall be conclusive as to such proportion.

20. Extra Items

20.1 All such items which are not included in the priced BOQ shall be treated as extra items.

21. Payments for Variations and / or Extra Quantities

21.1 The rates for such additional (Extra quantity), altered or substituted work / extra items under this clause shall be worked out in accordance with the following provisions in their respective order:-

- a. The contractor is bound to carry out the additional (Extra quantity), work at the same rates as are specified in the contract for the work.
- b. If the item is not in the priced BOQ and is included in the SOR of the department, the rate shall be arrived at by applying the quoted tender percentage on the SOR rate.

MPPWD for Road & Bridge works enforce from 29.08.2017,

MPPWD for Building works enforce from 01-08-2014,

MPPHED SOR for Water Supply works and Sewerage System enforce from 01.06.2016,

MPPWD Electrical SOR enforce from 01.08.2014 and

MPPKVVCL for Electrical works 2016-17

with all amended up to the date of issue of NIT, the rate shall be arrived at by applying the quoted tender percentage above or below or at par with the SOR rate.

Note:-All SoR amendment applicable up to the date of issue of NIT

- c. For the altered or substituted work rates will be derived from the rates for a similar class (type) of work as is provided in the contract (priced BOQ) for the work.
- d. If the rates for the altered, substituted work cannot be determined in the manner specified in the subclause (c) above – then the rates for such composite work item shall be worked out on the basis of the concerned Schedule of Rates as mentioned in 21.1.b, minus/plus the percentage quoted by the contractor.
- e. If the rates for a particular part or parts of the item for the altered, or substituted work item cannot be determined in the manner specified in subclause (c) to (d) above, the rate for such part or parts will be determined by the Competent Authority as defined in the Contract Data on the basis of the rate analysis derived out of prevailing market rates.
- f. But under no circumstances, the contractor shall suspend the work on the plea of non-acceptability of rates on items failing under subclause (c) to (e). In case the contractor does not accept the rate approved by the Engineer-in-Charge for a particular item, the contractor shall continue to carry out the item at the rates determined by the Competent Authority. The decision on the final rates payable shall be arrived at through the dispute settlement procedure.

22. No compensation for alterations in or restriction of work to be carried out.

22.1 If at any time after the commencement of the work, the Engineer-in-Charge, for any reason whatsoever, not require the whole or any part of the work as specified in the bid to be carried out; the Engineer-in-Charge shall give notice in writing of the fact to the contractor and withdraw that whole or any part of the work.

22.2 The contractor shall have no claim to any payments or compensation whatsoever, on account of any profit or advantage which he might have derived from the execution of work in full or on account of any loss incurred for idle men and machinery due to any alteration or restriction of work for whatsoever reason.

22.3 The Engineer-in-Charge may supplement the work by engaging another agency to execute such portion of the work, without prejudice to his rights.

23. No Interest Payable

No interest shall be payable to the Contractor on any payment due or awarded by any authority.

24. Recovery from Contractors

Whenever any claim against the Contractor for the payment arises under the contract, the Department may be entitled to recover such sum by:

(a) Appropriating, in part or whole of the Performance Security and Additional Performance Security, if any; and/or Security Deposit and/or any sums payable under the contract to the contractor.

(b) If the amount recovered in accordance with (a) above is not sufficient, the balance sum may be recovered from any payment due to the contractor under any other contract of the department, including the securities which become due for release.

(c) The department shall further have an additional right to effect recoveries as arrears of land revenue under the M.P. Land Revenue Code.

25. Tax

25.1 The rates quoted by the contractor shall be deemed to be inclusive of the commercial tax and other levies, duties, cess, toll, taxes of Central and State Governments, local bodies and authorities.

25.2 The liability, if any, on account of quarry fees, royalties, octroi and any other taxes and duties in respect of materials actually consumed on public work, shall be borne by the contractor.

25.3 Any changes in the taxes due to change in legislation or for any other reason shall not be payable to the contractor.

26. Check Measurements

26.1 The department reserves to itself the right to prescribe a scale of check measurement of work in general or specific scale for specific works or by other special orders.

26.2 Checking of measurement by the superior officer shall supersede measurements by subordinate officers(s), and the former will become the basis of the payment.

26.3 Any over/excess payments detected, as a result of such check measurement or otherwise at any stage up to the date of completion of the defect liability period specified in this contract, shall be recoverable from the Contractor, as per clause 24 above.

27. Termination by Engineer-in-Charge

27.1 If the Contractor fails to carry out any obligation under the Contract, the Engineer-in-Charge may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

27.2 The Engineer-in-Charge shall be entitled to terminate the Contract if the Contractor

- (a) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the contract;
- (b) the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
- (c) without reasonable excuse fails to comply with the notice to correct a particular defect within a reasonable period of time;
- (d) the Contractor does not maintain a valid instrument of financial security as prescribed;
- (e) the Contractor has delayed the completion of the works by such duration for which the maximum amount of liquidated damages is recoverable;
- (f) If the Contractor fails to deploy machinery and equipment or personnel or set up a field laboratory as specified in the Contract Data;
- (g) If the Contractor, in the judgment of the Engineer-in-Charge has engaged in corrupt or fraudulent practices in competing for or in executing the contract;
- (h) Any other fundamental breaches as specified in the Contract Data.

27.3 In any of these events or circumstances, the Engineer-in-Charge may, upon giving 14 days notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of subparagraph (b) or (g) of clause 27.2, the Engineer-in-Charge may terminate the Contract immediately.

27.4 Notwithstanding the above, the Engineer-in-Charge may terminate the Contract for convenience by giving notice to the Contractor.

28. Payment upon Termination

28.1 If the contract is terminated under clause 27.3, the Engineer shall issue a certificate for the value of the work accepted on final measurements, less Advance Payments, and Penalty as indicated in the Contract Data. The amount so arrived at shall be determined by the Engineer-in-Charge and shall be final and binding on both the parties.

28.2 Payment on termination under clause 27.4 above –

If the Contract is terminated under clause 27.4 above, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

28.3 If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered as per clause 24 above.

29. Performance Security

The Contractor shall have to submit performance security and additional performance security if any, as specified in the Bid Data Sheet at the time of the signing of the contract. The contractor shall have to ensure that such performance security and additional performance security, if any, remains valid for the period as specified in the Contract Data.

30. Security Deposit

30.1 Security Deposit shall be deducted from each running bill at the rate as specified in the Contract Data. The total amount of Security Deposit so deducted shall not exceed the percentage of Contract Price specified in the Contract Data.

30.2 The security deposit may be replaced by the equivalent amount of bank guarantee or fixed deposit receipt assigned to the Employer, with validity up to 3 (three) months beyond the completion of Defect Liability Period/ extended Defect Liability Period.

30.3 The Security Deposit shall be refunded as follows:

- a) 50% shall be refunded after 3 years from the date of completion of work.
- b) 50% shall be refunded 3 months beyond the completion of Defect Liability

Period.

31. Price Adjustment

1. Price adjustment shall be applicable only if provided for in the Contract Data.
2. The price of adjustment clause shall apply only for the works executed from the date of signing of the agreement until the end of the initial intended completion date or extensions granted for reasons attributed to the Employer by the Engineer.
3. The price adjustment clause shall be applicable only for a stipulated period of eighteen months from the date of signing of the agreement. If a time extension is granted to complete the work for any reason attributed to the employer or contractor, to extended period neither price shall be payable to the contractor nor any deduction shall be made to this account.

3. The Contractor shall not be entitled to any benefit arising from the price adjustment clause for extension in the contract period for reasons attributed to the Contractor.

4. In the Force Majeure event, the price escalation clause shall apply. 31.2 Procedure

1. Contract price shall be adjusted for increase or decrease in rates and price of labor, materials, fuels, and lubricants in accordance with following principles and procedures and as per formula is given in the contract data.
2. The price adjustable shall be determined during each quarter from the formula given in the contract data
3. Following expression and meaning are assigned to the work done during each quarter:
 $R = \text{Total value of work during the quarter. It would include the amount of secured advance granted, if any, during the quarter, less the amount of secured advance recovered, if any during the quarter, less value of material issued by the department, if any, during the quarter.}$
4. Weights of various components of the work shall be as per the Contract Data.

31.3 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

31.4 The index relevant to any quarter, for which such compensation is paid, shall be the arithmetical average of the indices relevant to the indices relevant to the calendar month.

31.5 For the purpose of clarity it is pointed out that the price adjustment may be either positive or negative, i.e. if the price adjustment is in favor of the Employer, the same shall be recovered from the sums payable to the contractor.

32. Mobilization and Construction Machinery Advance

32.1 Payment of advances shall be applicable if provided in the Contract Data.

32.2 If applicable, the Engineer in charge shall make interest-bearing advance payment to the contractor of the amounts stated in the Contract Data, against Provision by the contractor of an unconditional Bank Guarantee in a form and by a nationalized/scheduled banks, in the name as stated in the Contract Data, in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the contractor.

- 32.3 The rate of interest chargeable shall be as per Contract Data.
- 32.4 The construction machinery advance, if applicable, shall be limited to 80% of the cost of construction machinery and admissible only for new construction machinery.
- 32.5 The advance payment shall be recovered as stated in the Contract Data by deducting proportionate amounts from payment otherwise due to the Contractor. No account shall be taken of the advance payment or its recovery in assessing valuations of work done, variations, price adjustments, compensation events, or liquidated damages.
33. Secured Advance
- 33.1 Payment of secured Advance shall be applicable if provided in the Contract Data.
- 33.2 If applicable, the Engineer shall make advance payment against materials intended for but not yet incorporated in the Works and against provision by the contractor of an unconditional Bank Guarantee in a form and by a nationalized/ scheduled bank, in the name as stated in the Contract Data, in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been adjusted, but the amount of the guarantee shall be progressively reduced by the amounts adjusted by the contractor.
- 33.3 The Amount of secured advance and conditions to be fulfilled shall be as stipulated in the Contract Data.
- 33.4 The Secured Advance paid shall be recovered as stated in the Contract Data.
34. Payment Certificates
- The payment to the contractor will be as follows for construction work:
- (a) The Contractor shall submit to the Engineer monthly statements of the value of the work executed less the cumulative amount certified previously, supported with detailed measurement of the items of work executed.
 - (b) The Engineer shall check the contractor's monthly statement and certify the amount to be paid to the contractor.
 - (c) The value of work executed shall be determined, based on the measurements approved by the Engineer/Engineer-in-charge.
 - (d) The value of work executed shall comprise the value of the quantities of the items in the Bill of quantities completed.
 - (e) The value of work executed shall also include the valuation of variations and Compensation Events.

- (f) All payments shall be adjusted for deductions for advance payment, security deposit, other recoveries in terms of contract and taxes at source as applicable under the law.
- (g) The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- (h) Payment of intermediate certificate shall be regarded as payments by way of advance against the final payment and not as payments for work actually done and completed.
- (i) Intermediate payment shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or be considered as an admission of the due performance of the contract or any part thereof, in any respect or the occurring of any claim.
- (j) The payment of final bill shall be governed by the provisions of clause 36 of GCC.
- (k) The payment to the contractor shall only be given after payment certificate is issued by an engineer in charge/Quality Control Agency appointed for the said works by the employer.

E. Finishing the Contract

35. Completion Certificate

35.1 A Completion Certificate in the prescribed format in contract Data shall be issued by the Engineer-in-Charge after physical completion of the Work.

35.2 After Final payment to the contractor, a Final Completion Certificate in the prescribed format in the Contract Data shall be issued by the Engineer-in-Charge.

36. Final Account

36.1 The Contractor Shall Supply the Engineer with a detailed account of the total amount that the contractor considers payable for works under the contract within 21 days of issue of a certificate of physical completion of works. The Engineer shall issue a Defects Liability Certificate and certify any payment that is due to the Contractor within 45 days of receiving the Contractor's account if it is correct and complete. If the account is not correct or complete, the Engineer shall issue within 45 days a schedule that states the scope of the corrections or additions that are necessary, If the Account is still unsatisfactory after it has been resubmitted, the matter shall be referred to the Competent Authority as defined in the Contract Data, who shall decide on the amount payable to the Contractor after hearing the Contractor and the Engineer in charge.

- 36.2 In case the account is not received within 21 days of issue of Certificate of Completion as provided in Clause 35.1 above, the Engineer shall proceed to finalize the account and issue a payment certificate within 28 days.

F. Other Conditions of Contract

37. Currencies

All payments will be made in Indian Rupees.

38. Labour

38.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labor, local or other, and for their payment, housing, feeding, and transport.

