



Jaipur Development Authority, Jaipur

**Engineering Procurement and Construction
(EPC)**

Bid Document

For

**Outer Development works in Gandhi Darshan
Museum at Central Park, Jaipur**

Bidding Document

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DISCLAIMER

The participating bidders are informed through sale of Bidding Documents and under disclaimer of bid documents, Volume-I as under:-

- (a) The interested bidder should make its own independent assessment and seek its own professional, technical, financial and legal advice.
- (b) The information provided in the bid documents has been prepared in good faith; it is not and does not purport to be comprehensive or to have been independently verified. Neither JDA, nor any of its officers or employees, nor any of their advisers nor consultants accept any liability or responsibility for the accuracy, reasonableness or completeness of, or for any errors, omissions or misstatements, negligent or otherwise, relating of the proposed exterior work, or makes any representation or warranty, express or implied, with respect to any written or oral information made or to be made available of any of the recipients or their professional advisers and, so far as permitted by law and except in the case of fraudulent misrepresentation by the party concerned, and liability therefore is hereby expressly disclaimed.
- (c) The information contained in the bid documents is selective and is subject to updating, expansion, revision and amendment that a recipient may require. Neither JDA nor any of its officers, employees, nor any of its advisors nor consultant undertakes to provide any recipient with access to any additional information or to update the information in bid documents or to correct any inaccuracies therein which may become apparent. Each recipient must conduct its own analysis of the information contained in bid documents or to correct any inaccuracies therein which may become apparent. Each recipient must conduct its own analysis of the information contained in bid documents or to correct any inaccuracies therein that may contain in bid documents and is advised to carry its own investigation into the proposed exterior work, the legislative and regulatory regime which applies thereto and by and all matters pertinent to the proposed Project and to seek its own professional advice on the legal, financial, regulatory and taxation, consequences of entering into any agreement or arrangement relating to the proposed exterior work.
- (d) The bid document includes certain statements, estimates, targets and forecast with respect to the exterior work. Such statements, estimates, projections, targets and forecasts reflect various assumptions made by the management, officers and employees of JDA, which assumptions (and the base formation on which they are made) may or may not prove to be correct. No representation or warranty is given as the reasonableness of forecasts or the assumptions on which they may be based and nothing in bid documents is, or should be relief on as, a promise, representation or warranty. The estimate provided with the bid document is only for reference purpose. Actual assessment of cost for the work shall be carried out by participating bidder before online submission of bid.

जयपुरविकासप्राधिकरण, जयपुर

कमरानं. 143, प्रथम तल, नागरिक सेवा केन्द्र, रामकिशोर व्यास भवन, इन्दिरा सर्किल जवाहर लाल नेहरू मार्ग,
जयपुर-302004

दूरभाष : + 91-141-2569696, ई-मेल : sapanmishra.jda@rajasthan.gov.in

क्रमांक: जविप्रा/अधि.अभि.(मुख्यालय)/2022-23/डी-246

दिनांक: 10.08.2022

निविदा सूचना

निविदा सूचना: जविप्रा/अधि. अभि.(मुख्यालय)/12/2022-23

जयपुर विकास प्राधिकरण द्वारा “Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur” जिसकी अनुमानित लागत राशि रु 5.66 करोड़ के लिए ऑनलाईन बिड्स दिनांक 12.08.2022 को सायं 6:00 बजे से आमन्त्रित की जाती है। निविदा बोली का ऑनलाईन आवेदन व भुगतान जविप्रा पोर्टल पर करने की अन्तिम तिथि. 31.08.2022 को सायं 6:00 बजे तक है। निविदा बोली के दस्तावेजों का विस्तृत विवरण www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in and www.jda.urban.rajasthan.gov.in पर देखा जा सकता है।
(UBN No.....)

निविदा में भाग लेने वालों को निम्न शर्तों की पूर्ति करनी होगी।

1. निविदादाता जयपुर विकास प्राधिकरण की वेबसाइट www.jda.urban.rajasthan.gov.in पर पंजीकृत हो एवं निविदा में भाग लेने के लिए बोलीदाता को आवेदन करने के लिए दस्तावेज शुल्क, अमानत राशि, आर.आई.एस. एल. प्रोसेसिंग शुल्क ऑनलाईन जमा करनी होगी।
2. ऑनलाईन निविदा प्रस्तुत करने के लिए निविदादाताओं का राजस्थान सरकार के ई-प्रोक्यूरमेंट पोर्टल www.eproc.rajasthan.gov.in पर पंजीकृत हो।

अधिशायी अभियन्ता (मुख्यालय)
जविप्रा, जयपुर।

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Room No. MB-FF-143, Ram Kishore Vyas Bhavan, Indira Circle, Jawaharlal Nehru Marg, Jaipur – 302004

Telephone: +91-141-2569696 Email:- : sapanmishra.jda@rajasthan.gov.in

No: - JDA/EE(HQ)/2022-23/D-246

Dated: 10.08.2022

NOTICE INVITING BID

NIB No. : JDA/EE (HQ)/12/2022-23

Online Bids are invited from 6.00 PM 12-08-2022 for **“Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur”**. Estimated cost is Rs 5.66 Crore. The last date for Applying Bid and making online payment on JDA portal is up-to time 6.00 PM of 31-08-2022 .Details may be seen in the Bidding Document at our office or the State Public Procurement Portal website www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in and www.jda.urban.rajasthan.gov.in.

(UBN No.)

To participate in the bid, bidder has to be:

1. Registered on JDA website www.jda.urban.rajasthan.gov.in, for participating in the Bid, the Bidder has to apply for the Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only.
2. Registered on e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in for online e-Bid submission.

Executive Engineer (HQ)
JDA, Jaipur

Copy to :-

1. PRO Cell, JDA, Jaipur through TA to DE (II) for publication in News paper.

Executive Engineer (HQ)
JDA, Jaipur

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Room No. CB-FF-103, Ram Kishore Vyas Bhavan, Indira Circle, Jawaharlal Nehru Marg, Jaipur – 302004

Telephone: +91-141-2569696 Email:- sapanmishra.jda@rajasthan.gov.in

No: - JDA/EE-HQ/2022-23/D-246

Dated: 10.08.2022

NIB No. : JDA/EE-HQ/12/2022-23

Name & Address of the Procuring Entity	➤ Name :Executive Engineer (HQ), Jaipur Development Authority ➤ Address : Room No. 143, 1st floor, Main Building, JDA Campus, Indira Circle, Jawahar Lal Nehru Marg, Jaipur-302004 (Rajasthan) ➤ Email : sapanmishra.jda@rajasthan.gov.in	
Subject Matter of Procurement	Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur Job No. JDA/EE HQ/A & F/2022-2023/Aug/NR-005 Date : 02/08/2022	
Bid Procedure	➤ EPC Mode, Two Envelope System; open competitive bidding as per e-Bid procedure at http://eproc.rajastha.gov.in	
Bid evaluation Criteria (Selection Method)	➤ L1 (eg. Least Cost based Selection (LCBS)-L1)	
Websites for downloading Bidding Document, Corrigendum's, Addendums, etc.	➤Websites: www.sppp.rajasthan.gov.in,www.eproc.rajasthan.gov.in, www.jda.urban.rajasthan.gov.in	
Website for online Bid application participation and payment *	➤Website: www.jda.urban.rajasthan.gov.in ➤For participating in the Bid, the Bidder has to apply for this Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, ➤online only. ○ Bidding document fee: Rs. 1000/- Rupees (One Thousand Only) ○ RISL Processing Fee: Rs. 1000/- (Rupees One Thousand Only) ➤Online/Bank Guarantee ○ Bid Security Deposit (BSD) as detailed below.	
Estimated Procurement Cost	INR 5.66 Cr (Five crore sixty six lakh rupees only)	
Bid Declaration	➤ It was informed to Tenderer that EMD shall be @2% of	
	➤ EMD 0.5% shall be applicable for	➤ If both firm in JV are registered in AA class in JDA.
estimate procurement cost i.e. Rs. 11.32 Lakhs for the bidder registered in appropriate equivalent class in Other Department or 0.5% of estimated procurement cost i.e. Rs. 2.83 Lakhs for the bidder registered as contractor for AA class in JDA. ➤ In case of JV please see table below		

	➤ EMD 2.0% shall be applicable for ➤ In the rest condition in JV, EMD shall be applicable 2.0% of estimated procurement cost i.e ➤ If one bidder registered in AA class category in JDA and other registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. ➤ If both bidders are registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act.
	➤ Bid Security deposit can be deposited either online or in the form of Bank Guarantee in favour of Secretary, JDA, Jaipur payable at Jaipur. The bidder will provide details of BGviz No., issue date, expiring date etc on online tendering system of JDA. ➤ A copy of this BG is to be attached with the document during uploading.
Date/Time/Place of Pre-Bid	➤ 17-08-2022 at 12.00 Noon in "Manthan", Second Floor, Main Building, Ram Kishore Vyas Bhavan, Indira Circle, Jawahar Lal Nehru Marg, JDA Campus, Jaipur
Applying Bid and making Online Payment on JDA portal (www.jda.urban.rajasthan.gov.in)	➤ Start Date: 12-08-2022.at 6.00 PM ➤ End Date :.31-08-2022 at 6.00 PM ➤ In case EMD in form BG, Original Bank Guarantee is to be submitted in Room No NB-III, 215E of DD (E&B), Jaipur Development Authority by 16-08-2022.at 10.00 AM to 01-09-2022.up to 6.00 PM
Bid Submission on e-Procurement Portal of GOR (www.eproc.rajasthan.gov.in)	➤ Start Date: : 12-08-2022 at 6.00 PM ➤ End Date : 31-08-2022 at 6.00 PM
Date/Time/Place of Technical Bid Opening	• 02-09-2022 at 01.00.PM in Room No. JB-SF-208, 2nd floor, court Building, JDA Campus, Indira Circle, Jawahar Lal Nehru Marg, Jaipur- 302004 (Rajasthan)
Date/Time/Place of Financial Bid Opening	Will be intimated later to the technically qualified bidders on E-proc portal. Room No. JB-SF-208, 2nd floor, Court Building, JDA Campus, Indira Circle, Jawahar Lal Nehru Marg, Jaipur- 302004 (Rajasthan)
Bid Validity	➤ 120 days from the bid submission deadline
Completion period of work	➤ 4.5 Months
Job No	➤ Job No. JDA/EE HQ/A & F/2022-2023/Aug/NR-005 Date : 02/08/2022, Amount: 70.53 crores

A. The details of the project is as below:

- The outer development works including masonry, Flooring Work, paint, water body & Amphitheatre, internal road and parking development, water proofing, drainage works, Mechanical and Electrical work of area outside museum building to make the museum fully functional in all respect at Gandhi Darshan Museum at Central Park, Jaipur on EPC mode.

A. *Process for Tender Participation & Depositing Payment on 'Online Tender Participation' Portal of JDA

1. Participate in tender

- a) Bidder can access 'Online Tender Participation' Portal of JDA at <https://jda.urban.rajasthan.gov.in/jda> or by Single-Sign-On at <http://service.jaipurjda.org>.
- b) Create user Login with a valid mobile number to register yourself for various Online Services of JDA.
- c) Select 'Proceed as Citizen' and then 'Proceed for Subscription' for 'Tender Online Payment'. The prevailing plan for getting registered for tendering process of JDA is Rs. 500.00 with the validity period of 3 Years (renewable).
- d) After successful payment, re-login and upload required documents for KYC (Know Your Client) compliance as per the type of entity viz. Individuals/ Company/ Partnership Firms/ Trusts & foundations. Besides, Bank Passbook / Cancelled Cheque consisting of Bank Account, IFSC Code is mandatory to be uploaded, to refund the bid security of unsuccessful bidder.
- e) After receiving the payment successfully and approving KYC documents the bidder will be authenticated by JDA for taking part in Tender.

2. Deposit Tender Fee, RISL processing fee and Bid Security (EMD)

- Option-1: Payment Gateway (Aggregator)
The facility to make payment through Debit Card, Credit Card, Net banking etc., will be available. User can use this facility from anywhere any time till the closing date & time of bid participation.
- Option-2: Electronic Fund Transfer (EFT: NEFT/RTGS)
If the bidder selects payment mode as EFT (NEFT/RTGS), "Paying Slip for EFT (NEFT/RTGS)" will be generated by the system for the complete amount. The payment can be made from any Bank any Branch using this Paying Slip through NEFT/RTGS (Claim against payment made through EFT in any other JDA bank account will not be acceptable and bidder stands disqualified from participation in the bid applied for). After successful transaction through NEFT/RTGS, as per the standard procedures it may take 4 to 24 hours in process of confirmation of EFT through Auto-Process depending on the time of EFT done. Therefore, option to make payment through EFT (NEFT/RTGS) will be available till 48 hours prior to closing date of bid participation.

3. Deposit Bid Security (EMD)

The Bid Security (EMD) can be submitted through Bank Guarantee (BG). Bidder may opt Bank Guarantee (BG) against Bid Security (EMD), for which bidder requires to prepare BG before applying in the tender. The detail of BG requires to be fed on 'Online Tender Participation' Portal of JDA before paying balance amount (Tender Fee + RISL Processing Fee). This balance amount will be paid through Payment Gateway only, option to make balance payment through EFT (RTGS/NEFT) will not be available.

4. Obtain Bid Participation Receipt

After confirming payment, the bidder will get Bid Participation Receipt based on which user will get the payment details along with other details for bidding on e-

Procurement portal of GOR.

- In case of BG as the remaining payment will be done through Payment Gateway, unsuccessful transaction the 'Bid Participation Receipt' will be generated on real time basis.
- In case complete payment is done through Payment Gateway, on successful transaction the 'Bid Participation Receipt' will be generated on real time basis.
- In case complete payment is done through EFT (NEFT/RTGS), on confirmation of payment from ICICI Bank (Auto Process) 'Bid Participation Receipt' will be available on Login of Bidder on JDA portal.

B **Bid Submission on 'e-Procurement Portal' of Government of Rajasthan

1. Online e-Bid can be submitted after registration at e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in
2. It is mandatory to upload Bid Participation Receipt with the bid submission.
3. Details of online payment available on Tender Participation Portal of JDA have to be filled in 'offline payment' section of e-Procurement portal.

Note:

1. Bidder (authorized signatory) shall submit their offer on-line in Electronic formats both for technical and financial proposal.
2. In case, any of the bidders fails to pay the Tender Fee, BSD, and RISL Processing Fee, online (subject to confirmation), its Bid shall not be accepted.
3. To participate in online bidding process, Bidders must procure a Digital Signature Certificate (Type III) as per Information Technology Act-2000 using which they can digitally sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency, i.e. TCS, Safecrypt, Ncode etc. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC. Also, bidders must register on <http://eproc.rajasthan.gov.in> (bidders already registered on <http://eproc.rajasthan.gov.in> before 30-09-2011 must register again).
4. JDA will not be responsible for delay in online submission due to any reason. For this, bidders are requested to upload the complete bid well advance in time so as to avoid 11th hour issues like slow speed; choking of web site due to heavy load or any other unforeseen problems.
5. Bidders are also advised to refer "Bidders Manual Kit" available at eProc website for further details about the e-Tendering process.
6. Training for the bidders on the usage of e-Tendering System (eProcurement) is also being arranged by DoIT&C, GoR on a regular basis. Bidders interested for training may contact e-Procurement Cell, DoIT&C for booking the training slot.
Contact No: 0141-4022688 (Help desk 10 am to 6 pm on all working days) e-mail: eproc@rajasthan.gov.in
Address : e-Procurement Cell, JDA, YojanaBhawan, Tilak Marg, C-Scheme, Jaipur
7. The procuring entity reserves the complete right to cancel the bid process and reject any or all of the Bids.
8. No contractual obligation whatsoever shall arise from the bidding document/ bidding process unless and until a formal contract is signed and executed between the procuring entity and the successful bidder.
9. Procurement entity disclaims any factual/ or other errors in the bidding document (the onus is purely on the individual bidders to verify such information) and the information provided therein are intended only to help the bidders to prepare a logical bid-proposal.
10. The provisions of RTPPA Act 2012 and Rules 2013 thereto shall be applicable for this procurement. Furthermore, in case of any inconsistency in any of the provisions of this bidding document with the RTPP Act 2012 and Rules thereto, the later shall prevail.