38.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

39. Compliance with Labour Regulations

39.1 During continuance of the Contract, the Contractor, and his sub-Contractors shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notifications and bye-laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye-laws that may be passed or notification that may be issued under any labour law in future either by the State or Central Government or local authority. Salient features of some of the major labor laws that are applicable to the construction industry are given in the Contract Data. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, Such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications /bye-laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct from any money due to the Contractor including his amount of performance security. The Employer /Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer. The Employees of the Contractor and the Sub-contractor in no case shall be treated as the employees of the Employer at any point in time.

40. Audit and Technical Examination

Government / AKVN REWA MP. Ltd. shall have the right to cause an audit and technical examination of the works and the final bill of the contract including all supporting vouchers , Abstract etc. to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract and found not to, have been overpaid in respect of any work done by the contractor under the contract or any work claimed by him to have been done under the contract and found not to, have been executed , the Contractor shall be liable to refund the amount of overpayment and it shall be lawful for Government / AKVN REWA MP. Ltd. to recover the same from him in the manner prescribed in clause 24 above and if it is found that the Contractor was paid less than what was due to him, under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Government / AKVN REWA) MP. Ltd. to the Contractor.

41. Death or Permanent Invalidity of Contractor

If the Contractor is an individual or a proprietary concern, partnership concern, dies during the currency of the contract becomes permanently incapacitated, where the surviving partners are only minors, the contracts shall be closed without levying any damages/ compensation as provided for in clause 28.2 of the contract agreement. However, if the competent authority shall enter into a fresh agreement for the remaining work strictly on the same terms and conditions under which the contract was awarded.

42. Jurisdiction

This Contract has been entered into the State of Madhya Pradesh and its validity, construction, interpretation and legal effect shall be subjected to the courts at the place where this agreement is entered into. No other jurisdiction shall be applicable.

[End of GCC]

Contract Data

GCC Clause	Particulars	Data
1.14	Employer	AKVN REWA M.P. Ltd.
1.15	Engineer	Junior Engineer, Assistant Engineer, Executive Engineer
1.16	Engineer-in-Charge	Executive Engineer
1.22	Stipulated period of completion	12 months including the rainy season
3	Language & Law of Contract	English
4	Address & contact details of the Contractor	As per Annexure – H
	Address & contact details of the Employer/Engineer- Phone, Fax, email	Executive Engineer, Audyogik Kendra Vikas Nigam, Rewa (M.P.) Phone – Fax – E-mail –
5	Subcontracting permitted for the Contract Value	As per GCC Clause - 5
6	Technical Personnel to be provided by the Contractor – requirement, &	As per Annexure-I (Format I-3)
	Penalty, if required Technical Personnel not employed	1. Project Manager Rs. 1,00,000/- per month 2. Deputy Project Manager: Rs.75,000/- per month per Person. 3. Site Engineer / Junior Engineer: Rs. 40,000/- per month per Person. 4. Lab Technician: Rs 25000/- per month per Person
10	Specifications	As per Annexure – E
	Drawings	As per Annexure – N
12	Competent Authority for deciding a dispute under Dispute Resolution	Managing Director, Audyogik Kendra Vikas Nigam, Rewa (M.P.).
	Appellate Authority for deciding a dispute under Dispute Resolution	Chairman, Audyogik Kendra Vikas Nigam, Rewa (M.P.) (Managing Director, MPTRIFAC, Bhopal)
13	Period for submission of updated construction program	Every Three month or at the end of Milestone whichever is less
	Amount to be withheld for not submitting construction program in the prescribed period	Rs. One Lakh Only/-
14	Competent Authority for granting Time Extension	Managing Director, Audyogik Kendra Vikas Nigam, Rewa (M.P.).

GCC Clause	Particulars	Data
15	Milestones laid down for the Contract	YES
	If Yes, details of Milestones	As per Annexure – O
	Liquidated damage	As per Annexure – P
17	List of equipment for lab	As per Annexure – Q
	Time to establish lab	30 days
	Penalty for not establishing field Laboratory	Rs. 2,00,000/- per month for the delay
18	Defect Liability Period	5 (Five) years after physical completion of work
21	Competent Authority for determining the rate	Managing Director, Audyogik Kendra Vikas Nigam, Rewa (M.P.).
	Schedule of Rate:	<p>1. MPPWD for Road & Bridge works enforce from 29.08.2017 amended up to the date of issue of NIT</p> <p>2. MPPWD for Building works enforce from 01-08-2014 amended up to the date of issue of NIT</p> <p>3. MPPHED SOR for Water Supply works & Sewerage system enforce from 01.06.2016 amended up to the date of issue of NIT</p> <p>4. MPPKVVCL for Electrical works 2016-2017 & MPPWD Electrical SOR 01.08.2014 amended up to the date of issue of NIT</p>
27	Any other condition for breach of contract	Yes, as below: If the Contractor fails to achieve 50% Financial progress in any Milestone and/or fails to achieve 75% Financial progress in Two Consecutive Milestones.
28	Penalty	The penalty shall include: a. Security deposit as per clause 30 of General Conditions of Contract and b. Liquidated Damages imposed as per clause 15 or Performance Security (Guarantee) including Additional Performance Security (Guarantee), if any, as per clause 29 of General Conditions of Contract, whichever is higher.
29	Performance guarantee (Security) shall be valid up to	Three months beyond the Completion of Defect Liability Period

GCC Clause	Particulars	Data
30	Security Deposit to be deducted from each running bill	At the rate of 5% of Gross Amount of Running Bill.
	Maximum limit of deduction of Security Deposit.	Up to 5% of Final Contract Amount.
31	Clause 31.1(1) Price adjustment shall be applicable	Not Applicable
	Clause 31.2.4 Weightages of component in the work.	Not Applicable
32	Mobilization and Construction Machinery Advance Applicable	No Mobilization and Construction Machinery Advance payable.
33	33.1 Secured Advance Applicable	No Secured Advance payable
	33.2 If yes, Unconditional Bank Guarantee	Not applicable
	33.2 If yes, Amount of Secured Advance	Not applicable
	33.3 If yes, Conditions for Secured Advance	a. Not applicable
		b. Not applicable
		c. Not applicable
		d. Not applicable
		e. Not applicable
		f. Not applicable
	33.4 If yes, Recovery of Secured advance	Not applicable
35	Completion Certificate – after physical completion of the work	As per Annexure – U
	Final Completion Certificate – after final payment on completion of the Work	As per Annexure – V

GCC Clause	Particulars	Data
36	Competent Authority	Managing Director, AKVN REWA M.P. Ltd.
39	Salient features of some of the major labor laws that are applicable	As per Annexure – W
41	Competent Authority	Managing Director, AKVN REWA M.P. Ltd.

ANNEXURE – N
(See clause 10 of Section 3-GCC)

Drawings

Detail Drawing can be seen in the office of the Executive Engineer, Audyogik Kendra
Vikash Nigam, Rewa (M.P.)

Details of Milestones

Sl. No.	Milestone	Duration	Achievement
1	1 st	Up to 3 months from commencement of work	10% of the Contract Amount
2	2 nd	Up to 6 months from commencement of work	25% of the Contract Amount
3	3 rd	Up to 9 months from commencement of work	60% of the Contract Amount
4	4 th	Up to 12 months from commencement of work	100%of the Contract Amount

ANNEXURE – P
(See clause 15 of Section 3-GCC)

Compensation for Delay

If the contractor fails to achieve the milestones, and the delay in execution of work is attributable to the contractor, the Employer shall retain an amount from the sums payable and due to the contractor as per the following scale –

- i. Slippage up to 25% in financial target during the milestone under consideration
– 2.5% of the work remained unexecuted in the related time span.
- ii. Slippage exceeding 25% but Up to 50% in financial target during the milestone under consideration
– 5% of the work remained unexecuted in the related time span.
- iii. Slippage exceeding 50% but Up to 75% in financial target during the milestone under consideration
– 7.5% of the work remained unexecuted in the related time span.
- iv. Slippage exceeding 75% in financial target during the milestone under consideration - 10% of the work remained unexecuted in the related time span.

Note: For arriving at the dates of completion of time span related to different milestones, delays which are not attributable to the Contractor shall be considered. The slippage on any milestone is if made good in subsequent milestones or at the time of the stipulated period of completion, the amount retained as above shall be refunded. In case the work is not completed within the stipulated period of completion along with all such extensions which are granted to the Contractor for either Employer's default or Force Majeure, the compensation shall be levied on the contractor at the rate of 0.05% per day of delay limited to a maximum of 10% of contract price.

The decision of Managing Director shall be final and binding upon both the parties.

ANNEXURE – Q
(See clause 17 of Section 3-GCC)

List of Equipment for Quality Control Lab

i) General		
a)	Oven - Electrically operated, thermostatically controlled, range 200°C sensitivity 1°C	1 No.
b)	Balance 20 kg capacity – self-indicating type	1 No.
c)	Electronic Balance 5 kg capacity accuracy 0.5 gm	2 Nos.
d)	Water bath-electrically operated and thermostatically controlled with adjustable shelves, sensitivity 1°C	1 No.
e)	Thermometers: Mercury-in-glass thermometer range 0° to 250°C Mercury-in-steel thermometer with 30 cm stem, range up to 300°C	4 Nos.
f)	Kerosene or gas stove or electric hot plate	1 No.
g)	Glasswares, spatulas, wire gauzes, steel scales, measuring tape, casseroles, karahis, enameled trays of assorted sizes, pestle-mortar, porcelain dishes, gunny bags, plastic bags, chemicals, digging tools like pickaxes, shovels etc.	As required
h)	Set of IS Sieves with lid and pan: 450 mm diameter: 75mm, 63 mm, 53 mm, 45mm, 37.5 mm, 26.5 mm, 22.4mm, 19mm, 13.2 mm, 11.2mm, 9.5 mm, 6.7 mm and 4.75 mm size 200 mm diameter: 2.36 mm, 2.0 mm, 1.18 mm, 600 microns, 425 microns, 300 microns, 150 microns and 75 micron	1 set 2 sets
i)	Water testing kit	1 set
j)	First aid box	1 set
ii) For soils and aggregates		
a)	Riffle Box	1 No.
b)	Atterberg Limits (liquid and plastic limits) determination apparatus	1 set
c)	Compaction Test Equipment both 2.5 kg and 4.5 kg rammers (Light and Heavy compactive efforts)	1 set
d)	Dry Bulk Density Test apparatus (sand pouring cylinder, tray, can etc.) complete	1 set
e)	Speedy Moisture Meter complete with chemicals	1 set
f)	Post hole auger with extensions	1 set
g)	Core cutter apparatus 10 cm dia, 10/15 cm height, complete with a dolly, rammer etc.	1 set
h)	Aggregate Impact Value Test apparatus/ Los Angeles Abrasion Test apparatus	1 set
i)	Flakiness and Elongation Test Gauges	1 set
j)	Standard measures of 30, 15 and 3 liters capacity along with standard tamping rod	1 set
k)	California Bearing Ratio test apparatus	1 set
l)	Unconfined compression test apparatus	1 set
iii) For Cement and Cement Concrete		
a)	Vicat apparatus for testing setting times	1 set
b)	Slump testing apparatus	4 sets

c)	Compression and Flexural strength testing machine of 200 tonne capacity with additional dial for flexural testing	1 No.
d)	Needle Vibrator	2 Nos.
e)	Air Meter	1 No.
f)	Vibrating hammer for vibrating dry mix as for Dry Lean Cement concrete sub-base	1 No.

- All items shall be required to function at 100% level at all times of construction period.

- Third Party Monitoring, Quality Control and supervision agency, PMC, shall be appointed to conduct various quality test and shall require full functioning of the Quality Control Lab; If the Quality Control Agency Does not Find the equipment functioning properly to there satisfaction the applicable penalty shall be levied on the contractor, Also the required tests shall be conducted outside by NABL accredited Labs and as per requirement by Government Engineering colleges, at Risk and cost of the Contractor.

Annexure – R
(See clause 31 of section 3 –ITB)

Price Adjustment (Not Applicable)

Price Adjustment (Not Applicable)

Annexure –S
(See clause 32 of Section 3-GCC)

Bank Guarantee form for Mobilization and Construction Machinery Advance

To

..... (name of Employer)
..... (name of Employer)
..... (name of Contractor)

In accordance with the provisions of the General Conditions of Contract, clause 31 (“Mobilization and Construction Machinery Advance”) of the above-mentioned Contract
..... (name and address of Contractor”) (hereinafter called “the Contractor”) shall deposit with (name of Employer) a bank guarantee to his proper and faithful performance under the said Clause of the Contract in an amount of (amount of Guarantee)* (in words).