**Executive Engineer HQ
JDA, Jaipur**

Process for Participation & Depositing Payment Online

JAIPUR DEVELOPMENT AUTHORITY, has decided to receive Bidding document fee, RISL Processing Fee and Bid Security Deposit (BSD) through online mode only for which the bidder has to get registered himself on JDA portal www.jaipurjda.org.

To participate in the bid, bidder has to be:

1. Bidder should be registered in AA class category in JDA or equivalent in other departments /PSUs/private or may be a private entity registered under companies act or other relevant acts as applicable.
2. Registered on e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in for online e-Bid submission.

Methods for depositing on line amount

- All the eligible bidders should submit earnest money deposit (EMD) (Bid Security), Tender fee and RISL processing fee online through JDA portal. The bid security options available in tender for participants has been mentioned above.

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

SCHEDULE AND SPECIFICATIONS

Name of Work: Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur

1.	NIB No.	:	EE (HQ)/12/2022-23				
2.	Approximate cost	:	₹ 5.66 Crore				
3.	Cost of the Bid document	:	₹ 1000.00, (One Through Online Payment only)				
4.	Bid Processing Fees	:	₹ 1000.00 (One Through On Line Payment only)				
5.	Bid Security / Bid Declaration (In favors of Secretary, JDA, Jaipur.)	:	➤ It was informed to Tenderer that EMD shall be @2% of estimated procurement cost i.e. Rs.11.32 Lakhs for the bidder registered in appropriate equivalent class in Other Department or 0.5% of estimated procurement cost i.e. Rs. 2.83 Lakhs for the bidder registered as contractor for AA class in JDA. ➤ In case of JV please see table below <table><tr><td>EMD 0.5% shall be applicable for</td><td>1. If both firm in JV are registered in AA class in JDA.</td></tr><tr><td>EMD 2.0% shall be applicable for</td><td>In the rest condition in JV, EMD shall be applicable 2.0% of estimated procurement cost i.e a) If one bidder registered in AA class category in JDA and other registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. b) If both bidders are registered in other departments/PSUs /private or can be a private entity registered under companies act or as applicable act.</td></tr></table> ➤ Bid Security deposit can be deposited either online or in the form of Bank Guarantee in favour of Secretary, JDA, Jaipur payable at Jaipur. The bidder will provide details of BG viz No., issue date, expiring date etc on online tendering system of JDA. ➤ The original BG will be physically handed over in JDA as detailed below. ➤ A copy of this BG is to be attached with the document during uploading.	EMD 0.5% shall be applicable for	1. If both firm in JV are registered in AA class in JDA.	EMD 2.0% shall be applicable for	In the rest condition in JV, EMD shall be applicable 2.0% of estimated procurement cost i.e a) If one bidder registered in AA class category in JDA and other registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. b) If both bidders are registered in other departments/PSUs /private or can be a private entity registered under companies act or as applicable act.
EMD 0.5% shall be applicable for	1. If both firm in JV are registered in AA class in JDA.						
EMD 2.0% shall be applicable for	In the rest condition in JV, EMD shall be applicable 2.0% of estimated procurement cost i.e a) If one bidder registered in AA class category in JDA and other registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. b) If both bidders are registered in other departments/PSUs /private or can be a private entity registered under companies act or as applicable act.						
6.	Download of Bid document	:	From 12-08-2022, 6.00PM to 31-08-2022.upto 6:00 PM				
7.	Upload the Bid Document	:	From 12-08-2022, 6.00PM to 31-08-2022.upto 6:00 PM				
8.	Date of Pre Bid Meeting	:	.17-08-2022,12:00 Noon				

9.	Date/Time/Place of Technical Bid Opening	:	• 02-09-2022 at 1.00 PM in Room No. JB-SF-208, 2nd floor, court Building, JDA Campus, Indira Circle, JawaharLal Nehru Marg, Jaipur- 302004 (Rajasthan)
10.	Date/Time/Place of Financial Bid Opening	:	Will be intimated later to the technically qualified bidders on E-proc portal. Room No. JB-SF-208 2nd floor, Court Building, JDA Campus, Indira Circle, JawaharLal Nehru Marg, Jaipur- 302004 (Rajasthan)
11.	Physically BG submission start date	:	16-08-2022 at 10.00 AM
12.	Physically BG submission end date	:	01-09-2022.at 6.00 PM
13.	Last Date of submission of Bid cost, Bid Process cost & Bid Security.	:	31-08-2022 up to 6.00 PM through online only.
14.	Completion period of work	:	4.5 Months

SCHEDULE – A: INFORMATION USEFUL FOR THE BIDDERS:

The bidder should see the site and fully understand the conditions of the site before tendering and include all leads, lift etc. The bidder should also go through the detailed drawings, specifications of each item of Schedule H as this work is on EPC mode and quote his rate on lump-sum basis. The work shall be carried out in accordance with the Indian standard specification/BIS specification and to the entire satisfaction of the Engineer–In–Charge of the work.

Qualified personnel as required under the contractor enlistment rules duly approved by the Deptt. shall have to be engaged at site by the Contractor. The deptt. Reserves the right to engage such staff and recover the expenses from the contractor on such account in case of his failure to do so.

SCHEDULE – B: LIST OF THE DRAWING:

1. Planning Drawings of Outer Development Works.

The other drawings may be seen in office of the undersigned.

SCHEDULE – C: LIST OF THE DRAWING TO BE SUPPLIED BY THE BIDDER:

The qualified bidder has to work as per the drawings and specifications provided by the consultant appointed for the project. The same will need approval by JDA before execution.

SCHEDULE - D: TEST OF THE MATERIALS:

The testing of the materials and workmanship shall be conducted by the JDA staff as per prescribed norms. The result of such tests should confirm to the standards and specifications. Qualified personnel as required duly approved by JDA shall have to be engaged at site by the contractor at his cost. The JDA reserves the right to engage such staff and recover the expenses from the contractor on such account in case of his failure to do so.

SCHEDULE – E: SAMPLES OF THE MATERIALS:

The sample of the materials to be used by the bidder shall be deposited 15 days in advance with the Engineer In charge and be got approval by him before use.

SCHEDULE - F: TIME OF COMPLETION:

The work should start within 10 days of issue of work order and complete within 4.5 months

SCHEDULE – G: NIL

SCHEDULE – H: SPECIAL CONDITION:

Attached Separately.

SCHEDULE – I: LIST OF MATERIAL TO BE SUPPLIED BY THE DEPARTMENT

NIL

SCHEDULE – J: COST OF BID DOCUMENTS, PROCESSING FEES & BID SECURITY.

The Bid processing fees payable to Managing Director R.I.S.L. & Cost of Bid documents & Bid Security is payable to Secretary, JDA, Jaipur will be accepted on line only Kindly refer "Instructions to Bidders" of the bid documents for process of online payment.

**Signature of the Bidder
With full Address**

**Executive Engineer (HQ),
JDA, Jaipur**

SECTION I
INSTRUCTION TO BIDDERS (ITB)

Section-I : Instruction to Bidders (ITB)

Important Instruction: - The Law relating to procurement “The Rajasthan Transparency in Public Procurement Act, 2012” [hereinafter called the Act] and the “Rajasthan Public Procurement Rules, 2013” and modified thereof from time to time [hereinafter called the Rules] under the said Act have come into force which are available on the website of State Public Procurement Portal <http://sppp.raj.nic.in>. Therefore, the Bidders are advised to acquaint themselves with the provisions of the Act and the Rules before participating in the Bidding process. If there is any discrepancy between the provisions of the Act and the Rules and this Bidding Document, the provisions of the Act and the Rules shall prevail.

1.	General		
	1.1 Scope of Bid		In support of the Invitation to Bid indicated in the Bid Data Sheet (BDS), the Procuring Entity issues this Bidding Document for the procurement of works as named in the BDS and as Specified in Section V, Procuring Entity's Requirements.
	1.2 Interpretation		Throughout this Bidding Document: (a) The term “in writing” means communicated in written Form through letter, fax, e-mail etc. with proof of receipt. (b) If the context so requires, singular means plural and Vice versa; and “Day” means calendar day.
	1.3 Code of Integrity	1.3.1	Any person participating in the procurement process shall: - i. Not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process; ii. Not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation; iii. Not indulge in any collusion, bid rigging or anti- competitive behaviour to impair the transparency, fairness and progress of the procurement process; iv. Not misuse any information shared between the Procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process; v. Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process; vi. Not obstruct any investigation or audit of a procurement process; vii. Disclose conflict of interest, if any; and viii. Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other Procuring Entity.
		1.3.2	Conflict of Interest: A conflict of interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations. A Bidder may be considered to be in conflict of interest with one or more parties in this bidding process if, including but not limited to: have controlling partners/ shareholders in common; or receive or have received any

			direct or in direct subsidy from any of them; or have the same legal representative for purposes of this Bid; or have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding this bidding process; or The Bidder participates in more than one Bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one Bid; or the Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Works that are the subject of the Bid; or The Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as Engineer-in-charge/ consultant for the Contract.
		1.3.3	The Bidder shall have to give a declaration regarding compliance of the Code of Integrity prescribed in the Act, the Rules and stated above in this Clause along with its Bid.
		1.3.4	Breach of Code of Integrity by the Bidder: - Without prejudice to the provisions of Chapter IV of the Rajasthan Transparency in Public Procurement Act, in case of any breach of the Code of Integrity by a Bidder or prospective Bidder, as the case may be, the Procuring Entity may take appropriate action in accordance with the provisions of sub-section (3) of section 11 and section 46 of the Act.
	1.4 Eligible Bidders	1.4.1	Bidder should be registered in AA class category in JDA or equivalent in other departments /PSUs/private or may be a private entity registered under companies act or other relevant acts as applicable.
		1.4.2	JOINT VENTURE: In case the bidder comprises a joint venture or consortium, following requirements shall also be complied with: The JV will have to be formed before submission of the bid and total number of JV partners shall not exceed 2 (Two). They must designate lead partner duly authorized by all the members who will represent the J.V. Of the two partners one with higher stake will be the lead partner. For The lead partner shall be nominated as being partner-in-charge and this authorization shall be evidenced by submitting power of attorney signed by the legally authorized signatories of all the partners. The partner-in- charge (or, the lead partner) shall be authorized to incur liabilities and to receive instructions on the behalf of the partners of the Joint Venture, whether jointly or severely, and entire execution of the contract (including payment) shall be carried out exclusively through the partner- in- charge. The share of one of the two partners shall not be less than 26% and rest of the share shall be held by other partner

			(For example if share of one partner is 26% then for other partner it will be 74%.) The JDA will only send communication to the lead partner, which will be deemed to have been sent to all the J.V. partners. Similarly, any negotiation and / or agreement with the lead partner shall be deemed to have been concluded with all the J.V. partners. All the members of J.V. shall be bound by the said communication and all acts/ deeds of the lead member. Any one of the two partners, alone should fulfill the Technical Criteria Similarly, any one of the two partners, alone should fulfill the Financial Criteria laid down in section –III: Evaluation and qualification. For rest of the eligibility criteria, qualifications of the two partners may be clubbed together.. The individual partner of J.V. alone or with other partners cannot participate in the same bid. For calculation of bid capacity, turn over and work liability of all the firms of joint venture shall be considered together. Attested copy of the MoU / Agreement/ Power of attorney entered into by the joint venture / consortium members duly notarized shall be submitted along with the Technical Bid with intended percentage participation nomination of lead member and division of responsibility to clearly define the work of each member etc. All the members of the joint venture/ consortium shall be jointly and severally liable for the execution of the Contract. In the event of default by any member of the joint venture/ consortium in the execution of his part of the contract, the partner-in-charge will have the authority to assign the work to any other party acceptable to the employer to ensure the execution of the part of contract. If initially the bid has purchased and submitted by the any partner or by the JV firm, in case JV bid accepted, the work order will be issued in favour of name of JV and the bidder will submit details of JV bank account to which payment is to be deposited by JDA. The experience certificate will be issued as per percentage of the shareholders defined in JV agreement of the two partners.
		1.4.3	A Bidder/JV constituting the bidder, shall have the nationality of India. A Bidder shall be deemed to have nationality of a country if the Bidder is a citizen or constituted or incorporated, and operates in conformity with the provisions of the Laws of that country. This criterion shall also apply to the determination of the nationality of proposed Sub-Contractors or suppliers for any part of the Contract including related services
		1.4.4	A Bidder should not have a conflict of interest in the procurement in question as stated in the RTPP Rule 81 and this Bidding document.
		1.4.5	A Bidder debarred under section 46 of the RTPP Act shall not be eligible to participate in any procurement process undertaken by any Procuring Entity, if debarred by the State Government; and a Procuring Entity, if

			debarred by such Procuring Entity.
		1.4.6	Bidder should be registered in AA class category in JDA or equivalent in other departments /PSUs/private or may be a private entity registered under companies act or other relevant acts as applicable.
		1.4.7	(i) Any change in the constitution of the firm, etc., shall be notified forth with by the Bidder in writing to the Procuring Entity and such change shall not relieve any former partner/ member of the firm, etc. from any liability under the Contract. (ii) No new partner/partners shall be accepted in the firm by the Bidder in respect of the contract unless he/they agree to abide by all its terms, conditions and deposit with the Procuring Entity a written agreement to this effect. The Bidder's receipt for acknowledgement or that of any partners subsequently accepted as above shall bind all of them and will be sufficient discharge for any of the purpose of the Contract. (iii) The status of the lead partner/ representative of the Joint Venture, Consortium or Association as a major stake holder shall not change without the consent of the Procuring Entity. New major stake holder must agree to abide by all terms and conditions of the Contract.
		1.4.8	Each Bidder/ JV shall submit only one Bid
		1.4.9	Bidder/JV should be registered under the GST Act and submit the proof of registration before signing the Contract agreement. He is also required to provide proof of Permanent Account Number (PAN) given by Income Tax Department.
2	BID DOCUMENT		
	2.1 Sections of the Bidding Document	2.1.1	The Bidding Document consists of two volumes (volume I & II). Volume I comprises three parts (part I, II, & III) which includes Sections as indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB Clause 2.3 [Amendment of Bidding Document]. (A) Volume-I Part I: Bidding Procedures Section I. Instructions to Bidders (ITB) Section II. Bid Data Sheet (BDS) Section III. Evaluation and Qualification Criteria Part II: Requirements Section IV. Procuring Entity's Requirements. Part III: Contract Section V(A) - General Conditions of Contract [GCC] Section V(B). Special Conditions of Contract [SCC] Section V (C). Contract Forms (B) Volume-II : Financial bid
		2.1.2	The Invitation for Bids (NIB) issued by the Procuring Entity is also part of the Bidding Document.
		2.1.3	The Bidding Document shall be uploaded on the e-procurement portal, eproc.raj.nic.in along with the Notice Inviting Bids. The complete Bidding Document shall also be placed on the State Public Procurement Portal,

			sppp.raj.nic.in. The prospective Bidders may download the bidding document from these portals. The price of the Bidding Document and processing fee of e-bid shall have to be paid to the Procuring Entity in the amount and manner as specified in NIB and e-procurement portal.
		2.1.4	The Procuring Entity is not responsible for the completeness of the Bidding Document and its addenda, if they were not downloaded correctly from the e-procurement portal or the State Public Procurement Portal
		2.1.5	The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding Document. Failure to furnish all information or authentic documentation required by the Bidding Document may result in the rejection of the Bid.
	2.2 Clarification of Bidding Document and Pre-Bid Meeting	2.2.1	The Bidder shall be deemed to have carefully examined the conditions, specifications, size, make and drawings, etc. of the Works and Related Services to be provided. If any Bidder has any doubts as to the meaning of any portion of the conditions or of the specifications, drawings etc., it shall, before submitting the Bid, refer the same to the Procuring Entity and get clarifications. A Bidder requiring any clarification of the Bidding Document shall contact the Procuring Entity in writing or e-mail at the Procuring Entity's address indicated in the BDS. The Procuring Entity will respond to all raised queries in pre bid meeting. Minutes of pre bid meeting shall be uploaded on the e-procurement portal, state public procurement portal and shall be sent to all bidders who will participating in pre bid meeting prior to the dead line of submission of bids as specified in ITB Sub-Clause 4.2.1 [Deadline for Submission of Bids]. The pre bid minutes issued by procurement entity shall then become part of the bid document and shall read as addendum to bid document.
		2.2.2	The Bidder or his authorized representative may attend the pre bid meeting on the specified date and time as mentioned in NIB. The purpose of pre bid meeting will be to clarify issues and to answer question on any matter related to this procurement that may be raised. If required, site visit may be arranged by the procuring entity.
		2.2.3	The Bidder is requested, to submit questions in writing, to reach the Procuring Entity not later than one week before the date of Pre-Bid Meeting.
		2.2.4	At any time prior to the deadline for submission of the Bids, the Procuring Entity, suo motto, may also amend the Bidding Document, if required, by issuing an addendum which will form part of the Bidding Document
		2.2.5	Non-attendance at the Pre-Bid Conference will not be a cause for disqualification of a Bidder.
	2.3 Amendment of Bidding Document	2.3.1	Any addendum issued shall be part of the Bidding Document and shall be uploaded on the State Public Procurement Portal and the e-procurement portal.
		2.3.2	To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring Entity may, at its discretion, extend the deadline for the submission of the Bids, pursuant to ITB