We, the (bank or financial institution), as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to (name of Employer) on his first demand without whatsoever right of obligation on our part and without his first claim to the Contractor, in the amount not exceeding (amount of guarantee)* (in words).

We further agree that no change or addition to or other modification of the terms of the Contractor or Works to be performed thereunder or of any of the Contract documents which may be made between (name of Employer) and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until (name of Employer) receives full repayment of the same amount from the Contractor.

Yours truly,

Signature and Seal

Name of Bank/Financial Institution.....

Address

Date

Annexure –T
(See clause 33 of Section 3-GCC)

Bank Guarantee form for Secured Advance

INDENTURE FOR SECURED ADVANCES

This indenture made the day of 20.....
BETWEEN (hereinafter called the contractor which expression shall where the
context so admits or implies be deemed to include his executors, administrators and assigns) or the
one part and the Employer of the other part.

Whereas by an agreement dated (hereinafter called the said agreement)
the contractor has agreed.

AND WHEREAS the contractor has applied to the Employer that he may be allowed
advanced on the security of materials absolutely belonging to him and brought by him to the site of
the works the subject of the said agreement for use in the construction of such of the works as he has
undertaken to executive at rates fixed for the finished work (inclusive of the cost of materials and
labour and other charges).

AND WHEREAS the Employer has agreed to advance to the Contractor the sum of Rupees
..... On the security of materials the quantities and other particulars of
which are detailed in Accounts of Secured Advance attached to the Running Account Bill for the
said works signed by the Contractor on date the Employer has reserved to himself
the option of making any further advance or advances on the security of other materials brought by
the Contractor to the site of the said works.

NOW THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in
consideration of the sum of Rs. on or before the execution of these presents
paid to the Contractor by the Employer (the receipt whereof the Contractor doth hereby
acknowledge) and of such further advances (if any) as may be made to him as a for said the
Contractor doth hereby covenant and agree with the President and declare as follows:

That the said sum of Rupees so advanced by the Employer to

- (1) the Contractor as aforesaid and all or any further sum of sums advanced as aforesaid shall be
employed by the Contractor in or towards expending the execution of the said works and for
no other purpose whatsoever.

- (2) That the materials details in the said account of Secured Advances which have been offered to and accepted by the Employer as security are absolutely the Contractor's own propriety and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnified the Employer against all claims to any materials in respect of which an advance has to be made to him as aforesaid.
- (3) That the materials detailed in the said account of Secured Advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Engineer.
- (4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Engineer or any officer authorized by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same required by the Engineer.
- (5) That the said materials shall not be removed from the site of the said works except with the written permission of the Engineer or an officer authorized by him on that behalf.
- (6) That the advances shall be repayable in full when or before the Contract receives payment from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the Employer will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials than actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
- (7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing of the Employer shall immediately on the happening of such default be repayable by the Contractor to be the Employer together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the employer to reply and pay the same respectively to him accordingly.

- (8) That the Contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rupees and any further sum of sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the power contained therein if and whenever the covenant for payment and repayment here-in-before contained shall become-enforceable and the money owing shall not be paid in accordance there with the Employer may at any time thereafter adopt all or any of the following courses as he may deem best:
- (a) Seize and utilise the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provision in that behalf contained in the said agreement debiting the Contractor with the actual cost of effecting such completion and the amount due to the Contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the Contractor, he is to pay same to Employer on demand.
 - (b) Remove and sell by public auction the seized materials or any part thereof and out of the money arising from the sale retain all the sums aforesaid repayable or payable to the Employer under these presents and pay over the surplus (if any) to the Contractor.
 - (c) Deduct all or any part of the money owing out of the security deposit or any sum due to the Contractor under the said agreement.
- (9) That except in the event of such default on the part of the Contractor as aforesaid interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been here-in- before expressly provide for the same shall be referred to the Employer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

Annexure – U

(See clause 35 of Section 3 –GCC)

Physical Completion Certificate

Name of Work:

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

Agreement No. Date

Amount of Contract Rs.

Name of Agency:

Used MB No.

Last measurement recorded:

- a. Page No. & MB No.
- b. Date

Certified that the above-mentioned work was physically completed on
..... (date) and taken over on (date) and that I
have satisfied myself to best of my ability that the work has been done properly.

Date of issued

Executive Engineer

.....
.....

Annexure – V
(See clause 35 of Section 3 –GCC)

Final Completion Certificate

Name of Work:

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

Agreement No. Date

Name of Agency:

Used MB No.

Last measurement recorded:

a. Page No. & MB No.

b. Date

Certified that the above-mentioned work was physically completed on
..... (date) and taken over on (date).

Agreement amount Rs

The final amount paid to contractor Rs.

Incumbency of officers for the work.

I have satisfied myself to best of my ability that the work has been done properly.

Date of issue:

Executive Engineer

.....
.....

Annexure – W
(see clause 39 of Section 3 – GCC)

Salient Features of some Major Labour Laws Applicable

- a) Workmen Compensation Act 1923:- The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) Payment of Gratuity Act 1972:- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum days (say, 15 days) wages for every completed year of service the Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.
- c) Employees P.F. and Miscellaneous Provisions Act 1952:- The Act provides for monthly contributions by the employer plus workers at the rate prescribed (say, 10% or 8.33%). The benefits payable under the Act are:
 - i. Pension or Family pension on retirement or death as the case may be.
 - ii. Deposit linked insurance on the death in harness of the worker.
 - iii. Payment of P.F. accumulation on retirement/death.
- d) Maternity Benefit Act 1951:- The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) Contract Labour (Regulation & Abolition) Act 1970:- The Act provides for certain welfare measures to be provided by the Contractor to contract labor and in case the Contractor fails to provide, the same is required to be provided, by the Principal Employer by the law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take a license from the designated Officer. The act is applicable to the establishments or Contractor of Principal Employer if they employ prescribed minimum (say, 20) or more contract labor.
- f) Minimum Wages Act 1948:- The Employer is to pay not less than the minimum wages fixed by appropriate Government as per provision of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways are scheduled employment.
- g) Payment of Wages Act 1936:- It lays down as to by what date the wages are to be paid when it will be paid and what deductions can be made from the wages of the workers.
- h) Equal Remuneration Act 1979:- The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training, and promotions etc.
- i) Payment of Bonus Act 1965:- The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus within the prescribed range of percentage of wages to employees drawing up to the

a prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. States may have a different number of employment size.

- j) Industrial Disputes Act 1947:- The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) Industrial Employment (Standing Orders) Act 1946:- It is applicable to all establishments employing prescribed minimum (say, 100 or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and gets these certified by the Designated Authority.
- l) Trade Unions Act 1926:- The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- m) Child Labour (Prohibition & Regulation) Act 1986:- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of child labor is prohibited in building and construction industry.
- n) Inter-state Migrants Workmen's (Regulation of Employment & Condition of Service) Act 1979:- The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrants workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Travelling expenses from home up to the establishment and back etc.
- o) The Building and Other Construction Workers (Regulation of Employment & Condition of Service) Act 1996:-) All the establishment who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishment are required to pay less at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures, such as canteens, first-aid facilities, ambulance, housing accommodations for workers near the workplace etc. The Employer to whom the Act applies to obtain a registration certificate from the Registering Officer appointed by the Government.
- p) Factories Act 1948:- The Act lays down the procedure for approval of program before setting up a factory, health and safety provision, welfare provision, working hours, annual earn leave and rendering information regarding the accident or dangerous occurrence to designated authorities. It is applicable to premises employing the prescribed minimum (say, 10) persons or more with aid of power or another prescribed minimum (say, 20) or more persons without the aid of power engaged in the manufacturing process.

Conditions of Contract

Part – II Special Conditions of Contract (SCC) & Technical Specification

1.0 Submission of Work Plan and Schedule

Submission of Work Plan and schedule – Contractor shall submit the detailed Work Plan, showing the various tasks to be performed in the order of their occurrence within maximum 21 (Twenty One) days from the issue date of the letter of acceptance for approval.

Contractor during the construction resubmit the Work Plan and Schedule keeping track of the actual site progress for ease of monitoring the progress on regular basis on every Three Months (Quarterly) to the Engineer-In-Charge & Consultant. Nonsubmission of the updated program will cause withheld of the amount specified in contract data.

2.0 Submission of Design and Drawings

Submission of Design, Drawings and other details for Road work, Storm Water Drain work, water supply, & Culverts, Electrical work, and other activities as instructed by EIC / consultant.

The contractor shall have to submit the detail design & drawing (Structural, Mechanical and Hydraulic) duly approved from NIT/Eng College Jabalpur or IIT for, RCC sump well, RCC Over Head Tank, in six copies with in 45 days of issue of letter or Acceptance of the tender. The charges for the same to be paid by the contractor.

3.0 Approval by the Consultant

The work will be executed on the design and drawings prepared by the contractor and approved by AKVN(R)/consultants. The contractor(s) shall make available to the consultant full access to the site of work and the site-testing laboratory and Contractor and their representative will have to be present during such inspections. All views and opinion given by the consultant shall be followed in full.

Contractor shall ensure adherence to the different conditions during execution regarding approval from Consultant. The Consultants approval shall not alter the Contractor's responsibility for the correct design of both Temporary and Permanent Works.

4.0 Other Conditions

a) The Contractor(s) will have to keep on-site complete survey instruments like Total Station / Auto Level and Computers, Plotter of A0 size, Printer, photocopier, Scanner, High-speed broadband Internet connection, Digital Camera with Data Transfer capabilities, Software shall be as required, consumables and other office accessories along with technical personnel to operate those instruments to facilitated and obtain the information required as instructed by Engineer-In-Charge/Consultant, for which no extra payment will be made.

b) The Contractor shall conduct the detailed physical survey, by Total Station, of the site and adjoining areas all complete, including, Bench Marking Pillars, DTM, GTS Bench Triangulation, 3dPolylines, etc., as per IRC-SP-19, IRC-5 and MORT&H specifications. The contractor shall get the methodology and output model approved by the Consultant. The survey shall include validation wherever required. **The contractor shall use Digital GPS; Total Station based Method for layout of Proposed Design, Services, and Features as per site and as per approved Design and Drawings**, the contractor shall

mark alignment of the road and layout of other components at site in coordination with AKVN REWA & consultant, after giving the layout by the consultant the contractor will verify the layout with the Drawings if it is not matched with the approved drawings, the contractor will be responsible to rectify the layout at site before commencing construction, and shall be completely liable for any undesired works.

c) The contractor shall periodically take photographs/videos of the site prior to the commencement of work, during construction and after completion of work as suggested and shall submit the photographs/videos in soft and hard copies to AKVN REWA and Consultant for which no extra payment will be made. The contractor shall, apart from the above, take photographs or digital videos of critical elements as instructed by Engineer-in-Charge and submit the same for which no extra shall be payable.

d) The schedule of quantities annexed with the tender generally represents the work. However, AKVN REWA Ltd. reserves the right to completely omit any item, add an item and the variance in the quantity of different items can be to any extent. No claim of the contractor(s) will be entertained on this account.

e) The drawings of certain items as specified by AKVN REWA shall serve as G.A. drawings for general layout. The contractor shall prepare and submit for approval, detailed shop / fabrication / setting out drawings, Working Sections at every 20m for road, contour plan etc. (including Road Profile, Drain Profile & section, Culvert & bridge hydraulic Design etc.), for all Civil and Engineering Works, with all levels taken by Total Station / Auto Level of existing and proposed work and other details not detailed in the GAD drawings, for proper coordination and all changes required as per the site condition and contractor shall submit these drawings for approval to the EIC/Consultant. It shall be the contractor's responsibility to see that all deviations if any from CAD drawings and specifications, noted on the drawings are brought to the attention of the consultant, otherwise, approval shall be automatically voided. No extra cost shall be paid for designing and preparation of shops/ working / Setting out drawings.

f) The Contractor shall conduct survey and detailed soil investigation wherever required and submit Design Calculations, Specifications and Working Drawings showing the Proposed Works such as building work, overhead tank, sump, bridge, culvert etc (both Temporary and Permanent) to the EIC/ Consultant, who has to approve them if they comply with the desired specifications and drawings.

g) The Engineer-In-Charge's/Consultants approval shall not alter the Contractor's responsibility for the correct design of the Works (both Temporary and Permanent).

h) The contractor shall make available samples of all Materials etc. of all makes intended to be used at the site, for the approval of EIC/Consultant.

i) Contractor at his own cost (no extra payment shall be made by AKVN REWA for setting the laboratory) shall have to install and maintained at work site a well – equipped, with calibrated instruments done as required in codes, field laboratory (of minimum 20 sq.m.) for day to day testing of materials and quality of work along with experienced & technically qualified testing staff. Contractor shall also keep all relevant Codes at Site

Laboratory. The structures and equipment shall be removed on the completion of works at contractor's own cost

j) The cost of materials consumed on testing either at the field or in a different laboratory and the cost of testing will not be paid.

k) Frequencies of the prescribed tests to be carried out must not be less than the prescribed frequencies in MORT & H 5Th revision, CPWD specification, National Building code, relevant IS / IRC codes and as specified in Applicable SORs. Copies of Registers containing a record of such tests shall have to be presented along with running bill. The test shall have to be conducted by the contractor's Engineer under the supervision of the Engineer - In - Charge or his authorized representatives.

l) Contractor shall conduct at least 20% of material testing from Govt. Engineering College/ Govt. agency/ National Accreditation Board for Testing and Calibrating Laboratories (NABL) accredited testing laboratory as approved by EIC/consultant to check the quality of materials procured by the contractor at the site and to check the quality of the work executed. All charges for testing shall be paid by the contractor, failing which the same shall be got done by Engineer-In-Charge and charges shall be recovered from the contractor's bill.

m) The quantities of any item in the Bill of Quantities approximately indicate the total extent of work, which may vary to any extent and may even, be omitted thus altering the aggregate value of the contract. Contract price may vary (additional alteration) up to 10% (ten percent) on account of any change in scope and contractor shall have to carry out the work on this account.

However, the AKVN (REWA) shall have powers to increase/decrease the contract price beyond

10% but up to 25% with mutual consent of the contractor with no extra cost.

n) If required and directed by Engineer In-charge or Consultant, the contractor shall arrange a visit of his personnel comprising of Engineer In-charge's, Consultant's representative to various places/plants in or outside of Singrauli to check and verify the quality of material at manufacturers place. No extra cost shall be payable for this to the contractor.

o) The contractor has to appoint a sufficient number of technical staff (as per Schedule- I) i/c senior experienced supervision Engineers & technically trained staff as per the instruction and approval of Engineer-In-Charge / Consultant. The contractor should take approval of CV's of key personnel from a consultant. If the contractor fails to deploy the technical staff as per schedule "I", an amount as shown in Contract Data shall be deducted from his running bill.

p) Execution of Agreement: The bidder whose tender has been accepted hereinafter referred to as the contractor, will execute the agreement in the prescribed form within 15 days of the date of communication of the acceptance of his tender by the competent authority. Failure to do so will result in the earnest money being forfeited to Authority and tender being canceled.

- q) The Employer shall give possession of the Site to the Contractor. The Contractor shall be responsible to coordinate with the Service Provider/Concerned Authorities for cutting of trees, shifting of utilities, Removal of Encroachments Etc. and making the site unencumbered from the project construction area required for completion of the Work. This would include initial and frequent follow up meetings/actions/discussions with each involved service provider/concerned authorities. The Contractor will not be entitled to any additional compensation for delay in the cutting of Trees, Shifting of utilities and removal of Encroachments by the service provider/concerned authorities. The Engineer-in-charge shall consider an extension of time to such delays. Statutory Charges if any; for cutting of trees and shifting of utilities as required by the concerned department shall be made by Employer.
- r) All statutory approvals for Permanent Water, drainage, firefighting, Municipal and other services are to be obtained by the contractor at no extra cost. Only the official payment made in the Government treasury or to the local bodies for deposit etc. will be reimbursed against the treasury slip.
- s) The Contractor shall construct and maintain such storehouses, yards etc. as considered sufficient by the Engineer-In-Charge for proper upkeep of the Material, Plant and Machinery, and records for the due discharge of contractors Obligations towards the Contract. Space for these works will have to be made available by contractor himself as per his own convenience at his own costs. Engineer-In-Charge/Consultants will be provided free access to these premises. The site handed over to the contractor will have to be vacated in the same condition within 3 (three) months of the completion of the contract.
- t) It will be the responsibility of the contractor to make necessary temporary arrangements for sufficient illumination of the road being used by the road users during the period of the work at his cost. The contractor will also make adequate arrangements for illumination of work sites at his cost.
- u) All charges for temporary Water & Electrical connection and Consumption charges required to execute the total work are to be borne by the contractor at no extra cost.
- v) Either the Engineer-In-Charge/Consultants may require the Contractor to attend a management meeting, which shall be held once every month or whenever specifically required. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- w) No Claims whatsoever on grounds of delay in getting the temporary connections shall be admissible towards any extra payment.
- x) The contractor shall procure minimum 43 grade (conforming to IS:8112) Ordinary Portland Cement only as required for the work from the reputed manufacturers of cement, i.e. from A.C.C., Ultratech, J.K., Ambuja, Shree or Birla only as approved by EIC/consultant. Supply of cement shall be taken in 50 kg bags bearing manufacturers name and ISI marking. Samples of cement arranged by the contractor shall be taken by the

Engineer-in-charge and got tested in accordance with provisions of relevant IS codes. In case test results indicate that the cement arranged by the contractor does not conform to the relevant IS codes, the same shall stand rejected and shall be removed from the site by the contractor at his cost within a week's time of the written order from the Engineer-in-charge to do so.

(i) The cement shall be bought at the site is not less than 25 tons lots or as decided by the Engineer-in-charge/Consultant.

(ii) The cement storeroom shall have a capacity of a minimum of 2000 bags of cement. The store should be constructed by the contractor at site of work for which no extra payment shall be made. The contractor shall be responsible for the watch and ward and safety of the cement storeroom. The contractor shall facilitate the inspection of the cement storeroom by the Engineer-in-charge at any time.

(iii) The contractor shall supply free of charge the cement/other material required for testing. The cost of tests shall be borne by the contractor.

(iv) The actual issue and consumption of cement on work shall be regulated and proper accounts should be maintained. The theoretical consumption of cement shall be worked out as per procedure prescribed in the contract and shall be governed by conditions laid therein.

(v) Cement brought to the site and remaining unused after completion of work shall not be removed from the site without written permission of the Engineer-in-charge at any time.

y) The contractor shall procure steel reinforcement bars TMT-FE-500 only (Thermo-Mechanically Treated bars) conforming to relevant IS codes from SAIL, TISCO, VIZAG, RINL & JINDAL only. The structural steel of the main Producer only shall be permitted for use. The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work. Samples shall also be taken and got tested by the Engineering-charge as per the provision in this regard in relevant IS codes. In case the test results indicate that the steel arranged by the contractor does not conform to BIS codes the same shall stand rejected and shall be removed from the site of work by the contractor at his cost within a week's time from the written orders from the Engineer-in-charge to do so. The cost of steel, testing charges and to & fro cartage shall be borne by the contractor.

(i) The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid to this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking at any time as and when desired by the Engineer-in-charge / Consultant.

(ii) The contractor shall supply free of charge the steel required for testing.

(iii) The actual issue and consumption of steel on work site shall be calculated and proper accounts shall be maintained. The theoretical consumption of steel shall be worked out as per the standard procedure and shall be governed by conditions laid therein.

(iv) Steel brought to site and steel remaining unused shall not be removed from the site without the written permission of the Engineer-in-charge.

z) Subgrade should be compacted up to at least 97% of maximum dry density. The compaction would be done by soil compactor Vibratory rollers.

a) Mix design - The contractor shall conduct & submit the mix design for RCC, PQC, and DLC for approval before execution of work as per relevant specifications and approved by an institution or laboratory approved by Engineer-In-Charge / Consultant at his own cost.

bb) The excavated materials will have to be disposed of, spread and dressed anywhere on either side of the road as per the direction of Engineer-In-Charge

5.0 Scope of work

AKVN Rewa proposed to develop Industrial Area on available land at at Udyog Vihar churatha, Dist. Rewa, M.P Total Area = 134.91 Hect of land is identified at the mentioned area

The Owner / Employer intend to appoint the single contracting firm to carry out the integrated development of proposed Industrial area within 18 months including a rainy season of the stipulated time period. The integrated components of the infrastructure works are including roads, water supply, drains, electrical works (street light), culverts, boundary wall, site development works and other allied works. However, following are the approximate quantities of critical components.

S.No.	Descr	Physical
1	Road Work	9.5 KM
2	Strom Water Drainage	8.5 KM
3	RCC Hume Pipe Culvert	14 No
4	Water supply Work	
a	Rising mains	700 M
b	Distribution water supply	11 km
c	Over Head Tank	500 KL
d	Construction of Tube Well, Pumping Station	5Nos
e	Const of Tube Well	5Nos
f	Sunwell	225 KL
g	Power connection at the Pumping station.	5No
5	Electrical Work	
a	Street Light – Panel Room	3 Nos
d	Street Light	134 Nos

6.0 Nature of Work

Entire work should be executed in an integrated manner & simultaneously to ensure the timely completion of the work.

- PQC, DLC, CRM for CC Roads
- RCC Storm Water Drains,
- Plain & Reinforced Cement Concrete.
- Water supply work including source development, storage, distribution system, Over Head Tank, Sump Well, Rising main, Pumphouse, etc complete.
- Electrical Installations including street lights and its panel rooms.
- Other requisite work for successful completion & commissioning of the project.

7.0 General Specifications of various works

7.1 RCC Sump Well

The construction RCC sump well capacity of 200KL each with as required Pump cum Panel Room of minimum size 10sqm and 3m height with all necessary fittings and fixture etc. all complete, completion, testing, commissioning and maintenance of the works except in so far as the contract otherwise provides, the provision of all labour, materials, constructional plants, equipments and accessories, temporary and enabling works and works (whether of a temporary or permanent nature) required in and for such construction, complement and maintenance so far as the necessity for providing the same is specified in or can be reasonably inferred from the contract.

7.1.1 Workman Ship:

- a. All works pertaining to the contract shall be carried out per specifications given here under.
- b. After satisfactory completion of construction work and water tightness testing, the water tanks shall be the roughly cleaning with brushes and cleaning agents as permitted by the engineer in charge to remove dust, dist, loose concrete, chips and scales or any other undesirable material. The tank shall be filled with water upto the full storage level and mixed thoroughly with a solution of high strength hypochlorite (HTH) of any other disinfection solution as approved by the engineer in charge. The solution shall have strength of at least 0.5 m p.m. residual chlorine. The water shall stand for a period of 48 hours. It shall then be flushed out by opening the scour valves and shall then be ready for commissioning. The test shall be certified by the engineer in charge before it is ready for commissioning.

7.1.2 Excavation The depth of excavation will generally be guided by the underground strata and the safe bearing capacity of the foundation soil as directed by the Engineer – in – charge. Strata charge of trial pit. Section is made available for the purpose of design. This shall be verified by the contractor by Actual site investigation and test of underground strata at his own cost. Test result shall be submitted along with design calculation. The contractor shall keep the side clear of water at all times. This end he shall provide Arrangement as required.

7.1.3 Design Requirements:

- a. The structure should be designed as per actual safe bearing capacity (SBC) of trial pit at site. The contractor should carryout Safe Bearing Capacity test at his own cost.
- b. The tank should be designed for required storage capacity with suitable arrangement for inlet, and scour.
- c. For the purpose design the stress in steel and concrete shall be adopted as specified in the relevant in the Indian standard code.
- d. For the guidance of the contractor the section of trial pit taken at the site of construction is enclosed but the contractor should himself verify the bearing capacity of soil at site for design of foundation.
- e. Suitable size of aluminum ladder shall be provided inside the tank. The provision of ladder should be as per instruction of Engineer- in – charge.
- f. The min. scour pipe will be of 150 mm dia. meter. The works involve excavation in trenches providing laying & jointing scour from the bottom of tank to the nearby drain by pipe. The C.I. 150 mm, dia. class “LA” pipe should be provided with 150mm dia C.I. sluice valve. (All fitting and valves of IS standard and provision for of chamber with heavy duty RCC cover and frame). Provision for 2m wide plinth protection as per design is also part of work.
- g. The submitted designs and drawings shall be got checked by IIDC Gwalior from IIT/ Regional Engineering college/MITS Gwalior. The charges for the same should be paid by Contractor. The contractor shall have to execute the work as per approved designs and drawings.

7.1.4 Filling Foundation with Bed Concrete:

- a. Any excavation be done below the specified levels, contractors shall fill in such excavation at his own cost with M-10 grade of concrete below foundation well rammed in position up to the level.
- b. The contractor shall notify when the excavation is completed and on concrete shall be laid until
- c. The soil for each individual footing, rats etc., is approved. The contractor is to carry out necessary soil testing at his own cost. And the test results dully approved by the engineer-in-charge.