			Sub-Clause 4.2 [Deadline for Submission of Bids], under due publication on the State Public Procurement Portal and the e-procurement portal and newspapers.
3	Preparation of Bids		
	3.1 Cost of Bidding	3.1.1	The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Procuring Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
		3.1.2	The Bidder shall furnish the scanned attested copies of following documents with its Bid: - i. Partnership Deed and valid registration certificate with the Registrar of Firms in case of Partnership Firms and private entity are also permitted. Power of Attorney in favour of the partner signing/submitting the Bid, authorizing him to represent all partners of the firm. ii. GST registration certificate and Permanent Account Number (PAN) given by the Income Tax Department. iii. Address of residence and office, telephone numbers, e-mail address iv. Certificate of Registration and Memorandum of Association issued by Registrar of Companies in case of a registered company and in case of any other statutory or registered body, certificate of incorporation or registration issued by concerned authorities. Power of attorney in favour of the person signing the Bid. v. Where permitted to bid as Joint Venture, Consortium or Association, letter of formal intent to enter in to an agreement or an existing agreement in the form of a Joint Venture, Consortium or Association.
	3.2 Language of Bid	3.2.1	The Bid, as well as all correspondence and documents relating to the Bid between Bidder and the Procuring Entity, shall be written in English/ 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 duly accepted by the Bidder in English/ Hindi in which case, for purposes of interpretation of the Bid, such translation shall govern
	3.3 Documents Comprising the Bid	3.3.1	The bidders shall submit the bid online with all pages numbered serially and by giving index of submissions. Bid should be submitted as follows : (a) Two-envelope system would be adopted, for POST QUALIFICATION. Envelope-1 being for Technical Bid and Envelope - 2 being for Financial Bid. Each envelope would be sealed separately and super scribed as "Envelope-1 Technical Bid" and "Envelope-2 Financial Bid". Both envelopes would be placed in Third envelope duly sealed, bearing the name of work and the name of the bidding contractor. In this third envelope, envelop of earnest money, GST certificate and copy of registration of contractor in required category should also be kept.

			(E-Bid procedure at http://eproc.rajastha.gov.in) (b) The technical bid will be opened only of those bidders whose proper Bid Security (Earnest money), GST certificate, Copy of PAN Card and copy of registration of contractor in required category are found to be in order.
		3.3.2	The Technical Bid shall contain the following: i. Technical Bid Submission Sheet and Technical Bid containing the filled-up Bidding Forms and Declarations related to Technical Bid]; ii. proof of payment of price of Bidding Document, processing fee, Bid Security, in accordance with ITB Clause 3.10; iii. written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB Clause 3.11; iv. documentary evidence in accordance with ITB Clause 3.7 establishing the Bidder's eligibility to bid; v. documentary evidence in accordance with ITB Clause 3.8 establishing the Bidder's qualifications to perform the contract if its Bid is accepted; vi. the Notice Inviting Bids; vii. any other document required in the BDS; and viii. Others considered necessary to strengthen the Bid submitted.
		3.3.3	The Financial Bid/ Price Proposal shall contain the following: Financial Bid/ Price Proposal Submission Sheet and the applicable Price Schedules, in accordance with ITB Clauses 3.4, 3.5; Any other document required in the Bid documents.
	3.4 Bid Submission Sheets and Price Schedules	3.4.1	The Bidder shall submit the Technical Bid and Financial Bid using the Bid Submission Sheets provided. These forms must be completed without any alterations to their format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.
		3.4.2	The Bidder shall submit as part of the Financial Bid, the Price Schedules for Works, using the forms
	3.5 Bid Prices	3.5.1	Total Price which the Bidder wants to charge for the entire Works with all its contingencies in accordance with drawings and specifications shall be quoted (in figures and words) by the Bidder. The quoted amount shall be specified in the financial bid in order to regulate the amount to be added to or deducted from the fixed sum on account of additions and alterations not covered by the Contract. Payments shall be linked to various stages of completion of the Works specified in Activity Schedule given in Section V C Special Condition of Contract.
		3.5.2	Prices quoted by the Bidder shall be fixed during the Execution of the work and not subject to variation on any account, unless otherwise specified in the BDS. A Bid submitted with an adjustable price quotation shall be treated as non-responsive and shall be rejected, pursuant to ITB Clause 5.7 [Responsiveness of

			Bids]. However, if in accordance with the BDS, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a Bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.
		3.5.3	All duties, taxes and other levies payable by the Bidder under the contract, or for any other cause, shall be included in the rates and prices, and the total Bid Price submitted by the Bidder.
3.6 Currencies of Bid	3.6.1	The rates quoted by the Bidder shall be in Indian Rupees. All payments shall be made in Indian Rupees only.	
3.7 Documents Establishing the Eligibility of the Bidder	3.7.1	To establish their eligibility in accordance with ITB Clause 1.4 [Eligible Bidders], Bidders shall: complete the eligibility declarations in the Bid Submission Sheet and Declaration Form. If the Bidder is an existing or intended Joint Venture [JV], Consortium or Association in accordance with ITB Sub-Clause 1.4.1, shall submit a copy of the Agreement, or a letter of intent to enter into such Agreement. The respective document shall be signed by all legally authorized signatories of all the parties to the existing or intended JV, Consortium or Association as appropriate; and the existing or intended JV shall authorize an individual/ partner in one of the firms as lead partner of the JV to act and commit all the partners of JV for the Bid.	
3.8 Documents Establishing the Qualifications of the Bidder	3.8	To establish its qualifications to perform the Contract, the Bidder shall submit as part of its Technical Proposal the documentary evidence indicated for each qualification criteria specified in Section III, [Evaluation and Qualification Criteria].	
3.9 Period of Validity of Bids	3.9.1	Bids shall remain valid for 120 days after the Bid submission deadline date as specified by the Procuring Entity. A Bid valid for a shorter period shall be rejected by the Procuring Entity as non-responsive	
	3.9.2	In exceptional circumstances, prior to the expiration of the Bid validity period, the Procuring Entity may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. The Bid Security or a Bid Securing Declaration in accordance with ITB Clause 3.10 [Bid Security] shall also be got extended for thirty days beyond the dead line of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security or a Bid Securing Declaration. A Bidder granting the request shall not be permitted to modify its Bid.	
3.10 Bid Security	3.10.1	All the eligible bidders should submit Bid Security Deposit as @2% of estimated procurement cost i.e. Rs. 11.32 Lakhs for the bidder registered in appropriate equivalent class in Other Department or 0.5% of estimated procurement cost i.e. Rs. 2.83 Lakhs for the bidder registered as contractor for AA class in JDA. ➤ In case of JV please see table below	
		EMD 0.5% shall be applicable for	➤ If both firm in JV are registered in AA class in JDA.

			EMD 2.0% shall be applicable for In the rest condition in JV, EMD shall be applicable 2.0% of estimated procurement cost i.e - If one bidder registered in AA class category in JDA and other registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. - If both bidders are registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act.
			Bid Security deposit can be deposited either online or in the form of Bank Guarantee in favour of Secretary, JDA, Jaipur payable at Jaipur. The bidder will provide details of BG viz No., issue date, expiring date etc on online tendering system of JDA. The original BG will be physically handed over in JDA as detailed below. A copy of this BG is to be attached with the document during uploading.
		3.10.2	Bid Security of a Bidder lying with the Procuring Entity in respect of other Bids awaiting decision shall not be adjusted towards Bid Security for this Bid. The Bid Security originally deposited may, however be taken into consideration in case Bids are re-invited.
		3.10.3	The issuer of the Bid Security and the confirmer, if any, of the Bid Security, as well as the form and terms of the Bid Security, must be acceptable to the Procuring Entity.
		3.10.4	Prior to submitting its Bid, a Bidder may request the Procuring Entity to confirm the acceptability of a proposed issuer of a Bid Security or of a proposed confirmer, if different than as specified in ITB Clause 3.10.3. The Procuring Entity shall respond promptly to such a request.
		3.10.5	The bank guarantee presented as Bid Security shall be got confirmed from the concerned issuing bank. However, the confirmation of the acceptability of a proposed issuer or of any proposed confirmer does not preclude the Procuring Entity from rejecting the Bid Security on the ground that the issuer or the confirmer, as the case may be, has become insolvent or is under liquidation or has otherwise ceased to be creditworthy.
		3.10.6	The Bid Security of unsuccessful Bidders shall be refunded soon after final acceptance of successful Bid and signing of Contract Agreement and submitting Security deposit by successful Bidder pursuant to ITB Clause 6.4 [Security deposit].
		3.10.7	The Bid Security from a Bidder shall be recovered /forfeited in the following cases namely :- - When the Bidder withdraws, or modifies his Bid after opening of Bids; or - when the Bidder does not execute the agreement in

			accordance with ITB Clause 6.3 [Signing of Contract] after issue of letter of acceptance/ placement of Work order within the specified time period; or (c) when the Bidder fails to commence the Works as per Work Order within the time specified; or (d) when the Bidder does not deposit the Security deposit in accordance with ITB Clause 6.4 [Security deposit]; in the prescribed time limit after the work order is placed; or (e) if the Bidder breaches any provision of the Code of Integrity prescribed for Bidders in the Act and Chapter VI of the Rules or as specified in ITB Clause 1.3 [Code of Integrity]; or (f) if the Bidder does not accept the correction of its Bid Price pursuant to ITB Sub-Clause 5.5 [Correction of Arithmetical Errors].
		3.10.8	In case of the successful bidder, the amount of Bid Security may be adjusted in arriving at the amount of the Security deposit, or refunded if the successful bidder furnishes the full amount of Security deposit. No interest will be paid by the Procuring Entity on the amount of Bid Security.
		3.10.9	The Procuring Entity shall promptly refund the Bid Security of the Bidders at the earliest of any of the following events, namely: - (a) The expiry of validity of Bid Security; (b) The execution of agreement for procurement/O&M and Security deposit is furnished by the successful bidder on part of execution/O&M hence shall be refunded in two parts accordingly. (c) The cancellation of the procurement process; Or The withdrawal of Bid prior to the deadline for presenting Bids, unless the Bidding Document stipulates that no such withdrawal is permitted.
		3.10.10	The Bid Security of a Joint Venture, Consortium or Association must be in the name of the Joint Venture, Consortium or Association that submits the Bid. If the Joint Venture, Consortium or Association has not been legally constituted at the time of Bidding, the members of the proposed consortium or JV shall enter in to an Agreement to form a legally constituted JV after the issue of Letter of Acceptance/Letter of Intent to them and also declare a partner as the lead partner in whose name the Bid Security may be submitted.
	3.11 Format and Signing of Bid	3.11.1	All pages of the Technical and Financial Bid shall be digitally signed by the Bidder or authorized signatory on behalf of the Bidder. This authorization shall consist of a written confirmation and shall be attached to the Bid. In case of a Joint Venture, Consortium or Association, if the Joint Venture, Consortium or Association has not been legally constituted at the time of Bidding, all the members of the proposed Joint Venture, Consortium or Association shall digitally sign the Bid.
4	Submission and Opening of Bids		
	4.1 Sealing and Marking of Bids	4.1.1	Bidders shall submit their Bids to the Procuring Entity electronically only on the e-procurement portal, www.eproc.rajasthan.gov.in . In submission of their Bids, the Bidders should follow the step by step

			instructions given on the e-procurement portal
		4.1.2	The Bidder shall enclose the Technical Bid and the Financial Bid in separate covers. The proof of payment of price of Bidding Document, processing fee and Bid Security shall be enclosed in third cover. The price of Bidding Document and Bid Security shall be paid in the name of the Procuring Entity and the processing fee shall be paid in the name of RISL.
	4.2 Deadline for Submission of Bids	4.2.1	Bids shall be submitted electronically only up to the time and date specified in the Notice Inviting Bids and BDS or an extension issued thereof.
	4.3 Withdrawal, Substitution and Modification of Bids	4.3.1	A Bidder may withdraw, substitute or modify its Bid after it has been submitted by submitting electronically on the e-procurement portal. A written Withdrawal/ Substitutions/ Modifications etc. Notice on the e-procurement portal, duly digitally signed by the Bidder or his authorized representative, and shall include a copy of the authorization in accordance with ITB Sub- Clause 3.11.1 [Format and Signing of Bid]. The corresponding Withdrawal, Substitution or Modification of the Bid must accompany the respective written Notice. All Notices must be received by the Procuring Entity on the e-procurement portal prior to the deadline specified for submission of Bids in accordance with ITB Sub-Clause 4.2. [Deadline for Submission of Bids].
		4.3.2	No Bid shall be withdrawn, substituted or modified in the interval between the deadline for submission of the Bid and the expiration of the period of Bid validity specified in ITB Clause 3.9. [Period of Validity of Bids] or any extension thereof.
	4.4 Bid Opening	4.4.1	The electronic Technical Bids shall be opened by the Bid opening committee constituted by the Procuring Entity at the time, date and place specified in the Bid Data Sheet in the presence of the Bidders or their authorized representatives, who choose to be present.
		4.4.2	The Bidders may choose to witness the electronic Bid opening procedure online.
		4.4.3	The Financial Bids shall be kept unopened until the time of opening of the Financial Bids. The date, time and location of electronic opening of the Financial Bids shall be intimated to the bidders who are found qualified by the Procuring Entity in evaluation of their Technical Bids.
		4.4.4	The Bid opening committee shall prepare a list of the Bidders or their representatives attending the opening of Bids and obtain their signatures on the same. The list shall also contain the representative's name and telephone number and corresponding Bidders' names and addresses. The authority letters brought by the representatives shall be attached to the list. The list shall be signed by all the members of Bids opening committee with date and time of opening of the Bids.
		4.4.5	First, covers marked as "WITHDRAWAL" shall be opened, read out, and recorded and the covers containing the corresponding Technical Bids and Financial Bids shall not be opened. No Bid shall be permitted to be withdrawn unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is readout and recorded at Bid

			opening. If the withdrawal notice is not accompanied by the valid authorization, the withdrawal shall not be permitted and the corresponding Technical Bid shall be opened. Next, covers containing Scanned copy of online payments and registration certificate shall be opened, read out, and recorded. Next, covers marked as “SUBSTITUTION Technical Bid” shall be opened, read out, recorded. The covers containing the Substitution Technical Bids and/ or Substitution Financial Bids shall be exchanged for the corresponding covers being substituted. Only the Substitution Technical Bids shall be opened, read out, and recorded. Substitution Financial Bids will remain unopened in accordance with ITB Sub-Clause 4.4.4. No Bid shall be substituted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out and recorded at Bid opening. Covers marked as “MODIFICATION Technical Bid” shall be opened thereafter, read out and recorded with the corresponding Technical Bids. No Technical Bid and/ or Financial Bid shall be modified unless the corresponding modification notice contains a valid authorization to request the modification and is read out and recorded at opening of Technical Bids. Only the Technical Bids, both Original as well as Modification is to be opened, read out, and recorded at the opening. Financial Bids, both Original as well as Modification, will remain unopened in accordance with ITB Sub-Clause 4.4.4.
		4.4.6	All other covers containing the Technical Bids shall be opened one at a time and the following read out the name of the Bidder, whether there is a modification or substitution; whether proof of payment of Bid Security or Bid Securing Declaration, if required, payment of price of the Bidding Document and processing fee have been enclosed. Any other details as the Bids opening committee may consider appropriate.
		4.4.7	After all the Bids have been opened, their hard copies shall be printed and shall be initialled and dated on the first page and other important papers of each Bid by the members of the Bids opening committee. Only Technical Bids shall be read out and recorded at the bid opening and shall be considered for evaluation. No Bid shall be rejected at the time of opening of Technical Bids except Alternative Bids (if not permitted) and Bids not accompanied with the proof of payment of the required price of Bidding Document, processing fee and Bid Security.
		4.4.8	The Bids opening committee shall prepare a record of opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, modification, or alternative offer (if they were permitted), any conditions put by Bidder and the presence or absence of the price of Bidding Document, processing fee and Bid Security. The Bidders or their representatives, who are present, shall sign the record. The members of the Bids opening committee shall also sign the record with date.
		4.4.9	After completion of the evaluation of the Technical Bids,