7.1.5 Testing of Water Tightness

- a. The tank will have be tested for the water tightness as per IS -3370 and it will be responsibility of the contractor to make it water tight. The arrangements for water shall be done by the contractor at his own cost of testing purposes. The contractor will have to give a test of water tightness of reservoir to the entire satisfaction of the Nigam. The responsibility of structural suitability shall also rest solely with the contractor. Maintenance period shall be 60 months after successful testing and commissioning of tank.
- b. Snowcem or durocem painting of the tank shall be done only after tank is tested for water tightness only on the outside portion above ground level.
- c. The Nigam shall not be responsible for providing water require for construction and other purposes. The contractor shall make his own arrangements for the same at his own cost.
- d. No extra charge for the plastering if required for furnishing the surface of structures shall be paid under any circumstances.

77.1.6 Steel for Reinforcement: All the iron and steel required for the work will be procured by the contractor at his own cost. The Department shall not supply any quantity of steel under any circumstances. Steel for reinforcement shall conform to IS 432-1966 (with upto date revision) and IS 1139-1966 (with upto date revision) the contractor shall be required to produce the test certificate of the manufacturers to the department be-fore use of steel for the work. No untested steel shall be used. The department however reserves right to get the received steel tested at the cost of contractor.

Plinth Protection- Construction of plinth protection minimum 1.0m wide, of Cement Concrete grade M20, 75mm thk, laid on brick ballast or coarse granular bedding of minimum thickness 150mm, including construction of 30cm thk toe wall on the outer periphery of the plinth protection, along with necessary drain arrangement.

7.1.7 Payment Schedule: Rcc Sump Well

The payment schedule for this item is as under.

Sr. No.	Stages of Work	Corresponding total payment upto stage
1	After excavation & base concrete	15% of total cost
2	After completion of tank wall casting (half height)	20% of total cost
Sr. No.	Stages of Work	Corresponding total payment upto stage
3	After completion full height of tank	20% of total cost
4	After casting of roof	10% of total cost
5	After providing & installation of pipes, valves, pumps panel board and etc complete.	15% of total cost
6	After successful testing of tank etc. Note: Water required for testing should be arranged by contractor himself.	20% of total cost

7.2 RCC OVERHEAD TANK (500 kl with 18 m staging,)

The construction, completion, testing, commissioning and maintenance of the works except in so far as the contract otherwise provides, the provision of all labour, materials, constructional plants, equipments and accessories, temporary and enabling works and works (whether of a temporary or permanent nature) required in and for such construction, complement and maintenance so far as the necessity for providing the same is specified in or can be reasonably inferred from the contract.

7.2.1 Workman Ship:

- a. All works pertaining to the contract shall be carried out per specifications given here under.
- b. After satisfactory completion of construction work and water tightness testing, the water tanks shall be the roughly cleaning with brushes and cleaning agents as permitted by the engineer in charge to remove dust, dist, loose concrete, chips and scales or any other undesirable material. The tank shall be filled with water upto the full store level and mixed thoroughly with a solution of high strength hypo chorine (HTH) of any other disinfection solution as approved by the engineer in charge. The solution shall have a strength of at least 0.5m p.m. residual chlorine. The water shall stand for a period of 48 hours. It shall then be flushed out by opening the scour valves and shall then be ready for commissioning. The test shall be certified by the engineer in charge before it is ready for commissioning.

7.2.2 Excavation

The depth of excavation will generally be guided by the underground strata and the safe bearing capacity of the foundation soil as directed by the Engineer – in – charge. Strata charge of trial pit section is made available for the purpose of design. This shall be verified by the contractor by Actual site investigation and test of underground strata at his own cost. Test result shall be submitted along with design calculation. The contractor shall keep the side clear of water at all times. This end he shall provide Arrangement as required.

7.2.3 Design Requirements:

- a. The structure should be designed as per actual safe bearing capacity (SBC) of trial pit at site. The contractor should carryout Safe Bearing Capacity test at his own cost.
- b. The tank should be designed for required storage capacity with suitable arrangement for inlet, outlet and scour.
- c. For the purpose design the stress in steel and concrete shall be adopted as specified in the relevant in the Indian standard code.
- d. For the guidance of the contractor the section of trial pit taken at the site of construction is enclosed but the contractor should himself verify the bearing capacity of soil at site for design of foundation.
- e. The RCC overhead tank should be designed in circular shape. Staging means the height from plinth beam to the beam of bottom dome.
- f. Suitable size of RCC stair from plinth beam to bottom dome and MS stair bottom dome to roof and stair protected by MS railing. A suitable size of aluminium ladder with railing shall be provided inside the tank.

The minimum diameters of DI pipes are as follows.

- g. Inlet pipe - 150mm dia, outlet pipe – 250mm dia, scour pipe 300mm dia and overflow pipe 300mm dia. sluice valve, (All pipes, fittings and valves are of CI and according to IS standard and provision for of RCC chamber with heavy duty RCC cover and frame). Provision for 2m wide plinth protection as per design is also part of work.
- h. The submitted designs and drawings shall be got checked by IIDC Gwalior from IIT/Regional Engineering college/MITS Gwalior. The charges for the same should be paid by Contractor. The contractor shall have to execute the work as per approved designs and drawings.
- i. Provision for lightening arrestor with copper strip as conductor earth electrode.

7.2.4 Filling Foundation with Bed Concrete:

- a. The foundation shall be filled with bed concrete of mix 1:3:6 and for the height shown in the Drawing or as per instructions of Engineer – in – charge.
- b. Any excavation be done below the specified levels, contractors shall fill in such excavation at his own cost with M-10 grade of concrete below foundation well rammed in position upto the level.
- c. The contractor shall notify when the excavation is completed and on concrete shall be laid until.
- d. The soil for each individual footing, rates etc., is approved. The contractor is to carry out necessary soil testing at his own cost and the test results duly approved by the engineer-in-charge.

7.2.6 Steel for Reinforcement:

All the iron and steel required for the work will be procured by the contractor at his own cost. The Department shall not supply any quantity of steel under any circumstances. Steel for reinforcement shall conform to IS 432-1966 (with upto date revision) and IS 1139-1966 (with upto date revision) the contractor shall be required to produce the test certificate of the manufacturers to the department before use of steel for the work. No untested steel shall be used. The department however reserves right to get the received steel tested at the cost of contractor.

Overhead Tank –

Construction of RCC Over head tank capacity 500 Kiloliters and 18M staging .

Plinth Protection- Construction of plinth protection minimum 1.0m wide, of Cement Concrete grade M20, 75mm thk, laid on brick ballast or coarse granular bedding of minimum thickness 150mm, including construction of 30cm thk toe wall on the outer periphery of the plinth protection, along with necessary drain arrangement.

7.2.7 Payment schedule:

The payment schedule for this item is as under:

Sr. No.	Stages of Work	Corresponding total payment upto stage
1	After excavation & footing with column upto plinth level	10% of total cost
2	After completion of Staging upto half height.	10% of total cost
3	After completion of full Staging upto bottom of beam of base slab.	10% of total cost
4	After completion base slab of tank	10% of total cost
5	After completion half height of tank wall	10% of total cost
6	After completion full height of tank wall	10% of total cost
7	After casting of roof	10% of total cost
8	After providing & installation of pipes and pipe fittings etc	10% of total cost
9	After successful testing & commissioning of tank etc. Note: Water required for testing should be arranged by contractor himself.	20% of total cost

SPECIAL CONDITIONS FOR ELECTRICAL WORK

1. The Contractor may execute the work of as specified in the agreement item through the agency of “Class A” registered with MP Licensing board Bhopal But all liability will belong to the main contractor. All the standard made of materials and equipment shall use as specified and approved by MP PKVV Co. Ltd and accepted by tendering authority. All required approvals from concerning authorities of MP PKVV Co. Ltd. to execute the work shall be part of contractor’s job.
 2. To contact and pursue the concerning authorities of MP PKVV Co. Ltd. To arrange necessary shutdowns as & when required to execute the work and final handing over to them with all necessary formalities and testing and commissioning as per procedure under rules and regulation of MP PKVV Co. Ltd. Laid down by MPERC, Bhopal.
 3. To obtain all necessary statutory permission and sanction/approvals from all concerning departments with preparation and finalization of all required drawings and documents and handing over to MP PKVV Co. Ltd.
 4. To replace/repair as the case may be of all defective/damaged/burnt items/part either himself or from concerning manufacturers during guarantee period which shall not be less than one year except power and distribution transformer which shall be 24 months from the date of commissioning & handing over substation to MPPKVV Company Ltd.
 5. The quantities of equipment/materials are indicated in the schedule of items as enclosed. However, the Contractor shall supply and erect/construct as per the quantities finalized by M.P.P.K.V.V.Co. Ltd. during/after detailed engineering/execution of works, and shall be paid accordingly.
 6. After the approval of M.P.P.K.V.V.Co. Ltd the contractor shall start to construct/ erect the substation / Linework.
 7. After the work order, AKVN REWA will issue the Guaranteed Technical Particulars form as per M.P.P.K.V.V.Co. Ltd to the contractor for the assigned work.
 8. All the works will be carried out as per the existing rules & regulations of MPPKVV Co. Ltd.
 9. The work will be as per satisfaction of engineer-in-charge, who can take a decision as per the site conditions, quantity may vary as per site condition
 10. Electrical work components are at the stage of technical approval from Madhya Kshetra Vidyut Vitran Company Ltd. Bhopal and it is expected to obtain the approvals prior to finalization of the Contract. However, Contractor has to execute the work as per the MP PKVV CO. LTD.’s prevailing procedures and norms under the supervision of their officials. After completion of works, all works and electrical components shall be handed over to MP PKVV CO. LTD. for future O&M. Hence, it is the sole responsibility of the Contractor will deploy the required resources to complete the electrical work within the stipulated timeframe. 10% retention amount of electrical work will be with held from running bill (applicable for electrical components) till completion of work and withheld amount will be released after the successful completion and handing over of electrical operational assets to MPPKMVV Co. as per their satisfaction.
- a. The Contractor may execute the work of 5 MVA, 33/11 KV substation and 33 & 11 KV lines through the agency of “Class A” registered with MP Licensing board Bhopal But all liability will belong to the main contractor.

Note: All the civil works like road, drain, culvert, bridge, buildings etc, shall be maintained for Five years after completion of work by the contractor and all electrical and mechanical equipment shall be maintained for one year after completion of work by the contractor, if not specified anywhere.

If contractor failed to perform the requisite and informed repairs within given period, then AKVN REWA will carry out the same to ensure the smooth service to users and the same amount with an additional penalty of the same amount (means twice of expenditure incurred by AKVN REWA) will be recovered from the Contractor. If contractor failed to undertake the repairs then notice will be issued to contractor and Security Deposit will be forfeited to AKVN REWA without assigning any reason to the contractor.

11. All material and equipment supplied by the contractor shall be new. They shall be of such design size and material as to satisfactorily function under the rated conditions of the operation and to withstand the environmental conditions at the site.

12. Material and equipment to be used in the work shall be inspected by the Departmental Officers. Inspection of materials/equipment to be witnessed at the Manufacturer's premises and receive materials at the site with manufacturer's certificate and guarantee certificates.

13. Similarly, for fabricated equipment, the contractor will first submit dimensional detailed drawings for approval before fabrications, and all the components and wiring installation shall be of appropriate rating of rated voltage, current, and frequency as required of the electrical installation in which they are used.

14. HANDING OVER:

1. Supports shall be of adequate strength and conform to Rule 76 of the Indian Electricity Rules. The size of pole section shall be selected the requirement of the load as per IS-Specification.
2. Dismantled materials are transported under the direct supervision of a Competent/Authorized Person of DISCOM and old material returned to MP PKVV CO. Store.)
3. The installation will be handed over to the department after the necessary testing and commission with prior permission of Electrical Inspector Office.

PROPOSED WORK

S r. N o.	Name of Industrial Area	Place	Proposed Work					Streetlight line (nos)	100 KVA S/S 11/4 KV
			New 5 MVA S/S 33/11 KV	Length of 33 KV line Required Km	Length of 11 KV Required Km	No. of 11 KV FEEDER	1500 KVAR 11 KV Capacitor Bank with Protection		
1	Upgradation of Industrial Area (Dist. Udyog Vihar, Chaurasia, Rewa)	Distt- Rewa	0	0	0	0	0	134	5

SECTION 4

BILL OF QUANTITIES (BOQ)

General Description of work: Development of infrastructure development works, including Road, Drainage, Water supply, Electrical, work at New Industrial Area- New Industrial Area at Waidhan, Singrauli, and M.P.

Probable Amount of Contract:

Rs.1894.49 /-

(Rs. Eighteen Crores, Ninty Four Lacs and Forty Nine Thousand only.)

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BILL OF QUANTITIES					
ROAD WORKS					
S. No	Schedule Item	Unit	Qty	Rate	Amount
1	Site Clearance	Hect	13.0	39368	510012.44
	Clearing and Grubbing Road Land . <i>(Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal unserviceable materials and stacking of serviceable material to be used or auctioned up to a lead of 1000 metres including removal and disposal of top organic soil not exceeding 150 mm in thickness.)</i>				
	a) In area of light jungle 5.5 M C/W Road				
2	Preparation of surface	cum	20116.4	228	4586539.20
	Dismantling of Flexible Pavements Dismantling of flexible pavements and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately.				
	5.5 M C/W Road				
3	Profiling, levelling and preparing the exposed granular surface to required camber and levels as per requirement i/c cutting and filling from available material upto a thickness of 100mm i/c grading, watering and compacting with vibratory rollers of 80 to 100 kN static weight to achieve the desired density as per clause 405 of specification.	SQM	8831.6	30	264948.00
	5.5 M C/W Road				
4	Disposal of Surplus excavated material from road way cutting i/c loading, unloading, transportation, i/c all leads and lifts	cum	16493.1	150	2473965.00
5	Preparation of surface for Road Embankment including scarifying existing surface upto 30 cm depth including spreading , dressing levelling of excavated earth including rolling and compaction complete.	sqm	4824.0	36.6	176558.40
	5.5 M C/W Road				

S. No	Schedule Item	Unit	Qty	Rate	Amount
6	<p>Excavation in Soil using Hydraulic Excavator and Tippers with disposal upto 1000 metres. <i>(Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location within all lifts and lead upto 1000m as per relevant clauses of section-300 of specification.)</i></p>	cum	1000.0	45	45000.00
	5.5 M C/W Road				
7	<p>Construction of embankment with material deposited from Borrow Pits. <i>(construction of embankment with approved material CBR >7, deposited at site from roadway cutting & excavation from drain & foundation of other structure graded and compacted to meet requirement of table 300-2)</i></p>	cum	24320.8	144	3502195.20
	5.5 M C/W Road for Complete Row				
	b) Embankment for 5.5m Cairrage way and avg width =12.9M				
8	<p>Excavation in Hard Rock with disposal upto 1000 metres Excavation for roadway in hard rock with rock breakers i/c breaking rock or by drilling, blasting and breaking, trimming of bottom and side slopes in accordance with requirements of lines, grades and cross sections, loading and disposal of cut road with all lifts and leads upto 1000 metres and as per relevant clauses of section-300 of specification</p>	cum	1	164	164.00
	b) Embankment for 5.5m Cairrage way and avg width =12.9M				
9	<p>Sub-Base and Base Course CRM Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base in accordance to Table No. 400-14, 40015 and as per clause of section 407 of specifications. (i) For 53 mm maximum size.</p>	cum	18014.1	957	17239512.84
	5.5 M C/W Road(Avg Width= 10.7m as per drawing)				

S. No	Schedule Item	Unit	Qty	Rate	Amount
10	Construction of Shoulders with approved material/selected soil i/c excavation all lifts & leads i/c grading to required slope & camber of 4% and compacting using vibratory roller of 80 to 100 kN static weight to meet requirement as per relevant clause of 400.	cum	18241.0	181	3301613.76
	4.13(b) Hard shoulders (CBR Value >12)				
	5.5 M C/W Road(Avg Width= 4.8m as per drawing)				
11	Dry Lean Cement Concrete Sub- base Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 810 tonnes vibratory roller, finishing and curing as per clause 601 of specification complete in all respect.	cum	4223.4	2199	9287168.64
	5.5 M C/W Road(Avg Width= 5.7m as per drawing)				
12	Surface Course Cement Concrete Pavement Construction of un-reinforced, dowel jointed, plain cement concrete pavement M-40 grade concrete over a prepared sub base with cement , coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, admixtures as approved, curing compound, finishing to lines and grades as per drawing as per IRC 15 2011 and as per relevant clauses of section 602 of specifications complete but excluding cost of steel in dowel bar and tie rods etc.	cum	12159.5	5153	62657903.50
	5.5 M C/W Road				

S. No	Schedule Item	Unit	Qty	Rate	Amount
13	Add extra in Item above for the cost of steel in dowel bar and tie rod including cradde, laps etc. complete required as per design.	Ton	112.6	39259	4422133.76
	ii Tor steel				
	5.5 M C/W Road				
	a)Dowel bars: 500mm long 38mm dowel bars at contraction joints (Kg/Joint), Contraction joint at every 4.0m spacing(67nos), and bars @300mm spacing (17nos), total length of bars per joint =17 x500mm = 8500mm or 8.5m				
b) 640mm long 12mm dia tie bars at transverse joints @600mm spacing (nos of bars per km = 1000m/0.6=1668nos)					
	extra 5 % for cradles and Laps if any				
14	Road Markings and others	sqm	3562.5	80	285000.80
	Painting Lines, Dashes, Arrows etc on Roads in Two Coats on New Work (Painting lines, dashes, arrows etc on roads in two coats on new work with ready mixed road Grade-I marking paint concrete surface (cold applied reflective paint) conforming to IS:164 on bituminous surface, including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control. (Over 10 cm in width)				
	5.5 M C/W Road				
15	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes all complete as per clause 803 of specifications.	sqm	3562.4	516	1838208.72

S. No	Schedule Item	Unit	Qty	Rate	Amount
16	Cable Duct Across the Road Providing and laying of a reinforced cement concrete pipe duct, 300 mm dia, across the road (new construction), extending from drain to drain in cuts and toe of slope to toe of slope in fills, constructing head walls at both ends, providing a minimum fill of granular material over top and sides of RCC pipe as per IRC:981997, bedded on a 0.3 m thick layer of granular material free of rock pieces, outer to outer distance of pipe at least half dia of pipe subject to minimum 450 mm in case of double and triple row ducts, joints to be made leak proof, invert level of duct to be above higher than ground level to prevent entry of water and dirt, all as per IRC: 98 - 1997 and approved drawings.	Rm	68.0	1456	99008.00
	(i) Single Row for one utility service				
	5.5 M C/W Road (provided every 300m)				
	(ii) Double Row for two utility services				
	5.5 M C/W Road provided every 500m	RM	90.5	2651	240010.94
RCC HUME PIPE CULVERTS					
17	Earthwork				
	Excavation for structures (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material). as per relevant clauses of section 300 & 2100 in	cum	1490.9	52	77528.88
	I B) Ordinary soil , by mechanical means				
	(i) depth upto 3 m (wing wall)				
	(ii) pipe				
18	Providing and laying Plain/Reinforced cement concrete in open foundation including form work shuttering etc. complete as per drawing and technical specifications and as per relevant clauses of sections 1500, 1700 & 2100 with A PCC Grade M15				
	BELOW Raft-box (B= 3+0.4+0.4+0.15+0.15=4.1m)	cum	25.5	4572	116403.12
	Below Return Walls (B= 0.25+0.15+0.15= 0.55m)				
	Below cut of walls				
	approm upstream				

S. No	Schedule Item	Unit	Qty	Rate	Amount
	appron downstream below wing wall footing				
19	Providing and laying Plain/Reinforced cement concrete in open foundation including form work shuttering etc. complete as per drawing and technical specifications and as per relevant clauses of sections 1500, 1700 & 2100 with B PCC Grade M20	cum	4.6	5025	23326.05
20	Providing P.C.C. M-15 Nominal mix for hume pipe culverts in foundation and sub structure etc. as per drawing and as per relevant clauses of section 1500, 1700, 2100 and 2900.	cum	351.9	4353	1531907.76
21	Plain/Reinforced cement concrete in sub-structure complete as per drawing and technical specifications F RCC Grade M25	cum	240.6	5972	1436863.20
22	Furnishing and Placing Reinforced/Prestressed cement concrete in super-structure as per drawing and Technical Specification and as per relevant clauses of sections 1500, 1700 and 2300 in B RCC Grade M25	cum	3.1	6386	19605.02
25	Supplying, fitting and placing HYSD bar reinforcement in superstructure complete as per drawing and technical specifications as per relevant clauses of section 1600 (@160kg/cum).	TON	39.0	50028	1950091.44
26	Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC/PVC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications	RM	732.8	173	126774.40

S. No	Schedule Item	Unit	Qty	Rate	Amount
27	Laying Reinforced Cement Concrete Pipe NP4/prestrssed concrete pipe on first class bedding in SINGLE row. (Providing and Laying Reinforced cement concrete pipe NP4/prestrssed concrete pipe for culverts on first class bedding of granular material (cost of bedding included) in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets.) B) 1000 mm dia	M	120.0	5668	680160.00
28	Providing and laying of Filter media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2 of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition complete as per drawing and technical specification.	cum	160.6	1117	179390.20
29	Drainage Spouts complete as per drawing and Technical specification and as per clause 2705 of specifications.	nos	8.0	1194	9552.00
30	Deduction for not providing the first class bedding (in case sand is available in the bed or the concrete craddle is provided as per item 9.6 above) in item No.9.2., 9.3, 9.4 & 9.5 above	Cum	-27.8	417	-11597.07
STORM WATER DRAINS					
31	Excavation for structures (<i>Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material</i>). as per relevant clauses of section 300 & 2100 in Ordinary soil by mechanical means depth upto 3 m Hard rock (blasting prohibited) Mechanical Means	cum	13615	52	707980.00
		cum	5370	534	2867580.00

S. No	Schedule Item	Unit	Qty	Rate	Amount
32	Spreading available excavated earth from drain and foundations of other structures along the sides of the drain along the length including grading, levelling and to required levels and slopes i/c compacting and watering as required i/c all leads and lifts.	cum	13289.5	109	1448555.50
33	Providing and laying Plain/Reinforced cement concrete in open foundation including form work shuttering etc. complete as per drawing and technical specifications and as per relevant clauses of sections 1500, 1700 & 2100 with .	cum	940	4572	4297680.00
	PCC Grade M15 RCC Grade M20	cum	2765	4919	13601035.00
34	Supplying, fitting and placing un-coated HYSD bar reinforcement in foundation complete as per drawing and technical specifications and as per relevant clauses of section 1600.	tonne	150.561	49081	7389684.44
35	Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC/PVC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications.	Rm	1433	173	247909.00
36	Filler joint (iii) Providing and fixing in position 20 mm thick pre moulded joint filler in expansion joint for fixed ends of simply supported spans not exceeding 10 m to cater for a horizontal movement upto 20 mm, covered with sealant complete as per drawing and technical specifications.	m	797.4	138	110041.20
	(iv) Providing and filling joint sealing compound as per drawings and technical specifications with coarse sand and 6% bitumen by weight .	m	797.4	23	18340.20
WATER SUPPLY WORKS					
37	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be leveled and neatly dressed. Soft rock with or without blasting or bituminous pavement / cement concrete road.	Cum	7867.38	219.6	1727676.65
	In ordinary or Soft rock with or without blasting or bituminous pavement / cement concrete road. hard rock	Cum	73	506.7	36989.10

S. No	Schedule Item	Unit	Qty	Rate	Amount
38	Filling with crusher stone dust for pipe bedding or over the pipe including supply of crusher stone dust.	Cum	802.01	624	500454.24
39	Filling available excavated earth in trenches, lead up to 50m and lift up to 1.5m in all kind of soil excluding watering and ramming.	Cum	7336.61	18.9	138661.93
40	spreading, leveling, compacting, grading, the available excavated earth along the road including dressing of surface.	Cum	54.8	75	4106.25
41	Providing, laying and jointing following socket & spigot centrifugally cast (Spun) Ductile Iron pressure pipes with inside cement mortar lining (class K-7) conforming to IS 8329/2000 with suitable Rubber Gasket (Push on) joints as per IS:5382/85 including cost of rubber gasket.	m	400	1035.9	414360.00
	100 mm diameter				
	150 mm diameter	m	300	1464.3	439290.00
42	Providing, laying and jointing socket & spigot centrifugally cast (Spun) Ductile Iron pressure pipes with inside cement mortar lining (class K-7) conforming to IS 8329/2000 with suitable Rubber Gasket (Push on) joints as per IS:5382/85 including testing of joint (laying conforming to IS 12288 : 1987)	m	2434	1300.89	3166366.26
	150 mm diameter				
	100 mm diameter	m	8016	920.51	7378808.16
	200 mm diameter	m	1250	1688.4	2110500.00
43	Providing & fixing of Cast iron double flanged sluice valves as per I.S.:14846-2000 fitted with cast iron cap including jointing & testing with cost of jointing material such as bolts, nuts, rubber insertions etc. all complete.	Each	1	5491	5491.00
	150MM (PN1.6)				
	100MM (PN1.0)	Each	27	3598	97146.00
	200 MM (PN1.6)	Each	6	9792	58752.00
44	Providing & Laying Ductile Iron Double Socket Reducer conforming to IS-9523/2000 having dimension as per table 21 of IS-9523/2000 in the nominal diameter/sizes with external bitumen coating and internal cement mortar lining with finishing as per clause 13 of IS- 9523/2000. (laying conforming to IS 12288 : 1987) (All sizes in mm)	Nos	1	2402.28	2402.28
	150 X 150				
	150x 100	NOS	19	1435.09	27266.71