			the Procuring Entity shall invite Bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified to attend the electronic opening of the Financial Bids. The date, time, and location of the opening of Financial Bids will be intimated in writing by the Procuring Entity. Bidders shall be given reasonable notice of the opening of Financial Bids.
		4.4.10	The Procuring Entity shall notify Bidders in writing whose Technical Bids have been rejected on the grounds of being substantially non-responsive and not qualified in accordance with the requirements of the Bidding Document
		4.4.11	The Bids opening committee shall conduct the electronic opening of Financial Bids of all Bidders who submitted substantially responsive Technical Bids and have qualified in evaluation of Technical Bids, in the presence of Bidders or their representatives who choose to be present at the address, date and time specified by the Procuring Entity.
		4.4.12	All covers containing the Financial Bids shall be opened at the time & date and the following read out and recorded- the name of the Bidder; whether there is a modification or substitution; the Bid Prices; any other details as the Bids opening committee may consider appropriate After all the Bids have been opened, their hard copies shall be printed and shall be initial and dated on the first page of each Bid by the members of the Bids opening committee. All the pages of the Price Schedule and letters, Bill of Quantities attached shall be initialled and dated by the members of the committee. Key information shall be encircled and unfilled spaces in the Bids shall be marked and signed with date by the members of the Bids opening committee.
		4.1.13	The Bids opening committee shall prepare a record of opening of Financial Bids that shall include as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification, the Bid Price, any conditions, any discounts and alternative offers (if they were permitted). The Bidders or their representatives, who are present, shall sign the record. The members of the Bids opening committee shall also sign the record with date.
5.	Evaluation and Comparison of Bids		
	5.1 Confidentiality	5.1.1	Information relating to the examination, evaluation, comparison, and post-qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.
		5.1.2	Any attempt by a Bidder to influence the Procuring Entity in its examination of qualification, evaluation, comparison of the Bids or Contract award decisions may be resulting in the rejection of its Bid, in addition to the legal action which may be taken by the Procuring Entity under the Act and the Rules.
	5.2 Clarification of Technical or	5.2.1	To assist in the examination, evaluation, comparison and qualification of the Technical or Financial Bids, the Bid

Financial Bids		evaluation committee may, at its discretion, ask any Bidder for a clarification regarding his Bid. The committee's request for clarification and the response of the Bidder shall be in writing.
	5.2.2	Any clarification submitted by a Bidder with regard to His Bid that is not in response to a request by the Bid evaluation committee shall not be considered.
	5.2.3	No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetical errors discovered by the Bid evaluation committee in the evaluation of the financial Bids.
	5.2.4	No substantive change to qualification information or to a submission, including changes aimed at making an unqualified Bidder, qualified or an unresponsive submission, responsive shall be sought, offered or permitted.
5.3 Deviations, Reservations and Omissions in Technical or Financial Bids	5.3.1	During the evaluation of Technical or Financial Bids, the following definitions apply: i.) "Deviation" is a departure from the requirements specified in the Bidding Document; ii.) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and iii.) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.
5.4 Nonmaterial Non-conformities in Technical or Financial Bids	5.4.1	Provided that a Technical or Financial Bid is substantially responsive, the Procuring Entity may waive any non-conformities (with recorded reasons) in the Bid that do not constitute a material deviation, reservation or omission.
	5.4.2	Provided that a Technical or Financial Bid is substantially responsive, the Procuring Entity may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Request for information or documentation on such nonconformities shall not be related to any aspect of the Financial Proposal of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
5.5 Correction of Arithmetical Errors in Financial Bid	5.5.1	Provided that a Financial Bid is substantially responsive, the Bid evaluation committee shall correct arithmetical errors during evaluation of Financial Bid on the following basis: i. if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected; ii. if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and iii. if there is a discrepancy between words and figures, the amount in words shall prevail, unless the

			amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.
		5.5.2	If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid Securing Declaration shall be executed.
	5.6 Preliminary Examination of Technical or Financial Bids	5.6.1	The Procuring Entity shall examine the Technical or Financial Bids to confirm that all documents and technical documentation requested in ITB Sub-Clause 3.3 [Documents Comprising the Bid] have been provided, and to determine the completeness of each document submitted.
		5.6.2	The Procuring Entity shall confirm, following the opening of the Technical or Financial Bids, that the following documents and information have been provided: i. Bid is signed, as per the requirements listed in the Bidding documents; ii. Bid has been sealed as per instructions provided in the Bidding documents; iii. Bid is valid for the period, specified in the Bidding documents; iv. Bid is accompanied by Bid Security or Bid securing declaration; v. Bid is unconditional and the Bidder has agreed to give the required security deposit; vi. Price Schedules in the Financial Bids are in accordance with ITB Clause 3.4 [Bid Submission Sheets and Price Schedules]; vii. written confirmation of authorization to commit the Bidder; viii. Declaration by the Bidder in compliance of Section 7 and 11 of the Act; and ix. Other conditions, as specified in the Bidding Document are fulfilled.
	5.7 Responsiveness of Technical or Financial Bids	5.7.1	The Procuring Entity's determination of the Responsiveness of a Technical or Financial Bid is to be based on the contents of the Bid itself, as defined in ITB Sub-Clause 3.3 [Documents Comprising the Bid].
		5.7.2	A substantially responsive Technical or Financial Bid is one that meets without material deviation, reservation, or omission to all the terms, conditions, and specifications of the Bidding Document. A material deviation, reservation, or omission is one that: if accepted, would- i. affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in Section V, Schedule of Supply; or limits in any substantial way, inconsistent with the Bidding Document, the Procuring Entity's rights or the Bidder's obligations under the proposed Contract; or (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
		5.7.3	The Procuring Entity shall examine the technical aspects of the Bid in particular, to confirm that requirements of Section IV, Procuring Entity's Requirements have been met without any material Deviation, reservation, or omission.

		5.7.4	If a Technical or Financial Bid is not substantially responsive to the Bidding Document, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by the Bidder by Correction of the material deviation, reservation, or omissions.
	5.8 Examination of Terms and Conditions of the Technical or Financial Bids	5.8.1	The Procuring Entity shall examine the Bids to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Bidder without any material deviation or reservation.
		5.8.3	The Procuring Entity shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clauses 3.3 [Documents Comprising the Bid] and to confirm that all requirements specified in Section IV [Procuring Entity's Requirements] of the Bidding Document and all amendments or changes requested by the Procuring Entity in accordance with ITB clause 2.3 [Amendment of Bidding Document] have been met without any material deviation or reservation.
	5.9 Evaluation of Qualification of Bidders in Technical Bids	5.9.1	The determination of qualification of a Bidder in evaluation of Technical Bids shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 3.8 [Documents Establishing the Qualifications of the Bidder] and in accordance with the qualification criteria indicated in Section III [Evaluation and Qualification Criteria]. Factors not included in Section III, shall not be used in the Evaluation of the Bidder's qualification.
	5.10 Evaluation of Financial Bids	5.10.1	The Procuring Entity shall evaluate each Financial Bid, the corresponding Technical Bid of which has been determined to be substantially responsive
		5.10.2	To evaluate a Financial Bid, the Procuring Entity shall only use all the criteria and methodologies defined in this Clause and in Section III, Evaluation and Qualification Criteria. No other criteria or methodology shall be permitted.
		5.10.3	To evaluate a Financial Bid, the Procuring Entity shall consider the following: i). the Bid Price quoted in the Financial Bid; ii) price adjustment for correction of arithmetical errors in accordance with ITB Clause 5.5[Correction of Arithmetical Errors]; iii) Adjustment of bid prices due to rectification of nonmaterial nonconformities or omissions in accordance with ITB Sub Clause 5.4.3 [Nonmaterial Nonconformities in Bids], if applicable.
		5.10.14	If the Bid, which results in the lowest evaluated Bid Price, is considered to be seriously unbalanced, or front loaded, in the opinion of the Procuring Entity, the Procuring Entity may require the Bidder to produce detailed rate analysis for any or all items to demonstrate the internal consistency of those rates with the construction methods and schedule proposed. If the rate justification is not satisfactory submitted by the bidder, the bid of such bidder may be rejected.
	5.11 Negotiations		
		5.11.1	To the extent possible, no clarifications shall be Conducted after the pre-Bid stage. All clarifications

			needed to be sought shall be sought in the pre-Bid stage itself.
		5.11.2	Negotiations may be undertaken only with the lowest Bidder when the rates quoted are considered much higher than the prevailing market rates.
		5.11.3	The Competent committee shall have full powers to undertake negotiations. Detailed reasons and results of negotiations shall be recorded in the proceedings.
		5.11.4	The lowest Bidder shall be informed about negotiations in writing either through messenger or by registered letter and e-mail (if available). A minimum time of seven days shall be given for calling negotiations. In case of urgency, the competent committee, after recording reasons, may reduce the time, provided the lowest Bidder has received the intimation and consented to holding of negotiations.
		5.11.5	Negotiations shall not make the original offer made by the Bidder inoperative. The competent committee shall have option to consider the original offer in case the Bidder decides to increase rates originally quoted or imposes any new terms or conditions.
		5.11.6	In case of non-satisfactory achievement of rates from lowest Bidder, the Bid evaluation committee may choose to make a written counter offer to the lowest Bidder and if this is not accepted by him, the committee may decide to reject and re-invite Bids or to make the same counter-offer first to the second lowest Bidder, then to the third lowest Bidder and so on in the order of their initial standing in the bid evaluation and work order be awarded to the Bidder who accepts the counter-offer.
		5.11.7	In case the rates even after the negotiations are considered very high, fresh Bids shall be invited.
	5.12 Procuring Entity's Right to Accept Any Bid, and to Reject Any or All Bids	5.12.1	The Procuring Entity reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract award without assigning any reasons thereof and without there by incurring any liability to the Bidders.
6.	Award of Contract		
	6.1 Procuring Entity's Right to Vary Quantities	6.1.1	If the Procuring Entity does not procure any subject matter of procurement or procures less than the quantity specified in the Bidding Document due to change in circumstances, the Bidder shall not be entitled for any claim or compensation except Otherwise provided in the Bidding Document.
	6.2 Acceptance of the successful Bid and award of contract	6.2.1	The Procuring Entity after considering the recommendations of the Bid Evaluation Committee and the conditions of Bid, if any, financial implications, samples, test reports, etc., shall accept or reject the successful Bid.
		6.2.2	Before award of the Contract, the Procuring Entity shall ensure that the price of successful Bid is reasonable and consistent with the required specifications.
		6.2.3	A Bid shall be treated as successful only after the competent authority has approved the procurement in terms of that Bid.
		6.2.4	The Procuring Entity shall award the contract to the Bidder whose offer is the lowest in accordance with the evaluation criteria.

		6.2.5	Prior to the expiration of the period of validity of Bid, the Procuring Entity shall inform the successful Bidder in writing, by registered post or email, that its Bid has been accepted.
	6.3 Signing of Contract	6.3.1	In the written intimation of acceptance of its Bid sent to the successful Bidder, it shall also be requested to execute an agreement in the format given in the Bidding Document on a non-judicial stamp of requisite value at his cost and deposit the Security deposit or a Security deposit Declaration, if applicable, within a period specified in the BDS. In case the successful bidder is a JV still to be legally constituted, all parties to the JV shall sign the Agreement.
		6.3.2	If the Bidder, whose Bid has been accepted, fails to sign a written procurement contract or fails to furnish the required Security deposit or Security deposit Declaration within the specified time period, the Procuring Entity shall forfeit the Bid Security of the successful bidder / execute the Bid Securing Declaration and take required action against it as per the provisions of the Act and the Rules.
		6.3.3	The Bid Security, if any, of the Bidders whose Bids could not be accepted shall be refunded soon after the contract with the successful Bidder is signed and his Security deposit is obtained. Until a formal contract is executed, LOA shall constitute a binding contract.
	6.4 Security deposit	6.4.1	Security deposit shall be solicited from the successful Bidder except State Govt. Departments and undertakings, corporations, autonomous bodies, registered societies, co-operative societies which are owned or controlled or managed by the State Government and undertakings of Central Government. However, a Security deposit Declaration shall be taken from them.
		6.4.2	(i) The amount of Security deposit shall be three percent (3%) of the amount of the Work Order. The currency of Security deposit shall be Indian Rupees.
		6.4.3	Security deposit shall be furnished in one of the following forms as applicable- a). Deposit through eGRAS; or b). Bank Draft or Banker's Cheque of a Scheduled Bank in India in favour of Secretary, JDA, Jaipur; or c). National Savings Certificates and any other script/instrument under National Savings Schemes for promotion of small savings issued by a Post Office in Rajasthan, if the same can be pledged under the relevant rules. They shall be accepted at their surrender value at the time of Bid and formally transferred in the name of the Procuring Entity with the approval of Head Post Master; or d). Bank guarantee in favour of Secretary JDA, Jaipur payable at Jaipur. It shall be got verified from the issuing bank. Other conditions regarding bank guarantee shall be same as specified in ITB Sub-Clause 3.10 [Bid Security]; or e). Fixed Deposit Receipt (FDR) of a Scheduled Bank. It shall be in the name of the Procuring Entity on account of Bidder and discharged by the Bidder in advance. The Procuring Entity shall ensure before accepting the Fixed Deposit Receipt that the Bidder furnishes an undertaking

			from the bank to make payment/ premature payment of the Fixed Deposit Receipt on demand to the Procuring Entity without requirement of consent of the Bidder concerned. In the event of forfeiture of the Security deposit, the Fixed Deposit shall be forfeited along with interest earned on such Fixed Deposit. f). The successful Bidder at the time of signing of the Contract agreement, may submit option for deduction of Security deposit from each running and final bill @ 3% of the amount of the bill.
		6.4.4	Security deposit furnished in the form of a document mentioned at options (a) to (e) of Sub-Clause 6.4.3 above, shall remain valid for a period of sixty days beyond defect liability period.
		6.4.5	Failure of the successful Bidder to submit the Security deposit in accordance to 6.4.3 above and sign the Contract accordingly shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event, the Procuring Entity may either cancel the procurement process or if deemed appropriate, award the Contract at the rates of the lowest Bidder, to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Procuring Entity to be qualified to perform the Contract satisfactorily.
		6.4.6	Forfeiture of Security deposit: Amount of Security deposit in full or part may be forfeited in the following cases: - when the Bidder does not execute the agreement in accordance with ITB Clause 6.3 [Signing of Contract] within the specified time; after issue of letter of acceptance; or when the Bidder fails to commence the Works as per Work order within the time specified; or when the Bidder fails to complete Contracted Works satisfactorily within the time specified; or when any terms and conditions of the contract is breached; or to adjust any established dues against the Bidder from any other contract with the Procuring Entity; or if the Bidder breaches any provision of the Code of Integrity prescribed for the Bidders specified in the Act, Chapter VI of the Rules and this Bidding Document. Notice of reasonable time will be given in case of forfeiture of Security deposit. The decision of the Procuring Entity in this regard shall be final.

SECTION II

BIDDING DATA SHEET

This section consists of provisions that are specific to each procurement and supplement the information or requirements included in Section I: Instructions to Bidders.