S. No	Schedule Item	Unit	Qty	Rate	Amount
45	Providing & Laying Ductile Iron Double Socket 90° Bends conforming to IS-9523/2000 having dimension as per table 15 of IS-9523/2000 in the following nominal diameter/sizes with external bitumen coating and internal cement mortar lining. (laying conforming to IS 12288 : 1987)	EACH	4	1261	5044.00
	100 MM				
	200 MM	EACH	2	1581	3162.00
46	Providing & Laying Ductile Iron Double Socket 45° Bends conforming to IS-9523/2000 having dimension as per table 16 of IS-9523/2000 in the nominal diameter/sizes with external bitumen coating and internal cement mortar lining. (laying conforming to IS 12288 : 1987)	NOS	10	1207.15	12071.50
	150 mm				
	100 MM	NOS	35	1915.73	67050.55
47	Providing and Laying Ductile Iron Double Socket 22.5° Bends conforming to IS9523/2000 having dimension as per table 17 of IS-9523/2000 in the following nominal diameter/sizes with external bitumen coating and internal cement mortar lining.	NOS	70	1704.48	119313.60
	150 mm				
	100 MM	NOS	20	1130.35	22607.00
48	Providing and Laying Ductile Iron Double Socket 11.25° bends conforming to IS9523/2000 having dimension as per table 18 of IS-9523/2000 in the following nominal diameter/sizes with external bitumen coating and internal cement mortar linin.	NOS	20	1658.35	33167.00
	150 mm				
	100 MM	NOS	70	1056.74	73971.80
49	Providing & Laying Ductile Iron All socket Tees conforming to IS-9523/2000 having dimension as per table 21 of IS-9523/2000 in the nominal diameter/sizes with external bitumen coating and internal cement mortar lining with finishing as per clause 13 of IS-9523/2000. (laying conforming to IS 12288 : 1987) (All sizes in mm)	NOS	35	1928.48	67496.80
	100x 100				
	150x150	NOS	12	3044.11	36529.32

S. No	Schedule Item	Unit	Qty	Rate	Amount
50	Providing & fixing of Cast iron double flanged sluice valves as per I.S.:14846-2000 fitted with cast iron cap including jointing & testing with cost of jointing material such as bolts, nuts, rubber insertions etc. all complete FOR 150MM (NP1.6)	EACH	7	5491	38437.00
51	Constructing Brick Masonry Manhole in Cement Mortar 1 :4 (1 cement : 4 fine sand) R.C.C. top slab 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1cement : 3 fine sand) finished with a floating coat of neat cement and making channels in CC 1:2:4 (1 cement : 2 coarse sand :4 graded stone aggregate 20mm nominal size) including finishing the channel to shape, curing etc. (Excavation foot rest and external cement plaster shall be paid for separately) Inside size 120x90 cm and 90 cm deep Manhole including CI cover with frame (medium duty) 500 mm internal diameter total weight of cover and frame to be not less than (58+58) 116 kg.	NOS	35	17735	620725.00
52	Carrying out the resistivity survey by VES method using Schlumberger configuration for locating the proper spot eith three soundings for drilling of tube well within the selected habitation, including photography , interpretation of resistivity data and submission of report in the desired format along with resistivity readings, necessary graph and photographs. PER SUCCESSFUL POINT	Nos.	10	1422	14220.00
53	Drilling of perfectly vertical bore hole of a diameter suitable to receive 200 mm nominal diameter casing pipe upto desired depth below ground level inclusive of the labour charges for transporting, lowering and fixing of 200 mm nominal diameter M.S./ G.I. / U.P.V.C. casing pipe inside the bore hole including all works pertaining to drilling such as transportation, installation and removal of drilling machine etc. complete. In all type of rocks.	Mtrs	125	1600	200000.00

S. No	Schedule Item	Unit	Qty	Rate	Amount
54	Drilling of perfectly vertical bore hole of a diameter suitable to receive 150 mm nominal diameter casing pipe upto desired depth below ground level inclusive of the labour charges for transporting, lowering and fixing of 150 mm nominal diameter and fixing of 150 mm nominal diameter M.S./ G.I. / U.P.V.C. casing pipe inside the bore hole including all works pertaining to drilling such as transportation, installation and removal of drilling machine etc. complete. in all types of rocks.	mtrs	1000	1180	1180000.00
55	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for borewell of: 200mm dia	each	5	439	2195.00
56	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2 mm) mild steel threaded and socketed /plain bevel ended pipe (type A) of required dia, conforming to IS: 8110, of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire and labour charges, fittings and accessories, all complete, for all depths, as per direction of Engineer -in-charge. 200 mm nominal size dia.	R.m.	110	1522	167420.00
57	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2 mm) mild steel threaded and socketed /plain bevel ended pipe (type A) of required dia, conforming to IS: 8110, of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire and labour charges, fittings and accessories, all complete, for all depths, as per direction of Engineer -in-charge. 150 mm nominal size dia.	Mtrs	500	1144	572000.00

S. No	Schedule Item	Unit	Qty	Rate	Amount
58	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level and draw down etc. by step draw down method, collecting water samples and getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire and labour charges of air compressor, tools and accessories etc., all as per requirement and direction of Engineer-in-charge.	Hrs	50	430	21500.00
59	Labour charges for installation of submersible pumping sets at 50m or more depth temporarily in the tubewell for a maximum of eight hours for the purpose of conducting yield test for tube well. (Any one of the below depending on the approximate yield observed during drilling operations). Submersible pumping set above 7.5 kW	Each	5	1007	5035.00
60	Supply and Transportation of 50Hz AC energy efficient submersible Pump upto 200lpm suitable to pump water from a depth of 200 mtr. of the tubewell including supplying, laying providing riser pipes of 52mm dia OF MINIMUM LENGTH 250 M to take water from pump to the connecting mains as required including connected valves, sluice valves, non return valves, unions, sockets and all specials (such as bends, elbows, tees etc) class medium including testing of joints and cost of jointing materials including suitable capacitor and single phase preventor with legrand mark ISI mark MCB etc., including minimum 16sqmm cables of required length, including fully automatic star delta motor starter fitted in CRCA sheet steel enclosure and frame suitable for 3 phase 415V, and all other necessary electrical fittings.etc, all complete in all respects necessary for successful execution and commissioning of the pump. The pump shall be of ISI marked and make kirloskar, Shakti, Siemens, Cromton Greeves	Nos.	5	70000	350000.00
61	Supply of spare submersible pump of capacity 200lpm of 9 HP, of min. efficiency 85%, ISI marked of make kirloskar, Shakti, Siemens, Cromton Greeves.	Nos.	5	35000	175000.00

S. No	Schedule Item	Unit	Qty	Rate	Amount
62	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	Cum	155.22	116.1	18021.04
63	Providing & laying in position cement concrete of specified grade excluding cost of c/s all work up to plinth level. Nominal M-10	Cum	9.7	3427.2	33243.84
64	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 sand : 12 graded stone aggregate 20 mm nominal size) at plinth level Cement mortar 1:6 (1 cement :6 sand).	Cum	75.75	3282.3	248634.23
65	Pointing on stone work with cement Mortar 1:3 (1 Cement: 3 Sand) Flush/ Ruled Pointing	Cum	37.15	86.4	3209.76
66	Brick work with well burnt chimney bricks in bull patent trench kiln crushing strength not less than 40 kg/sqcm and water absorption not more than 15% in superstructure. Cement Mortar 1:6	Cum	46.75	5236.9	244825.08
67	Centering and Shuttering including strutting, propping etc. and removal of form for: Lintel, beams & bands	Sqm.	33.04	204.3	6750.07
68	Centering and shuttering including strutting, propping etc. and removal of form for Suspended floors, roofs, landings, balconies and access platform. Shelves (Cast in situ) Lintels, beams, beams, girders, bressumers and cantilevers, Columns, Pillars, Posts and Struts Walls in super structure. Roof:	Sqm.	95	237.6	22572.00
69	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete. TMT bars	Kg	1860	56.61	105294.60

S. No	Schedule Item	Unit	Qty	Rate	Amount
70	Reinforced cement concrete (with 20 mm nominal size graded stone aggregate) in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, posts and struts etc. above plinth level and up to floor two level excluding cost of centering, shuttering, finishing, reinforcement- all work up to plinth level- M-20 nominal mix. M-20 Minimal mix (with 20mm nominal size graded stone aggregate).	Cum	22.64	4681.8	105995.95
71	20 mm cement plaster of mix : 1:6 (1 cement: 6 sand)	Sqm	287.6	140.4	40379.04
72	12 mm cement plaster of mix : 1:4 (1 cement: 4 sand)	Sqm	275.265	110.7	30471.84
73	6 mm cement plaster of mix :CM 1:3 (1 cement: 3 sand)	Sqm	125.72	117	14709.24
74	Providing and fixing 1mm thick M.S. sheet door with frame of 40 x 40 x 5mm angle iron and 3mm MS. gusset plate at the junctions and corners ,all necessary fittings complete, including applying a priming coat of approved steel primer. 10.5.1: UsingM.S. angles 40 x40 x 6mm for diagonal braces.	Sqm	15	2344.14	35162.10
75	Structural steel work riveted, bolted or welded in built up for all type sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	800	61.83	49464.00
76	Kota stone slab flooring over 20mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of slab including rubbing and polishing complete with base of cement mortar 1:4 (1cement ; 4 sand) 25mm thick	Sqm	140.4	938.7	131793.48
77	Distemping with dry distemper of approved brand and manufacture (two or more coats) and of required shade on new work, over and including priming coat of whitening to give an even shade.	Sqm	225	42.21	9497.25
78	Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sqm).	Sqm	202.6	43.2	8752.32

S. No	Schedule Item	Unit	Qty	Rate	Amount
79	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work	Sqm	604.8	47.7	28848.96
80	Supply and erection of LT Transmission line including all materials i.e pole, overhead conductors, nut, bolts, etc complete upto tube well	Rm	750	216	162000.00
81	Internal electrification of Pump House	job	5	4500	22500.00
82	Power connection security for load	L.S.	5	112500	562500.00
83	Construction of rcc sump well Capacity 3 Lakh liters, with the required size of pump house including design, drawing as approval from authority etc, complete. As directed by Engineer in charge i/c providing and installation of ISSI marked L&T/ SEIMENS/CROMPTON , two no. pump set OF 500 l pm capacity, 30 M head connected with 10 sq mm armored aluminium cable to panel board having fully automatic star delta motor starter fitted in CRCA sheet steel enclosure suitable for 3 phase 415 v. 50 Hz AC motor pump set of required capacity with ISI marked L&T/ SEIMENS/CROMPTON suitable capacitor , ampere ,meter, voltmeter 3 phase indication and single phase preventer with legrand mark ISI mark MCB , ETC complete work include cost of inlet and outlet gi pipe connected to the overhead tank distance up to 10 m, footvalve, NRV sluice valve with RCC chamber and RCC heavy duty chamber cover with frame as required size & necessary fittings mentioned in approved design and drawings. the pump shal be of make: kirloskar, shakti, crompton,kcb, siemens <i>NOTE: the contractor has to get designed the complete structure from regional engineering college/IIT And it should be approved from AKVN, REWA</i>	KL	300	12000	3600000.00
84	Construction of OHT of capacity 5 Lakh liters with 18 M staging including pipe and valve as required, including design, drawings approval from authority etc. complete. As directed by Engineer-in-charge. Work includes connection with CI Pipe to sump well and distribution line up to 35m. Size of pipes and valves with RCC chamber and Required civil works including Heavy duty chamber cover with frame as required size(inlet, outlet over flow & scour) including water proofing with epoxy or as required and as mentioned in approved design & drawing. <i>NOTE:- The contractor has to get designed the complete structure from Regional Engineering College/IIT/and it should be approved from Akvn, Rewa</i>	kl	500	15000	7500000.00

S. No	Schedule Item	Unit	Qty	Rate	Amount
ELECTRICAL STREET LIGHT					
85	Supply of XLPE insulated heavy duty power cable (confirming to IS-1554-1964, IS-7098 Part-I) 1100 Volt grade 2/3.5/4 Core ISI Marked with Aluminium Stranded Solid Conductor. 16 sqm mm armoured 4 core MAKE: Havels/Polycab/Finolex	RM	7000	178.00	1246000.00
86	25 sqm	RM	200	245.00	49000.00
87	50 sqm (armoured 3.5 core)	rm	50	361.00	18050.00
88	Supply of steel tubular pole swaged type as per IS:2713- 1980 Complete with base plate and top Canopy, 410 SP-40 (Bend type) 10.00 metre	Each	134	12574.00	1684916.00
89	Erection of steel tubular pole of length exceeding 8 M but not exceeding 10 Mtrs. In cement concrete 1:3:6 graded stone aggregate 40 mm nominal size foundation, base padding, muffing i.e. excavation and refilling as required	Each	134	2985.00	399990.00
90	Laying of one number armoured / unarmoured power cable 1:1 kV grade of size not exceeding 25 Sq.mm in the existing RCC Hume/Stone ware/G.I. pipe / surface in existing trench as required.	RM	7200	23.00	165600.00
91	Supplying & Installing double wall corrugated pipe (DWC) of HDPE (15-14930 Part II Marked) for cable laid under ground with necessary socket/ coupling/ tees same material at required depth upto 90 cm below road/ground surface i.e. excavation, back filling with excavated soil with ramming nd making surface good. 50 MM OD	RM	7000	123.00	861000.00
92	Supplying & Fixing of cramping types lugs as per ISS Specification suitable for 16 Sqm. Cable with aluminium stranded conductor evently cramped with hydraulic/ pressure tool & connected to M.S box etc. complete as required. A. 16 Sqm (8 No's. each Pole)	Each	1072	2.00	2144.00
93	Primer coat over new steel and other metallic surface with red oxide zinc chromid paint complete with supply of material and labour etc. i/c preparation of surface.	Sqm.	396.64	43.00	17055.52
94	Priming coat with Aluminium paid brushing complete with material & labour i/c preparation of surface. (two or more coats)	Sqm.	396.64	53.00	21021.92

S. No	Schedule Item	Unit	Qty	Rate	Amount
95	Supplying and erection of water tight terminal box made of 16 SWG M.S. Sheet (1.6mm thick) i/c rubber gasket of required size suitable for kit kat/ MCB/ Switch including 2 Nos. pole clamp of M.S. flat iron size 32x3mm, nut and bolts, 4 Pole epoxy connector nut & bolt type, 30Amp., 500Volt. The box shall be powder coated. Excluding the cost of the Kit Kat/MCB/Switch complete as per specification. 30x20x10 Cms.	Each	134	874.00	117116.00
96	Supplying & fixing of ISI marked Porcelain Rewireable type fuse carrier & base unit of approved make & confirming to IS: 2086-1993	Each	134	100.00	13400.00
97	Supplying and fixing street light with high power LED of 1 to 3 W each assembled on single MCPCB, system lumens output with efficacy>90 lm/W. luminaire having color temp 6500K & 50000 burning hrs life with minimum @ L 70, The colour rendering index of LED light should be more than 70. luminaire comprises of driver, PF 0.95 & surge protection 3KV. Housing made of pressure die cast aluminium with heat resistant flat glass / Lens type, IP65 protection. Submission LM 80-08 Form LED Source Manufacturer & LM79-08 / IS16106 from NABL approved lab. Manufacturer mandatory i/c 50mm.dia G.I. Pipe bracket upto 2 mtr. long in required angle/shape, connection lead, testing etc to complete the job. 2 Yrs Guarantee certificate from manufacturer. 90 watts	Each	134	21530.70	2885113.80
98	Earthing with G.I. Earth pipe 4.5 Metre long and 40 mm dia with masonry enclosure in cement mortar, cover plate having locking arrangement on the top etc.(but without charcoal or coke and salt) complete as required.	Each	13.4	2715.00	36381.00
99	Add Extra for using salt and charcoal / coke for pipe earth electrode as required including excavation & refilling.				
	Excavation 2.5 cum by manual labour	Each	13.4	1415.00	18961.00
100	Supplying and laying 6SWG (5.6mm) G.I. wire at 0.5 Metre below ground level as conductor earth electrode including soldering etc. as required.	m	7000	21.00	147000.00

S. No	Schedule Item	Unit	Qty	Rate	Amount
101	Supplying, fixing, testing & commissioning wall / floor mounted LT Panel primer coated with powder coated paint& provided with required gasket for dust / vermin proof with degree of protection IP42 suitable for 415V 3 phase, 50 Hz, 4 wire system fabricated out of CRCA sheet up to 2 mm thick (1.6 mm for doors) duly compartmentalized for incomer, bus section, outgoing, cable alleys & CT, PT Ampere Meter, Volt Meter, selector switches, Frequency Meter, phase indicating lamps, Energy Meter complete including cost of busbar supports, detachable cable gland plates, 2 earthing terminals, internal wiring & fixing of separately supplied MCBs, MCCBs , ACB, panel mounted Changeover switch / SFUs, etc. as required but excluding cost of bus bar strips, Ampere Meter, Volt Meter, Selector switch as per approved design & specification	SET	1	1755.00	1755.00
	Supplying and fixing of LT Panel accessories of approved make in existing LT Panel including connections etc.as required as per specefication				
	Digital Ampere Meter with CTs with selector switch				
	Digital Volt Meter with selector switch & HRC fuse	SET	1	1890.00	1890.00
	Frequency Meter	Each	1	1080.00	1080.00
	Copper Bus bar strips with PVC sleeves	KG	30	585.00	17550.00
	Aluminium bus bar strips with PVC sleeves	KG	5	225.00	1125.00
	LED lamp indicator	Each	3	180.00	540.00
102	Rewiring in existing surface /concealed rigid steel /PVC non metallic conduit with PVC insulated cable FR with copper multi strand conductor ISI marked and other materials as required including replacement of worn-out /damaged/missing material, painting etc. complete as per specification. This shall include all work, arrangement required for wiring but shall exclude switch, ceiling rose fitting etc 2 X 2.5Sq mm.	m	3000	58.00	174000.00
103	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) Footing Excavation for Size (1.2x1.2) All kinds of soil	Cum	70.36	104.40	7345.58

S. No	Schedule Item	Unit	Qty	Rate	Amount
104	Centering and shuttering including strutting propping etc and removal of form for foundation footing bases of column etc for concrete up to plinth lvl	CUM	24	141.00	3384.00
105	walls (any thickness) includig attached plasters butteresses, plinth beams and string courses etc. upto plinth level	Sqm.	31.32	216.27	6774.00
106	Centering and Shuttering including strutting, propping etc. and removal of form for: Lintel, beams & bands	Sqm	5.04	183.90	927.00
107	Columns, pillars, piers, abutments, posts and struts. For Column Shuttering	Sqm	68.4	288.40	19727.00
108	Suspended floor , roof landings ,balconies and access pateform	Sqm	63.99	213.84	13684.00
109	Providing & laying in position cement concrete of specified grade excluding cost of c/s all work up to plinth level. Nominal M-10	Cum	6.39	3151.00	20135.00
110	Providing and laying in position specified grade of reinforced cement concrete (with 20 mm nominal size graded stone aggregate) excluding the cost of centering shuttering, finishing and reinforcement-all work up to plinth level. M20 Concrete Grade	Cum	9.39	4439.70	41689.00
111	Reinforced cement concrete work (with 20 mm nominal size graded stone aggregate) in walls (any thickness) including attached, pilasters, buttresses, plinth and string courses, filets, columns, pillars, posts and struts suspended floor, roof slab, beams, etc. up to floor two level excluding cost of centering, shuttering, finishing and reinforcement M 20 CONCRETE GRADE	Cum	9.39	4213.60	39566.00
112	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete. TMT bars	KG	1095.66	51.01	55889.62
113	Brick work with fly ash lime bricks (FALG Bricks) Confirming to IS :12894-2002, in super structure above Plinth lvl up to floor -II lvl Having 50 kg /cm2 Avg Compressive Strength Cement mortar (1:6)	Cum	30.75	4535	139451.25
114	providing and laying dampproof course 50mm thk with cement concrete 1:2:4 (1 cement:2 sand: 4graded agregate 20mm nominal size)	Sqm	6.96	222.3	1547.21

S. No	Schedule Item	Unit	Qty	Rate	Amount
115	15 mm cement plaster on the rough side singal or half Brick Wall 1:6(1 Cement :6 Sand) 1:6 (1 cement: 6 sand)	Sqm	161.63	115.2	18619.20
116	12 mm cement plaster of mix : 1:4 (1 cement: 4 sand)	Sqm	125.36	110.7	13877.35
117	6 mm cement plaster of mix :CM 1:3 (1 cement: 3 sand)	Sqm	40.25	86.4	3477.60
118	Structural steel work riveted, bolted or welded in built up for all type sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	300	61.9	18570.00
119	Kota stone slab flooring over 20mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of slab including rubbing and polishing complete with base of cement mortar 1:4 (1cement ; 4 sand) 25mm thick	Sqm	36.4	938.7	34168.68

S. No	Schedule Item	Unit	Qty	Rate	Amount
120	<p>Providing and laying integral cement based water proofmg treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:</p> <p>a) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment.</p> <p>b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.</p> <p>c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/sqm of cement admixed with water proofing compound conforming to IS :2645 and approved by Engineer-in-charge.</p> <p>d) Finishing the surface with 20 mm thick jointles s cement mortar of mIX 1:4 (1 cement :4 sand) admixed with water proofing compound conforming to IS 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep.</p> <p>e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :(with 5 years service guarantee)</p>	Sqm	55.269	796.5	44021.76
121	<p>Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, Like birla white /JK white or equivalent, over the plastered wall surface to prepare the surface even and smooth ilc all cost of material, labour and scaffold etc in all position complete</p>	Sqm	508.36	66.60	33856.78

S. No	Schedule Item	Unit	Qty	Rate	Amount
122	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade New work (two or more coats) over and including water thinnable priming coat with cement primer.	Sqm	299.36	48.6	14548.90
123	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work	Sqm	19.8	47.7	944.46
124	Providing, fixing, and commisioning of internal electrification work including 1 point for tubelight, I fan point point, I 6A/16A Switch and socket including all Circuit breker, mcb, switch board, etc complete as/directions of engineer in charge	job	3	15000	15000.00
125	Providing, fixing, and commisioning of power connection as/specifications of MPPKVV Co. Ltd. , of 200 kva as per direction of the engineer incharge, including all necessary fees, charges and required connection.	L.S.	3	125000	375000.00
126	supplying and filling in plinth with crusher stone dust /coarse sand under floors including watering ramming consolidating in layers not excedding 20 cm in depth and dressing complete	cum	13.25	605	7348.32
	Total Amount				189448836.42
	GRAND TOTAL (lacs)				1894.49

SECTION 5
AGREEMENT FORM
AGREEMENT

This agreement, made on the day of between (name and address of Employer) (hereinafter called “the Employer”) and (name and address of contractor) hereinafter called “the Contractor” for the other part.

Whereas the Employer is desirous that the Contractor execute (name and identification number of Contract) (hereinafter called “the Works”) and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs..... NOW, THIS AGREEMENT WITNESSED as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works as remedy any defects therein in conformity in all aspects with the provisions of the contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.
 - i. Letter of Acceptance
 - ii. Contractor’s Bid
 - iii. The condition of Contract: General and Special
 - iv. Contract Data
 - v. Bid Data
 - vi. Drawings
 - vii. Bill of Quantities and
 - viii. Any other documents listed in the Contract Data as forming part of the Contract.

In witness whereof the parties were to have caused this Agreement to be executed the day and year first before written.

The Common Seal of was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said in the presence of:

Binding signature of Employer

Binding Signature of Contractor

Tender Document for

Construction of industrial Infrastructural Development Works for
Upgradation of Industrial Area, At Udyog Vihar churatha, Dist. Rewa,
M.P. Prepared by

Consultants:

MangalamAssociates,

Is submitted for approval;

Approved by tender committee;

Assistant Engineer
AKVN REWA

Executive Engineer
AKVN REWA

Senior Accounts Officer
AKVN REWA

Chief Engineer
MPTRIFAC, Bhopal

Managing Director
AKVN REWA