Contents

- A. Introduction
- B. Bidding Documents
- C. Preparation of Bids
- D. Submission and Opening of Bids
- E. Award of Contract

A. Introduction

ITB. 1.1.1	The Number of the Invitation for Bids (NIB) is: JDA/EE-HQ/12/2022-23 The Member of the Invitation for Bids is: Jaipur Development Authority. Name of Work: Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur (Detailed Scope of work has been defined in Section IV: Procuring Entity's Requirement)
1.1.2	Period of Completion: Construction work in all respect shall be completed in 4.5 months from the Start Date, which shall be the stipulated date of commencement mentioned in work order.
1.1.3	Estimated Cost of work is: Rs. 5.66 Crore.
ITB 1.4.1	Joint Ventures / Consortium are permitted comprising not more than 2 (two) firms/companies. The maximum equity under JV/Consortium of lead firm should be 74% and another firm 26%
ITB 1.4.2	"Bidders of Indian Nationality" are permissible.
ITB 1.4.3	Bidder should be registered in AA class category in JDA or equivalent in other departments /PSUs/private or may be a private entity registered under companies act or other relevant acts as applicable.
ITB 1.4.4	The bidding process is open to bidders who fulfil the prescribed eligibility criteria.
ITB 1.4.5	Each bidder shall upload on-line / submit only one bid for one work. A bidder who submits or participates in more than one bid for the particular Works will be disqualified.

B. Bidding Documents

ITB 2.1.3	This is an "on-line tender". Therefore, tender documents in physical form shall not be available for sale but can be downloaded from the website and pay cost (Rs 1,000/-) while submitting the filled-up Bidding document to the Procuring Entity along with the processing fee of Rs 1,000/- separately in favor of MD RISL, Jaipur. The bidder should submit, by date & time specified in NIB, in original, hard copies of (i) cost of bid document as Rs. 1,000/-Online (ii) Bid processing fee of Rs. 1,000/-online to Managing Director, RISL, Jaipur payable; (iii) Bid Security as per RTPP; (iv) Letter of Technical Bid; (v) Power of Attorney; and (vi) Joint Venture Agreement, if applicable. The bidder should upload scanned copies of these documents on e-procurement website along with their technical bids.
ITB 2.2.1	For Clarification purposes only, the Procuring Entity's address is: OFFICE OF THE EXECUTIVE ENGINEER HQ Jaipur Development Authority ROOM NO 143, FF, Main Building Ram Kishor Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur-302004 EPABX +91 -141-2569696 Ext.- 4101 : Fax +91-141- 2574555 email : sapanmishra.jda@rajasthan.gov.in
ITB 2.2.2	Pre bid Meeting to be held as below: Date 17-08-2022 Time: 12.00 Noon Venue: Manthan Hall Jaipur Development Authority.

	No site visit shall be organized by the procuring entity. However, bidder are advised to visit the sites at their own expenses and if any support is required, shall be provided by the JDA.
ITB 2.2.3	The Bidders are requested, to submit questions in writing, to reach the Procuring Entity.
ITB 2.3.1	Any addendum issued shall be part of the Bidding Document and shall be uploaded on the State Public Procurement Portals http://sppp.rajasthan.gov.in/ and http://eproc.rajasthan.gov.in or www.jda.urban.rajasthan.gov.in
ITB 2.3.2	To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring Entity may, at its discretion, extend the deadline for the submission of the Bids, pursuant to ITB Sub-Clause 4.2 [Deadline for Submission of Bids], under due intimation to the Bidders by uploading it on the State Public Procurement Portal and its e-procurement portal.

C. Preparation of Bids

ITB 3.2.1	The language of the bid shall be English
ITB 3.3.1	The online Bid shall comprise of two parts submitted simultaneously, one containing the Technical Bid/ Proposal and the other the Financial or Price Bid/ Proposal.
ITB 3.3.2	The Bidder shall submit the forms, declarations and documents, as specified in Section IV of Bid Document, with the Technical Bid:
ITB 3.3.3	The Bidder shall submit the following additional documents with its Technical Bid: - Technical Bid/Proposal Submission Sheet and Technical Bid containing the filled-up Bidding Forms and Declarations related to Technical Bid, possession of required qualifications and Code of Integrity given in Section IV [Bidding Forms]; - Proof of payment of price of Bidding Document, processing fee and Bid Security in accordance with ITB Clause 3.10; - Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB Clause 3.11; - Documentary evidence in accordance with ITB Clause 3.7 establishing the Bidder's eligibility to bid; - Documentary evidence in accordance with ITB Clause 3.8 establishing the Bidder's qualifications to perform the contract if its Bid is accepted; - The Notice Inviting Bids; - The PAN No. (Permanent Account Number) of Income tax with the Xerox copy of the PAN card. - Alternative bids shall not be permitted. - Alternative times for completion shall not be permitted. (However, this does not prohibit the successful bidder from completing the work as per specifications before schedule) - Any other document required in the BDS; and - Others considered necessary to strengthen the Bid submitted.
ITB 3.5.1	Add following: The form of contract for the work "Outer Development works in Gandhi

	Darshan Museum at Central Park, Jaipur” will be a Lump Sum contract on EPC basis.				
ITB 3.5.2	The Prices quoted by the Bidder shall be fixed.				
ITB 3.5.3	All variations in taxes and duties shall be borne as per relevant clause of the Section VI B: SCC				
ITB 3.9.1	The Bid validity period shall be 120 (One Twenty days) days from deadline for submission of bids.				
ITB 3.10.2	➤ EMD shall be @2% of estimated procurement cost i.e. Rs. 11.32 Lakhs for the bidder registered in appropriate equivalent class in Other Department or 0.5% of estimated procurement cost i.e. Rs. 2.83 Lakhs for the bidder registered as contractor for AA class in JDA. ➤ In case of JV please see table below <table border="1"> <tr> <td>EMD 0.5% shall be applicable for</td><td>1. If both firm in JV are registered in AA class in JDA.</td></tr> <tr> <td>EMD 2.0% shall be applicable for</td><td> In the rest condition in JV, EMD shall be applicable 2.0% of estimated procurement cost i.e a) If one bidder registered in AA class category in JDA and other registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. b) If both bidders are registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. </td></tr> </table> Bid Security deposit can be deposited either online or in the form of Bank Guarantee in favour of Secretary, JDA, Jaipur payable at Jaipur. The bidder will provide details of BGviz No., issue date, expiring date etc on online tendering system of JDA. The original BG will be physically handed over in JDA as detailed below. A copy of this BG is to be attached with the document during uploading.	EMD 0.5% shall be applicable for	1. If both firm in JV are registered in AA class in JDA.	EMD 2.0% shall be applicable for	In the rest condition in JV, EMD shall be applicable 2.0% of estimated procurement cost i.e a) If one bidder registered in AA class category in JDA and other registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. b) If both bidders are registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act.
EMD 0.5% shall be applicable for	1. If both firm in JV are registered in AA class in JDA.				
EMD 2.0% shall be applicable for	In the rest condition in JV, EMD shall be applicable 2.0% of estimated procurement cost i.e a) If one bidder registered in AA class category in JDA and other registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. b) If both bidders are registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act.				
ITB 3.10.3	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: Power of Attorney.				

D. Submission and Opening of Bids

ITB 4.1.1	For bid submission purposes only, the Procuring Entity’s address is: OFFICE OF THE EXECUTIVE ENGINEER(HQ) Jaipur Development Authority, Room No 143, FF, Main Building, Ram Kishor Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur-302004 Bidders shall submit their Bids electronically only. The Bidders shall submit the Bid online with all pages numbered serially and by giving an index of submissions. Each page of the submission shall be initialled by the Authorised Representative of the Bidder as per the terms of the tender. The Bidder shall be responsible for documents accuracy and correctness as per the version uploaded by the Procuring Entity and shall ensure that there are no changes caused in the content of the downloaded document. The bidder shall follow the following instructions for online submission: • Bidder who wants to participate in bidding will have to procure digital certificate as per IT Act to sign their electronic bids. Offers which are not digitally signed will not be accepted. Bidder shall submit their offer in electronic format on above mentioned website after digitally signing the same.
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	- Cost of bid document is Rs. 1,000/- should be deposited by online, whereas the Processing fee Rs. 1,000/- should be deposited online to MD, RISL, Jaipur payable at Jaipur. Scanned copy of proof of payments shall be submitted with the technical bid. - The Procuring Entity will not be responsible for any mistake occurred at the time of uploading of bid or thereafter. - If holiday is declared on submission & opening date of tender the scheduled activity will take place on next working day.
ITB 4.1.2	Bids are required to be submitted in Electronic Format, it shall be submitted on the e-procurement portal: http://eproc.rajasthan.gov.in
ITB 4.2.1	The Deadline for electronic Bid submission is Date: Time: 06:00 PM
ITB 4.4.1,4.4.5	The online Bid opening shall take place at: OFFICE OF THE SUPERINTENDING ENGINEER-I Jaipur Development Authority, Room No JB-SF-208, Court Building, Ram Kishor Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur-302004 The tendering process shall be conducted online only; DD/BG of Bid Security shall be submitted physically up to deadline described in tender document.
ITB 4.4.13,4.4.15	The Procuring Entity will open the Financial proposal as per e-tendering procedure.

E. Award of Contract

ITB 6.3.1	The period within which the Performance Security is to be submitted by the successful Bidder and the Contract Agreement is to be signed by him from the date of issue of Letter of Acceptance is 14 Days.
ITB 6.3.3	The procuring entity shall promptly return the bid security after the earliest of the following events, namely: 1. The expiry of validity of bid security 2. The execution of agreement for procurement/O&M and Security deposit is furnished by the successful bidder on part of execution/O&M 3. The cancellation of the procurement process; or 4. The withdrawal of bid prior to the deadline for presenting bids, unless the bidding documents stipulate that no such withdrawal is permitted.
ITB 6.4.1	Security Deposit shall be solicited from the successful Bidder in accordance to 6.4 of ITB.
ITB 6.4.3	(i) Security Deposit amounting to total 3% of contract value (Ref Clause 6.4.2 of ITB) shall be submitted in advance at the time of signing of agreement as per latest rules under RTPP act. Bank Guarantee encashable at Jaipur submitted against the performance guarantee, shall be unconditional and en-cashable/invokable at Town for which tenders are invited or submitted at Jaipur. (ii) The successful Bidder at the time of signing of the Contract agreement, may submit option for deduction of Security Deposit from each running and final bill @ 3% of the amount of the bill.
7.1	First Appellate Authority shall be: Executive Committee JDA, Jaipur Second Appellate Authority shall be: A.C.S./P.S. UDH Jaipur

JAIPUR DEVELOPMENT AUTHORITY,
JAIPUR

**Name of Project: - Outer Development works in
Gandhi Darshan Museum at Central Park, Jaipur**

Section – III Evaluation and Qualification

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

SCHEDULE AND SPECIFICATIONS

SCHEDULE – A: INFORMATION USEFUL FOR THE CONTRACTORS:

The bidder should see the site and fully understand the conditions of the site before tendering and include all leads, lift etc. The work shall be carried out in accordance with the MORTH/relevant I.S.code specification and relevant Manual and drawings given by consultant and to the entire satisfaction of the Engineer–In–Charge of the work.

Qualified personnel as required under the contractor enlistment rules duly approved by the Deptt. shall have to be engaged at site by the Contractor. The deptt. Reserves the right to engage such staff and recover the expenses from the contractor on such account in case of his failure to do so.

SCHEDULE – B: LIST OF THE DRAWING

The JDA has engaged a consultant M/s A. Mridul Architect for consultancy of proposed works. The bidder has to work as per the drawing & designs provided by the JDA's consultant. The bidder may submit any drawings required for ease of construction without violating the basic themes. The same will need approval by JDA before execution.

SCHEDULE - C: TEST OF THE MATERIALS:

The test of the materials and workmanship shall be conducted by the JDA staff as necessary. The bidder should also provide third party test result. The result of such tests should confirm to the standard laid down in the Indian standard MORTH/relevant I.S. code specification and relevant Manual.

SCHEDULE – D: SAMPLES OF THE MATERIALS:

The sample of the materials to be used by the contractor shall be deposited 15days In advance with the Engineer In charge and be got approval by him before use.

SCHEDULE - E: TIME OF COMPLETION:

The work should start within 15 days of issue of work order and complete within 4.5 Months.

Signature of the Contractor

With full Address, Mob No, Landline No & E-mail address

JAIPUR DEVELOPMENT AUTHORITY JAIPUR

Name of work:- Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur

Procedure:

Procedure for qualification would be as follow:

- a. Two-envelope system would be adopted. Envelope-1 being for Technical Bid and Envelope - 2 being for Financial Bid. Each envelope would be sealed separately and super scribed as "Envelope-1 Technical Bid" and "Envelope-2 Financial Bid". Both envelopes would be placed in Third envelope duly sealed, bearing the name of work and the name of the bidding contractor. In this third envelope, of earnest money, GST certificate and copy of registration of contractor in required category should also be kept. (E-Bid procedure at <http://eproc.rajasthan.gov.in>)
- b. The technical bid will be opened only of those bidders whose proper Earnest money, GST certificate and copy of registration of contractor in required category are found to be in order.
- c. The Technical Bid envelope would be opened on the dateat:00AM in the chamber of MB-FF-143, Ram Kishore Vyas Bhavan, Indira Circle, JawaharLal Nehru Marg, Jaipur – 302004 (Rajasthan).
- d. The Financial Bid envelope would be opened only of those bidders who fulfill all the technical bid criteria.

1. Criteria:

- (a) The bidder should have completed/executed at least one similar nature work i.e building work including civil and electrical both in last seven (7) financial years (including current year, if opted by the bidder) of value not less than 50% of the estimated cost of the work (bid cost) i.e 2.83 crores (updated to present price level)

the previous year's value shall be given weight age of 10% per year as follows :-

(a)	2022-2023 (Current Year)	1.00
(b)	2021-2022	1.00
(c)	2020-2021	1.10
(d)	2019-2020	1.21
(e)	2018-2019	1.33
(f)	2017-2018	1.46

(g)	2016-2017	1.60
(h)	2015-2016	1.76

Note:-

- (i) The bidder should enclose supporting documents like photographs, copies of G-Schedule, Work Order, completion/execution certificate etc. in support of the work qualifying as similar nature work.
- (ii) In case the bidder has executed/completed similar nature works as per clause 2(a) along with Civil work/Building work he must submit certificate issued by concerning authority having completed similar nature interior work as per clause 2A as per the qualifying amount and the component of similar nature interior work should not be less than 35% of total project cost.
- (ii) The starting & completion date of the work is to be in between above said financial year. If no then maximum work (70%) is to be completed in above said financial year.
- (iii) If bidder is submitted certificate having different components/nature of work then proper completion certificate of required similar nature building work(***Hotel 3 star and above, Airport Project, Institution Building, Shopping Mall, Office complex, Auditorium, Theatre, Sport Complex etc.***) experience is to be enclosed.
- (iv) Certificate issued by Govt. of India, State Govts., Union Territory, Govt. Undertakings, Autonomous Bodies, Private Hotel Groups 3 stars and above or private entity registered under companies act or relevant act shall only be considered.

2(b) The bidder should have a minimum 5 years of experience in in building work. Both completed and ongoing projects shall be considered provided the bidder furnishes work orders and/ or completion certificates in support and verification of the information.

2(c) The bidder should have achieved an annual financial turnover of at least 60% of the Estimated Cost of the work (bid cost) i.e 3.40 crores in any one of last five years (including current year, if opted by the bidder).

- (i) The bidder should enclose certificate of Turn over from Chartered Accountant for last Five financial years & audited balance sheet of the year which is considered by the bidder in this criteria.
- (ii) If current year or last year has been opted by bidder whose balance sheet is not submitted till the submission of bid then certificate from Chartered Accountant should be enclosed.

2(d) The bidder should submit certificate of Net Worth for the Financial Year 2021-22 (from latest audited balance sheet) and should be positive. (Certificate of Chartered Accountant showing calculation of Net Worth must be enclosed).

Note:-

- (i) The bidder should enclose certificate of Chartered Accountant clearly mentioning that the working capital is as per formula given in tender document and clearly stating the individual components CA must also clearly mention that he has gone through the Revolving line of credit which is issued by scheduled Bank and Bank's commitment is project specific, assured and without any ambiguity and shall be available till final completion of project, otherwise bid shall not be considered For revolving line of credit bank's letter should be attached. The bank issuing revolving line of credit has to be scheduled Bank as per format, otherwise it shall not be considered.
- 2(e) Bid Capacity: Bidders who meet the minimum qualification criteria will be qualified only if available bid capacity is equal to or more than the total Bid value.

The available bid capacity will be calculated as under:

$$\text{Bid Capacity} = (A \times N \times 3 - B)$$

Where

- A = Maximum value (at present price level) of Civil Engineering works executed in any one year during the last five financial years (updated to present price level) taking into account the completed as well as work in progress. However the bidder may opt current year in the five year assessment period.
- N = Number of year prescribed for completion of the work for which bids are invited. In present case value of **N shall be 0.375**
- B = Value at present price level of existing commitments and ongoing works to be executed during "N" period.

Note:-

- (a) Certificate from Chartered Accountant should be enclosed by bidder clearly indicating maximum value of Civil Engineering works in one Financial Year.
- (f) Litigation History: - Bidder should provide accurate information on any litigation or arbitration resulting from contracts completed or under execution by him over the last Ten years. The maximum value (updated at the present price level) of disputed amount claimed in the litigation / arbitration resulting from contracts executed in last Ten years shall be deducted from the calculated Bid Capacity of the bidder. The details shall be furnished in Schedule VI.

Note :-

- (i) The present price level for turnover, cost of completed work & disputed amount of similar nature (*civil works with Electrical works*), the previous year's value shall be given weight age of 10% per year as follows :-

(a)	2022-2023 (Current Year)	1.00
(b)	2021-2022	1.00
(c)	2020-2021	1.10
(d)	2019-2020	1.21
(e)	2018-2019	1.33
(f)	2017-2018	1.46

2(g) The bidder should propose a panel of expert(s) as under:

- i. Project lead with a recognized degree in B Tech from a reputed institute and at least Seven (7) years of total professional experience
- ii. At least one expert each having a Degree/ Diploma from a reputed institute in the fields of:
 - (a) One Civil Engg with experience of minimum 05 years;
 - (b) One Electrical Engineer with experience of minimum 05 years.
 - (c) One Quality control Engg. With relevant qualification and with experience of minimum 05 years.

The bidder should enclose duly attested CVs of the above experts.

3. Documentation :

The bidder should furnish the following documents along with the technical bid:

- (a) Information regarding financial resources and capability in Schedule –I.
- (b) Information regarding civil engineering works executed in the last seven years in Schedule–II
- (c) Certificates from the concerned Engineer–In–Charge or Project head of PSU or private company in support and verification of the information furnished in Schedule–II .
- (d) Information regarding details of maximum value of civil engineering works executed during the last five years taking into account the completed as well as works in progress in schedule – III.

- (e) Information regarding existing commitments and ongoing works to be completed in schedule – IV.
- (f) Information regarding details of litigation or arbitration contracts to be furnished in schedule – V.
- (g) Calculation of Bid capacity in schedule – VI.
- (h) Information regarding details of key personnel to be furnished in schedule – VII along with duly attested CVs.
- (i) Certificate required for net worth & working capital from chartered accountant in describe format in bid.
- (j) Affidavit of self-declaration as per Annexure I.
- (k) Undertaking for not Blacklisted as per Annexure 2.
- (l) Declaration by bidder under RTTP Act. (Annexure A, B, C, D)

4. Important:

- (A) The bidder must ensure that all the information required in the Documents is furnished by him complete in all respects. He would not be allowed to withdraw any document, or to rectify any information furnished therein, after submitting the bid.
- (B) The bidder should give an affidavit that the information furnished in schedule I, to VII is correct. If any information is found incorrect, the offer of the bidder shall be rejected and action be taken as per rules.
- (C) Bidders must do paging of all enclosure of bid documents.

5. REJECTION OF BIDS:

THE DEPARTMENT RESERVES THE RIGHTS TO REJECT ANY BID OR TO DISQUALIFY ANY OR ALL THE BIDDERS, WITHOUT ASSIGNING ANY REASONS AT ANY STAGE.

- i. If Bid is not accompanied with the requisite documents mentioned in Clauses 3 (a) to 3 (j) or is not in accordance with procedure specified in Para 1, or is not accompanied with earnest money & GST Certificate and registration of contractor, as per bid eligibility criteria, in required category it would be liable for rejection.
- ii. Furnishing of incorrect or incomplete or concealment of any information required in the bid documents would render the bid liable for rejection.

6. IN CASE OF JOINT VENTURE:

In case the bidder comprises a joint venture or consortium, following requirements shall also be complied with:

- a. In case the bidder comprises a joint venture or consortium, following requirements shall also be complied with: The JV will have to be formed before submission of the bid and total number of JV partners shall not exceed 2 (Two). They must designate lead partner duly authorized by all the members who will represent the J.V. Of the two partners one with higher stake will be the lead partner. For Evaluation & qualification criteria of 2(c), it should be in one financial year. For The lead partner shall be nominated as being partner-in-charge and this authorization shall be evidenced by submitting power of attorney signed by the legally authorized signatories of all the partners.
- b. The partner-in- charge (or, the lead partner) shall be authorized to incur liabilities and to receive instructions on the behalf of the partners of the Joint Venture, whether jointly or severally, and entire execution of the contract (including payment) shall be carried out exclusively through the partner- in- charge.
- c. The share of one of the two partners shall not be less than 26% and rest of the share shall be held by other partner (For example if share of one partner is 26% then for other partner it will be 74%.) The JDA will only send communication to the lead partner, which will be deemed to have been sent to all the J.V. partners. Similarly, any negotiation and / or agreement with the lead partner shall be deemed to have been concluded with all the J.V. partners. All the members of J.V. shall be bound by the said communication and all acts/ deeds of the lead member.
- d. Any one of the two partners, alone should fulfill the Technical Criteria Similarly, any one of the two partners, alone should fulfill the Financial Criteria For rest of the eligibility criteria, qualifications of the two partners may be clubbed together.
- e. The individual partner of J.V. alone or with other partners cannot participate in the same bid.
- f. Bid capacity is to be calculated by clubbing turn over and work in hand of all the firms of joint venture.
- g. Attested copy of the MoU / Agreement/ Power of attorney entered into by the joint venture / consortium members duly notarized shall be submitted along with the Technical Bid with intended percentage participation nomination of lead member and division of responsibility to clearly define the work of each member etc.
- h. All the members of the joint venture/ consortium shall be jointly and severally liable for the execution of the Contract.
- i. EMD shall be@ 2% of estimated procurement cost i.e 11.32 lakhs for the bidders registered in appropriate equivalent class in other department/private entity or 0.5% of estimated procurement cost i.e 2.83 lakhs for the bidders registered as contractor for 'AA' class in JDA. It can be deposited in declaration format enclosed at Annexure In the event of default by any member of the joint venture/ consortium in the execution of his part of the contract, the partner-in-charge will have the authority to assign the work to any other party acceptable to the employer to ensure the execution of the part of contract.
- j. It can be easily understand with this table

EMD 0.5% shall be applicable for	If both firm in JV are registered in AA class in JDA.
EMD 2.0% shall be applicable for	In the rest condition in JV, EMD shall be applicable 2.0% of estimated procurement cost i.e • If one bidder registered in AA class category in JDA and other registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act. • If both bidders are registered in other departments/PSUs/private or can be a private entity registered under companies act or as applicable act.

- k. It can be deposited in declaration format enclosed at Annexure In the event of default by any member of the joint venture/ consortium in the execution of his part of the contract, the partner-in-charge will have the authority to assign the work to any other party acceptable to the employer to ensure the execution of the part of contract.
- l. In the event of default by any member of the joint venture/ consortium in the execution of his part of the contract, the partner-in-charge will have the authority to assign the work to any other party acceptable to the employer to ensure the execution of the part of contract.
- m. If initially the bid has purchased and submitted by the any partner or by the JV firm, in case JV bid accepted, the work order will be issued in favour of name of JV and the bidder will submit details of JV bank account to which payment is to be deposited by JDA.
- n. The experience certificate will be issued as per percentage of the shareholders defined in JV agreement of the two partners.

EXECUTIVE ENGINEER (HQ)
JDA, JAIPUR

Bid Evaluation Sheet

Name of Work: - Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur

S. No.	Criteria	Required Qualification	Bidders qualification	Bidders uploaded document Page No. in support of qualification.	Remark
1	2	3	4	5	6
1	Registration Certificate - As per Clause 1e of Special Conditions of Contract.	Bidder should be registered in AA class category in JDA or equivalent in other departments /PSUs/ private or may be a private entity registered under companies act or as applicable act			
2	GST Certificate - As per Special Conditions of document	-			
3	Fee Payment Details (Please enclose copy of electronic receipt)	-			
(i)	Cost of Bid	Rs. 1,000/-			
(ii)	Bid Processing Fee	Rs. 1,000/-			
(iii)	Bid Declaration	➤ All the eligible bidders should submit Bid Security			

		Deposit as @ 2% of estimated procurement cost i.e 11.32 lakhs for the bidders registered in appropriate equivalent class in other department/private entity 0.5% of estimated procurement cost i.e 2.83 lakhs for the bidders registered as contractor for 'AA' class in JDA ➤ Bid Security deposit can be deposited either online or in the form of Bank Guarantee in favour of Secretary, JDA, Jaipur payable at Jaipur. The bidder will provide details of BGviz No., issue date, expiring date etc on online tendering system of JDA. ➤ The original BG will be physically handed over in JDA before the			
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		date of opening of technical bid. A copy of this BG is to be attached with the document during uploading.			
4	2(a) The bidder should have completed/executed at least one similar nature work i.e building work including civil and electrical both in last seven (7) financial years (including current year, if opted by the bidder) of value not less than 50% of the estimated cost of work i.e 2.83 crores (updated to present price level				
A	Value of work executed	-			
B	Financial year	-			
5	2(b) The bidder should have a minimum 5 years of experience in building work. Both completed and ongoing projects shall be considered.				
6	2(c) The bidder should have achieved an annual financial turnover of at least 60% of the Estimated Cost of the work (bid cost) i.e 3.40 crores in any one of last five years (including current year, if opted by the bidder).				
A	Annual Turn over	-			
B	Financial Year	-			

7	2(e) The bidder should submit certificate of Net Worth for the Financial Year 2021-22 (from latest audited balance sheet) and should be positive. (Certificate of Chartered Accountant showing calculation of Net Worth must be enclosed).				
8	2(f) Bid Capacity = $(A \times N \times 3 - B)$ A = Maximum value (at present price level) of civil engineering works. N = Number of years prescribed for completion of the work for which bids are invited. In present case value of N shall be 0.375 B = Value at present price level of existing commitments and ongoing works to be executed during "N" period.	-			
9	2(g) The bidder should propose a panel of expert(s) as under: i. Project lead with a recognized degree in B Tech from a reputed institute and at least Seven (7) years of total professional experience				

	ii. At least one expert each having a Degree/ Diploma from a reputed institute in the fields of: (a) One Civil Engg with experience of minimum 05 years; (b) One Electrical Engineer with experience of minimum 05 years. (c) One Quality control Engg. With relevant qualification and with experience of minimum 05 years. The bidder should enclose duly attested CVs of the above experts.				
10	Litigation History Schedule-VI				
11	Affidavit for Correctness of documents (Annexure 1)	-			
12	Declaration by bidder under RTTP Act. (Annexure A, B, C, D)	-			
13	Undertaking for not Blacklisted (Annexure 2)				
14	Duly filled Schedules as enclosed				

Signature of Bidder with Seal

Schedule – I
FINANCIAL RESOURCES AND CAPABILITY
[Reference clause 3 (a)]

1. Name of Bidder: - M/s.....

2. Total financial turnover achieved by the bidder in the last Five financial years:

S.N.	Year	Turnover
(a)	2022-2023(Current Year)	
(b)	2021-2022	
(c)	2020-2021	
(d)	2019-2020	
(e)	2008-2019	
(f)	2017-2018	

Note: Balance Sheets and Profit & Loss Accounts is to be enclosed by the bidder which is considered by him as per criteria 2 (a).

3. Total financial Turnover projected in the current financial year
4. Has the bidder ever been debarred from bidding for Central Government / State Government / any Government undertaking?
Yes / No, if yes give details.
5. Has bidder ever been declared insolvent?
Yes/No, if yes give details.
6. Name(s) and Address of Branch/(s) for bidder's Bankers.

I/We hereby certify that the above information is correct to the best of my/our knowledge and belief.

Date : **Signature of Bidder**
(With Seal wherever applicable)

SCHEDULE II

Reference Clause 3 (b)

DETAILS OF INTERIOR WORKS EXECUTED IN DURING THE LAST FIVE FINANCIAL YEARS TAKING INTO ACCOUNT THE COMPLETED AS WELL AS WORKS IN PROGRESS

Sr. No.	Name of the work	Name of the client	Location of work	Nature of work	Cost of work as per the work order (inclusive of taxes)	Stipulated date of completion	Actual Cost of work (if completed)	Actual date of completion	Status of work

Note: Certificate of completion (duly signed and stamped by a competent authority) for each of the completed works, and work orders (duly signed and stamped by a competent authority) for each of the ongoing works to be submitted by the bidder.

Date:

**Signature of Bidder
(With seal wherever applicable)**

SCHEDULE – III

Reference Clause 3 (d)

DETAILS OF MAXIMUM VALUE OF CIVIL ENGINEERING WORKS EXECUTED IN ANY ONE YEAR DURING THE LAST FIVE FINANCIAL YEARS TAKING INTO ACCOUNT THE COMPLETED AS WELL AS WORKS IN PROGRESS

S. N.	Name of Works (with agreement No. & Date)	Client	Place (district / state)	Financial Year	Cost of Work as per Work Order	Stipulated date of commencement	Stipulated date of completion	Value of work done during the year	Page No.

Date:

Signature of Bidder
(With seal)

SCHEDULE - IV

[Reference Clause 3(e)]

DETAILS OF EXISTING COMMITMENTS & ON GOING WORKS TO BE COMPLETED

S. No	Name of Works (with agreement No. & Date)	Client	Cost of Work as per Work Order	Stipulated date of commencement	Stipulated date of completion	Value of balance work on date of bid	Likely date of completion of balance work	Page No.

Date:

Signature of Bidder
(With seal)

SCHEDULE - V

**[Reference Clause 3(f)]
DETAILS OF LITIGATION OR ARBITRATION CONTRACTS**

S. No.	Name of Works (with agreement No. & Date)	Client	Work Order Amount	Disputed Amount Claimed in Litigation / Arbitration	Date of Raising Disputed Amount	Actual Award Amount, if the case is Decided	Cause of Litigation & matter in Dispute

Date:

Signature of Bidder
(With seal)

SCHEDULE – VI
[Reference clause 3(g)]

BID CAPACITY

Name of Bidder : -----

1	A = Maximum value of Civil engineering works executed in any one year during the last five financial years (updated to present price level)	Lacs.	Certified details enclosed at Page No.
2	N = Number of years prescribed for completion of the work for which bids area invited	0.375	
3	B = Value at present price level of existing commitments and ongoing works to be completed during next N period	Lacs.	Certified details enclosed at Page No.

BID CAPACITY = A X N X 3-B
 = Lacs.

Signature of Bidder

SCHEDULE VII

DETAILS OF KEY PERSONNEL

Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur

Name of Bidder.....

S.No.	Requirement of Technical Staff		Experience/Qualification	
	Designation	Strength	Minimum Experience (Years)	Qualification
1.	Project Manager	1 No.	7 yr (having experience of one similar nature of work)	B Tech or Equivalent
3.	Project / site Engineer (civil)	1 No.	5 Yr.	Civil Graduate Engineer or Diploma Engineer
4	Project / site Engineer (electrical)	1 No.	5 Yr.	Electrical Graduate Engineer or Diploma Engineer
5.	Quality Control Engineer	1 No.	5 Yr.	Civil Graduate Engineer or Diploma Engineer

Self-attested/ notary attested Affidavit on Non-Judicial Stamp Paper of Rs.100/-be given in support of the above information.

Signature of Bidder

ANNEXURE- I

(Reference Clause 3 (i))

To be given on Non-Judicial stamp Paper of Rs. 50/- only, duly Self Attested/Notary attested

SELF DECLARATION

Signed
Photograph
of Applicant

I/We..... Proprietor/ Partner/ Authorized signatory of M/s under take the oath that the information furnished by me/us in schedule I to VI of the Technical Bid for: **“Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur”** is correct to the best of my/our knowledge. If any information is found to be incorrect JDA has right to reject the Bid and to take action against me/us as per rules.

Date:

Proprietor/ Partner/ Authorized signatory

M/s

(With seal)

Note:- The applicant has to enclosed a self-attested photo identity card with above affidavit.

UNDERTAKING FOR NOT BLACKLISTED

(On a Non Judicial Stamp of Rs 50/- Self Attested/Notary attested)

I/We.....S/O Shri.....Age.....Year..... Resident
of.....
District.....State.....Proprietor/ Partner/ Authorized signatory of M/s
..... hereby declare and undertake as under.

1. I/We declare that _____ in capacity as _____ of _____ has not been charged with any prohibitory and /or penal action such as banning(for specific time or permanent)/de-registration or any other action under the law by any Government and/or Semi Government and/or Government undertaking.
2. I/We declare that I/We have perused and examined the tender document including addendum, condition of contract, specifications, drawings, bill of quantity etc. forming part of tender and accordingly, I/We submit my/our offer to execute the work as per tender documents at the rates quoted by me in capacity as _____ of _____
3. I/We declare that my/our firm have not been Black listed/debarred by any institution of Govt./Semi Govt. /Municipalities etc. for failure to pay any dues or for unsatisfactory performance.
4. I/We declare that my/our Firm has not been adjudged by any Court as insolvent, not Convicted under any law for any offence involving moral turpitude or any criminal activity.
5. I/We declare that the information provided by me/us is true and if any given time it is observed that any of the statement made above is in violation of said declaration, I/We are fully aware that contract will be terminated with immediate effect and Security Deposit/EMD shall be forfeited my/our firm shall be Black Listed or debarred from future tender of Jaipur Development Authority.
6. I/We declare that the information furnished by me/us in Technical Bid for “Construction of other than structure part viz masonry, finishing work, electrical, mechanical engineering building, interior work, landscaping and outer development works at Mahatma Gandhi Museum at Central Park, Jaipur.” is correct to the best of my/our knowledge and belief and nothing has been concealed therein.
7. I/We are well aware of the fact that if the information given by me is proved false/not true, I/We shall have to face the punishment as per the law. Also all the benefits availed by me shall be summarily withdrawn and JDA has right to reject the Bid and to take action against me/us as per rules.

Enclose I.D. Proof with self-declaration/undertaking.

.....
Proprietor/ Partner/ Authorized signatory
M/s

Stamp and Signature of Authorized Signatory

Note:

1. The undertaking shall be signed by authorized signatory of the bidder.

GENERAL INFORMATION OF TENDERER

ANNEXURE 3

A. BIDDER INFORMATION SHEET		
BIDDER's Legal Name	Sole Proprietorship Firm/Partnership Firm /Private Limited Company/Public Limited Company/ Joint Venture/Consortium	
In case of single entity, ownership & control of the Tenderer		
In case of JV/Consortium, Legal name of each partner with percentage participation (also Provide information of each member in separate sheet (page 2 of 2))	Legal Name of JV/Consortium member	% participation
Lead member of JV/Consortium,		
Bidder's actual or intended country of constitution		
Bidder's legal address, telephone numbers, fax numbers, e-mail address.		
Bidder's authorized representative or person-in- charge in case of JV/Consortium, (name, designation address)		

SIGNATURE OF

AUTHORIZED SIGNATORY

ON BEHALF OF BIDDER

ANNEXURE 3

B. JV/CONSORTIUM MEMBER INFORMATION	
JV/Consortium Member of Legal Name	
Legal status of the JV/Consortium Member	Sole Proprietorship Firm/Partnership Firm /Private Limited Company/Public Limited Company
Ownership & control of the JV/Consortium Member	
JV/Consortium Member country of constitution	
JV/Consortium Member of legal address, telephone numbers, fax numbers, e-mail address)	
JV/Consortium Member's authorized representative (name, designation address)	

ATTACH ATTESTED COPIES OF FOLLOWING ORIGINAL DOCUMENTS

- Document in support of legal status and ownership & control of the bidder or each member in case of JV/Consortium (undertaking for sole proprietorship/ partnership deed/ Memorandum & Articles of Association)
- In case JV/Consortium, submit MoU/Agreement (duly notarized) entered into by the joint venture/consortium members, containing intended percentage participation, nomination of Lead Member and division of responsibility to clearly define the work of each member etc.
- Authorization/POA in favour of authorized representative of tenderer to represent the bidder and also in favour of authorized representative of each member in case of JV/Consortium

SIGNATURE OF AUTHORIZED
SIGNATORY

ON BEHALF OF BIDDER

SECTION-IV

PROCURING ENTITY'S REQUIREMENTS

5.1 General

Name of Project – **Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur**

Project Background

- The project site is located approx 3.00 km from Jaipur Railway Station and approx. 8.00 km from Jaipur Airport at Central Park, Jaipur.
- The work is to be executed on Engineering, Procurement and Construction (EPC) Mode basis. In EPC Mode, the procurements and construction including exterior development and furnishing shall be done by EPC contractor as per the drawings provided by the consultant appointed for this work by the department. Necessary approvals will be given by department.
- The total plot area is about 14564.00 sqm on which museum is to be operated. The building is being constructed and the outer area is approx. 7529.00 sqm on which the proposed work is taken for its development. Contractor shall be required to do all exterior civil work including masonry, flooring, paint, water body, amphitheatre, internal road and parking development, drainage works, furniture, external lighting, transformer, DG and HT work, miscellaneous and safety work, IP based surveillance system, solar photovoltaic power plant, automatic fire alarm system work etc. outside museum building to make it functional in all respects. The work is to be executed as per drawings provided by the consultant.
- The structural work of the building excluding is in progress and to be completed soon. The bidder should complete all missing civil works in outer premise of the building in order to make the building fully functional in all respect.
- JDA has engaged a consultant M/s A. Mridul Architect for consultancy for proposed interior works. The bidder has to work as per the drawing & designs provided by the JDA's consultant. The bidder may submit any drawings required for ease of construction without violating the basic themes. The same will need approval by JDA as per advise of consultant before execution.
- The work of Gandhi Darshan Museum is to be executed in phases for which the bidder has to work in coordination with agencies executing the works of other phases for its time bound completion.

5.2 The execution of project has been divided into several phases as:

1. Structural work of the museum building
2. Interior and finishing works of the building including electrical works
3. Digital and newage technique related works
4. External development works including electrical works (proposed one)
5. Construction of sloping roof on the top floor of various area of building

The bidder has to work in coordination with the agencies executing the other phases for the effective and timely completion of the project.

5.3 Scope of work

- i) The bidder should complete all missing civil works on the outer side of the museum building in order to make the building fully functional in all respect.
- ii) The bidder should complete the outer development works with Design & Execution of Electric Installation work as per the attached drawings, design & conceptual drawing (conceptual drawing may also be seen by the bidder in Executive Engineer (HQ) Office at JDA.
- iii) Major Interiorworks :-
 - 1. Civil Works like :
 - a) Masonry walls [exposed sandstone (Teja stone from Natata, Saiwal, Jaipur/Siwar Pink sand stone),
 - b) Flooring (Garda Stone from Buddhpura (Flamed/ leatheredfinish), Mandana stone, cobble stones etc.)
 - c) Cement Plaster, pointing on stone walls
 - d) Entrance gate as per approved design
 - e) Turnstile gates at visitor's entrance
 - f) Doors
 - g) Railing work in all respect
 - h) Plaster of Paris work
 - i) Painting work
 - j) Tensile structure to cover O.T.S area at rear side of building
 - k) Waterproofing of courts and water body
 - l) Boundary walls with grills/Bamboo Jali/grill or gratings at approach road
 - m) Anti termite Treatment, Plinth protection at courtyards, Filling of good earth (cinder fill)
 - n) Drainage system
 - o) Underground water tank
 - p) Connection of sewer line upto near by S.T.P
 - q) Road furniture items
 - r) Miscellaneous civil works as per requirement
 - 2. Complete design & implementation of Electric & Mechanical works like :
 - a) External Lighting
 - b) Transformer, DG and HT work
 - c) Miscellaneous and safety work
 - d) IP based surveillance system
 - e) Solar Photovoltaic power plant
 - f) Automatic Fire Alarm System work
 - g) Rain water harvesting pit work
 - h) Miscellaneous works i.e JVVNL supervision and connection etc and others if any
- iv) Site office & Laboratory – Well-furnished site office space with computers / printers shall be provided also shall establish the testing laboratory with desired number of testing equipment's for carrying out various test on site as per relevant codes.
- v) Safety measures – shall adhere all safety measures and safety codes to achieve zero fatal injury. If contractor fail to adhere safety norms, Engineer-in-charge shall impose a penalty of maximum 10% amount of contract value which shall never be refunded in any case.

- vi) The contractor shall submit original equipment manufacturer's certificate for all major items with five years warranty.
- vii) All Civil works (masonry, wall plaster, putty, POP, paint etc) shall be done by bidder as per site requirement. No additional payment shall be made for the same.
- viii) After completion of works all supply lines and drainage system etc should be in working condition. All liabilities regarding the same shall be bear by bidder at no cost.
- ix) All the equipment should have factory inspection by JDA's engineer in charge as per prevailing IS code, prior to dispatch the material. All the expenses occurred during the inspection will be borne by the contractor.
- x) The successful bidder shall submit the report to Executive Engineer (HQ), JDA every fortnightly regarding progress of work.
- xi) Drawing out of water accumulation from any working area of site will be in bidder's scope of work.
- xii) In case of failure of successful bidder to perform his obligation as specified in the scope of work, JDA shall be free to carry out the work and shall recover two times of actual expenditure occurred on the work from his performance security/security deposit.
- xiii) Bidder should complete all required missing external civil/electrical work to complete the building in all respect.
- xiv) The work is to be executed as per the Architectural requirement, 3D view of the building is attached for reference. All external works are in the bidders scope. No additional payment shall be made for the same.

Special Conditions for Electrical Work :

1. Bidder should have Local OEM center should in working since five year
2. All electrical works is under five year warrantee period.
3. Tri party agreement should be executed by bidder for warrantee period of electrical items
4. It is liability of contractor to maintain all electrical equipment for five year after completion of the work.
5. All electrical material should be atleast of group first item of JDA BSR 2016 /PWD BSR 2016.
6. Electrical work is SITC work i.e. supply, installation, testing and commissioning as per specifications and latest ISI standards.
7. The make of all electrical items will be decided by Engineer-In-Charge.
8. During the execution of the work, if any drawing/specifications required same will be provided by the appointed consultant/OIC of work.

Contractor Obligation

- A. While undertaking development of the Project, the Successful Bidder shall adhere to the latest amended National Building Code of India, other relevant IS Codes and practices, Development Control Rules, FSI Limits, statutory requirements, laws of land, the principles of good industry practices and any other norms as applicable from time to time.
- B. The concrete grade as well as flooring will be as per the relevant Bureau of Indian Standard and IRC standards. All the drawings will be submitted to the Authority and after their approval only the construction activity will start.
- C. On completion of the work, the place will be handed over to JDA. However, the contractor will be responsible for maintaining the asset for 5 years of Defect Liability Period, during which period, the contractor will be liable to rectify/amend any defect, including those for civil works, mechanical/electrical and instrumentation works,

sensors and will change all the equipment or parts there of promptly and without any additional cost.

- D. Water and Electricity charges from start date to final handing-over of site are in bidder's scope.
- E. The Agency is required to complete the project on EPC basis with in controlled civil norms as mentioned in the Scope of Work, Technical Specifications & Architectural Drawings including development of entire site area up to & including the boundary wall. The scope of work is to be carried out complete in all respect including furnishing and services. Rates quoted by the Agency shall be considered for entire scope of work which includes all activities/ work starting from the given concept to completion till handing over of completed project in functional state from all perspective. The quoted amount is inclusive of defect liabilities period of 5 years for civil works and services which includes electrical installations, plumbing, fire fighting, lifts & its furnishing, etc. after acceptance of project as complete and functional, by the competent authority any damage in services would be borne by the Agency till the defect liability. It shall be deemed that the Agency has satisfied himself with the nature and location of the work, general and local conditions and particularly tho sepertaining to transport including restriction of movement of traffic / vehicle se tc., handling, availability and storage of materials, availability of labour, weather conditions at site and general ground/ sub soil conditions. Agency is expected to quote their rates accordingly and nothing extra shall be payable for any reason/ swhat so ever it may be.
- F. JDA shall bear no responsibility for the lack of such knowledge and also the consequences there of to the Agency. The information and site data shown in the drawings and mentioned in the tender documents are furnished for general information and guidance only. The JDA in no case shall be held responsible for the accuracy there of or/ and deductions, interpretations or conclusions drawn there from by the Agency and no claim shall be entertained whatsoever on this account; if the site conditions/ information is different or otherwise incorrect. It will be presumed that the Agency has satisfied himself for all possible contingencies, situations, bottle necks and acts of coordination which may be required between the different agencies.

Neither any hindrance shall be entertained because of the se constraints if so occurs at any stage.

The Agency is required to appoint execution team on site for pre and post construction works.

Requirement of Technical Representative(s) and Recovery Rates:

S.No.	Requirement of Technical Staff		Experience/Qualification		Rate of recovery per person if not appointed
	Designation	Strength	Minimum Experience (Years)	Qualification	
1.	Project Manager	1 No.	7 yr (having experience of one similar nature of work)	B Tech or Equivalent	Rs. 100000/- per month
2.	Project / site Engineer	1 No.	5 Yr.	Civil Graduate Engineer or Diploma Engineer	Rs. 50000/- per month per person
3.	Electrical engineer	1 No.	5 Yr.	Electrical Graduate Engineer or Diploma Engineer	Rs. 50000/- per month per person
4.	Quality Control Engineer	1 No.	5 Yr.	Civil Graduate Engineer or Diploma Engineer	Rs. 50000/- per month

Note:

1. The above given strength shall be required to be deployed as and when necessity arises at site or so directed by JDA.

Other Conditions:

1. Contractor have to establish material testing labs and keep construction equipment as per requirement of the work and direction of Engineer-in charge.
2. The Agency shall hand over the assets after completion of work with as built drawings, services route plans, Maintenance manuals, Warrantees/ Guarantees or any other document required by the JDA for maintaining these establishments.
3. Electrical & Mechanical Works: Details of E & M works are given in of the tender document.
4. Samples of the materials of approved make or otherwise shall be got approved from the JDA before use in the work.
5. Shifting /Removal of Services and Statutory Approvals: Contractor shall take all necessary measures required to be taken to remove any live or dead service lines running through the

plot area, cutting/shifting of trees etc, without any extra cost. After completion of the work and commissioning of building(s) along with services, he shall get completion certificate from local body, NOC from fire department and any other statutory approval related to building for handing over the assets. JDA and client i.e. JDA shall extend necessary support, as per statutory requirements, to the contractor for these approvals.

6. Contractor shall submit item wise detailed measurements, for record and other purposes. After completion of the work contractor shall submit as built drawings of all civil, electrical and mechanical services in Auto CAD including five sets of coloured drawings on A0/A1 size.

SECTION-IV

PROCURING ENTITY'S REQUIREMENTS

CIVIL WORKS

Additional conditions of civil works

The work in general shall be carried out in accordance with the specifications mentioned with this tender document.

Specifications and Conditions, Additional Conditions mentioned in this document.

JDA Specifications for civil and electrical as applicable.

Indian Standard Specifications of BIS including modifications / amendments Relevant Sections of National Building Code 2016 with up-to-date amendments Sound engineering practice as per directions of the JDA.

Agency(s) shall provide permanent benchmarks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of the work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.

The Agency (s) should engage approved, licensed plumbers for the work and get the materials (fixtures/fittings) tested, by the municipal body/corporation authorities wherever required at his own cost. The Agency(s) shall submit for the approval of the JDA, the name of the plumbing Agency proposed to be engaged by him.

The agency shall give performance test of the entire installation(s) as per the specifications in the presence of the JDA or his authorized representative before the work is finally accepted and nothing extra what-so-ever shall be payable to the agency for the test.

The work shall be carried out in accordance with the Architectural drawings and structural drawings, interior and finishing drawings provided by consultant and approved by the JDA.

Before commencement of any item of work the agency shall correlate all the relevant drawings, and specifications etc. and satisfy himself that the information available is complete and unambiguous. The agency alone shall be responsible for any loss or damage occurring by the commencement of work based on any erroneous and or in complete information and no claim what so ever shall be entertained on this account.

The agency shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other agency(s) or by the JDA and shall as far as possible arrange his work and shall place and dispose of the materials being used or removed, so as not to interfere with the operations of other agencies simultaneously working or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.

If the work is carried out in more than one shift or during night, no claim on this account shall be entertained. The agency must take permission from the police authorities etc. if required for work during night hours, no claim/hindrance on this account shall be considered if work is not allowed during night time.

The agency shall be responsible for the watch and ward/guard of the buildings safety, fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.

Sample of building materials, fittings and other articles required for execution of work shall be got approved from the JDA before use in the work. The quality of samples brought by the agency shall be judged by standards laid down in the relevant JDA/BIS specifications. All materials and articles brought by the agency to the site for use shall conform to the samples approved by the

JDA which shall be preserved till the completion of the work.

BIS marked materials except otherwise specified shall be subjected to quality test at the discretion of the JDA besides testing of other materials as per the specifications described for the item/material. Wherever BIS marked materials are brought to the site of work, the agency shall, if required, by the JDA, furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material/procured by the agency for incorporation in the work satisfies the provisions of specifications / BIS codes relevant to the material and / or the work done.

The agency shall procure the required materials in advance so that there is sufficient time to testing of the materials and clearance of the same before use in the work. The agency shall provide at his own cost suitable weighing and measuring arrangements at site for checking the weight / dimensions as may be necessary for execution of work.

Regarding testing of civil & electrical materials, the testing of materials shall be conducted in Govt. Laboratory / Govt. colleges / IITs / NITs or from the laboratory approved by JDA. The charges of testing of materials in approved laboratory shall be borne by the agency.

Agency shall submit minimum—Quality Assurance plan within 45 days after award of work which shall be consisting of:

Lot size, number of required tests and frequency of testing. While deciding these criteria JDA Specifications & Provisions of BIS Code and Standard Practices may be referred. Volume of work, Practical Difficulties and Site Conditions etc. may also be kept in view. The lot size, number of tests and frequencies of testing can be altered or modified by the JDA from the prescribed limits.

It should clearly indicate the Machinery and other Tool & Plants required to be deployed at site by the agency. Entire Machinery and T&P may not be required at the start of work, therefore, a proper time schedule by which each Machinery & T&P to be brought at site should also be indicated.

Receipt of Material, testing of the same & Maintenance of Register of Tests.

All the registers of tests carried out at Construction Site or in outside laboratories shall be maintained by the agency. Which may be inspected by JDA or his/her designee at any point of time.

The Agency shall allow access to Third Party Quality Assurance Agency (TPQAA) engaged by JDA to have a control on quality and methodology of execution. At least 25% of Samples of materials including Cement Concrete Cubes shall be taken jointly by Agency and TPQAA / JDA / quality control wing of JDA or his authorized representative. All arrangements for transporting and getting them tested shall be made by the Agency.

All the test in field lab setup at Construction Site shall be carried out by the Quality control team to be engaged by the Agency which can be witnessed by JDA or his/her designee. A daily report of Tests to be conducted on a day shall be submitted to JDA or his/her designee.

All the entries in the registers will be made by the designated Engineering Staff of the Agency.

Agency shall be responsible for safe custody of all the test registers.

Submission of copy of all test registers, Material at Site Register and hindrance register along with each alternate Running Account Bill and Final Bill shall be mandatory.

All material received at site shall be entered in MAS Register and copy of Supply order, MTC & Bill-invoice shall be maintained in order. The MAS Registers including Cement and Steel Registers shall be maintained by a qualified staff of Agency which may be inspected by JDA or his/her designee at any time. The daily report of receipt of material shall be sent to JDA or his/her designee.

The agency shall submit a 'Methods statement' for each important activity for the approval of the JDA soon after the award of work to him. The 'Methods statement' is a statement by which the construction procedures for any activity of construction are formulated and stated in chronological order. The 'Methods statement', should have a description of the item with elaborate procedures in steps to implement the same, the specifications of the materials involved, their testing and acceptance criteria, equipment to be used, Precautions to be taken, steps of measurement etc.

As and when any important item is taken up for execution, the Agency shall submit the specifications and develop a check list and Pour card. This sample check list should be got approved from the JDA and should be used at site. This check list should be shown to the JDA or his/her designee during inspection. This procedure is to be followed for all hidden items, CC/RCC work, Steel-reinforcement, shuttering, cast-in-situ mosaic flooring, doors & windows, plumbing, including water supply pipelines, roof treatment, earth filling etc.

The agency shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. nothing extra shall be payable to the agency on this account.

5.1 DETAILED TECHNICAL SPECIFICATIONS FOR REFERENCE PURPOSE :

(EXTERIOR WORKS CIVIL)	
S.N.	ITEM
	MASONRY WORKS
	External Masonry
1	Providing and fixing Exposed Random Rubble stone masonry (Teja Stone from Natata, Saiwal, Jaipur/ Siwar Pink sandstone) for superstructure above plinth level one storey height above 30 Cm. thick wall in CM:1: 3 As per Detail and drawing to be provided by JDA.
	375mm thk. Amphitheatre, Ghat, External Ramps & Steps
	FLOORING WORKS
2	Providing and fixing First quality with uniform texture Stone On floor 15-18 mm thick over 30mm (Av.) thick base of CM 1:4 (1 cement : 4 coarse sand) jointing with white cement mortar 1:2 (1 white cement : 2 marble dust) & In Skirting shall be fixed to the wall surface using 1:3 cement sand mortar with a top layer of white cement and to wood ply surfaces using wood to stone adhesive with pigment to match the shade of the granite slab including grinding, rubbing and polishing and moulding as per design and drawing complete.
	Flamed/Leathered Finish Garda stone from Buddhpura, Kota-Chittor Road Steps of Amphitheatre., Ghat & outer Areas
3	Providing and fixing Ist quality MAT finished ceramic tile size 300x300mm confirming to IS : 13753 coloured tile except white, grey, ivory, fume red brown in walls, floors, steps, pillars etc. laid on a bed of neat cement slurry /chemicla including nicely finished joints using water proof joint filler power (Untile or Roffe make) and finishing with flush pointing in white cement mixed with pigment to match the shade of tile complete
	Tiles in Water body with chemical

4	Providing and laying factory made coloured chamfered edge Cement Concrete paver blocks of required strength, thickness and size/shape, made by table vibratory method using PU mould, laid in required colour and pattern over 50mm thick compacted bed of stone dust, compacting and proper embedding/laying of inter locking paver blocks into the bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand including locking edges with M 15 cement concrete in footpath, light traffic parking etc. complete as per direction of Engineer-in-Charge. laying of paver including all excavation, filling, PCC (1:4:8), sand below paver and paver (80mm) laying. Mandana stone 30 mm thick
5	Supply and fixing Cobble stone 200-230 mm thick for stone road pavement, all the sides machine cut in rectangular shape in size not less than 30cm x 45cm to be used as stone paving with under layer 1:4 cement mortar & fixed in pattern as approved by Engineer with keeping standard joints 10mm to 15mm as specified same will be filled with mix of mosaic material in grey cement & finished joint at 3mm below the top of stone road pavement with standard & special tool for joint including cleaning & curing of surface complete in all respect as per direction of Engineer Incharge. Stone Cobbles 100x100x100mm On road surrendered for Mosque
	DOORS
6	Providing and fixing of Pre-used wooden (ship-wood) Single or double rebate Frames and External grade board solid core single or double leaf flush door shutters ISI 2202-67 marked, 40 mm thick shutter with Decorative Teak veneer both side with melamine polish, using Phenol formaldehyde resin, in glue both sides with approved steel fittings complete as per Annexure 'A' IS 2202 (Part I & II) 1999/1983, with required Hardware accessories, complete in all manner As per Detail to be provided by Dept. Flush Doors (Both side Veneer Finish with Melamine polish)) + Pre-used Wooden Frame (Ship-wood) Electric rooms 2 Nos
	PLASTER
7	Plaster on new surface on wall in cement sand mortar 1:4 including raking of joints etc. complete fine finish 20 mm thick Electrical rooms and external areas
	POINTING WORK
8	Pointing on stone masonry in cement sand mortar 1:3 (1-Cement:3-Sand), finished and complete in all respect. Exposed Stone Masonry Walls (Amphitheatre, Ghat, External Ramps & Steps)
	COPING WORK
9	Supplying and fixing in cement sand mortar 1:4 sand or other approved stone dassa or coping of thickness 75 to 100 mm (fine dressed) As per Detail to be provided by JDA Coping at Stone Toe Wall and water body wall (50mm thk.)
	PAINTING WORKS
	External Paint
10	Finishing walls with textured exterior paint of required shade as per approved colour complete as per manufacturers specifications including primer coat and protecting coat Trowel Finish av. thickness 2000 to 2500 microns.
	M.S Work
11	Providing and fixing MS Railing using MS Pipe/ Bar / Flat/ etc. with holdfast and fittings complete as per design and drawing including cutting welding and fabrication with priming coat of red oxide and enamel paint

	M.S powder coated railing as per requirement and design approved by JDA
12	MS Gate using Structural steel in single section fixed without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete above plinth level up to 4.5 mtr. height in R.S. joist flats, tees, angles and channels
	Main Entrance gate as per design
13	Providing, Fabricating, Assembling and erection of pre stressed Tensile Membrane Fabric Structure in desired Profile as per drawing, With SATTLER Type II, or Equivalent having Minimum Tensile Strength (Warp/Weft) 5000/4300 dN/50mm & Tear Strength (Warp/Weft) of 600/550N, High concentrated cross link PVDF Top coating (Weld able) and bottom side weldable PVDF Coated polyester fabric having minimum weight of 900 g/sqm as per particular specification with a particular specification with a 15 years Warranty etc. Over steel frames with all fittings and fixtures such as galvanised MS Membrane/End Plate, Shackles, Rigging Screws, Tumbuckles, Swedge, Fork, Keder rods & galvanised MS Strands/Cables with Stainless Steel end terminals complete as per Drawing /Detail & as per technical specification and as per the instructions of Engineer-in-charge. (Rate includes cost of fabric, Shop Drawing, patterning, forming, Cutting, Fabrication, hot weld stitch of fabric, Transported to the site, assembling and installation with GI Cables, Hardware, Aluminium flat, EPDM gasket and required accessories.) (Note: Actual Surface area of fabric shall only be measured for payment. Galvanized Strands/cables, Galvanized MS membrane plate & Aluminium flat only shall be paid separately under respective item.) Providing & Supplying erecting and placing in position MS Built-Up Section/Tubular Structure in the profile shape as per drawings with special plate connector, pinion joints, Plates, Hollow sections etc, with cleaning the surface and including Preparation of detailed Architectural Fabrication and erection drawings of structural steel work from design drawings issued by Engineer-in-Charge and incorporation of Engineer-in-Charge's Comments on same. Tensile Structure to cover o.t.s. area at rear side of Building
	TURNSTILE ENTRY GATE
14	SITC of Tripod Turnstile, Bi-Directional, Stainless Steel AISI 304, Drop Arm, Motorised, 100 % Duty Cycle, Anti Tail gating with sensors, Pass Speed 35 Person/Minute, Drop Arm, Arm Length 550mm to give passage width of 550~600mm, LED Directional Display, maximum power consumption 35 watt, Protection level IP 54, Working Temperature -25 to +70 degree Celsius. -
	Wooden and glass entry gate for visitor's entry
	FURNITURE WORKS
	Fixed Furniture as per requirement
15	Overall Dimensions: Sitting platform size - 1800 mm length X 600mm width; 4-Cast Iron Leg Frames size - 900mm Height X 750mm Width X 100mm thickness; Sitting height is 450 mm. Seasoned Wooden Batten Sitting platform Painted brown while the legs are in green colour Manufactured As/Design and to prevent damage during handling, transportation & erection Treated with special anticorrosive, water proof coating so as to make the surface glossy and water resistant.
	Benches
	WATER PROOFING WORKS
16	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: i) Ist course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) IInd course of 20mm cement plaster 1:3 (1 cement: 3 coarse sand) mixed with water. proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.. iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg per sqm. of area. iv) IVth course of 400 micron thick PVC sheet .(Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)
A	Waterbody
B	Courts

	PLINTH PROTECTION
17	Providing and fixing First quality with uniform texture Stone On floor 15-18 mm thick over 30mm (Av.) thick base of CM 1:4 (1 cement : 4 coarse sand) jointing with white cement mortar 1:2 (1 white cement : 2 marble dust) & In Skirting shall be fixed to the wall surface using 1:3 cement sand mortar with a top layer of white cement and to wood ply surfaces using wood to stone adhesive with pigment to match the shade of the granite slab including grinding, rubbing and polishing and moulding as per design and drawing complete over 150mm thk. P.C.C. (1:4:8) and Kerbstone with required excavation & earth filling.
	Plinth Protection at Courtyards
	GOOD EARTH FILLING
18	Supply and stacking Good soil of earth at site complete including loading, unloading and transportation etc.lead up to 10 Km. Disposed Earth to be leveled and neatly dressed :
	Good Earth filling (Cinder fill) Amphitheatre, Ghat, Courts, External Ramps & Steps)
19	Providing and laying in position ready mixed concrete (RMC) of M-30 grade for reinforced cement concrete work, using cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering, finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Note: Minimum cement content is @ 420 kg/cum. (No extra payment for using extra cement as per requirement of mix design.)
	Under ground Water Tank & Pump Room Construction
A	R.C.C. Under ground Water Tank (M30 grade) with waterproofing , U.G.W.T.-1 (Fire) (9.5x2.185x2.7), U.G.W.T.-2 (Fire) (9.5x2.185x2.7), U.G.W.T.-3 (Raw) (4.6x2.3x2.7),
B	R.C.C. Pump Room Construction (M30 grade) with waterproofing , Pump Room (6.29x4.6x2.7)
	MISCELLANEOUS ITEMS
20	Boundary wall construction with grills as per design approved by JDA.
21	Exposed Random Rubble stone masonry (Teja Stone from Natata, Saiwal, Jaipur/ Siwar Pink sandstone)for superstructure above plinth level one storey height above 30 Cm. thick wall As per Detail to be provided by JDA
	Toe walls for railings and others as per requirement
22	Specified timber /bamboo shall be sawn/cut in the direction of the grains. Sawing / cutting shall be truly straight and square. The timber / bamboo shall be planed smooth and accurate to the full dimensions, rebates, roundings, and mouldings as shown in the drawings made, before assembly. Patching or plugging of any kind shall not be permitted except as provided. This shall consist of wooden strips or laths 35 x 10 mm section unless otherwise specified planed and nailed together at every alternate crossing. The strips shall cross each other at right angle and shall be spaced 35 mm apart, so as to form 35 x 35 mm square opening or as shown in the drawing. These shall be fixed with nails to the frame. To cover the ends of strips, 50 x 12 mm beading shall be fixed to the frame with screws. The finished work with a tolerance of ± 1 mm may be accepted.
23	Other Miscellaneous works as per requirement

Following MAKE should be considered :-

LIST OF PREFERRED MAKES OF MATERIALS FOR CIVIL WORKS

S.N.	Material	List of Preferred Make
1.	(i) Ordinary Portland Cement	ACC, Ultratech, Wonder Cement
	(ii) White Cement	Birla White, J. K. White
2.	Water Proofing Compounds, Admixtures, Plasticizer, Super Plasticizer, Curing Compounds	Fosroc, ROFF/Dr. Fixit(Pidilite Industries), CICO, Sika, BASF, Ardex Endura (Bal Endura), Nerolac Perma
3.	Integral Water proofing compound with cement (For Plaster & Mortar)	Fosroc, Conplast 421 Dr. Fixit : LW+, Sika : Sikacim, & equivalent product of BASF, CICO, Ardex Endura, Nerolac-Perma, Asian Paints
4.	Water proofing for wet areas	Fosroc : Brush Bond/Brushcrete, CICO : Tapecrete, Dr. Fixit : Pidifine 2K, Sika : Nito Bond, Asian Paints : Damp Block 2 K & equivalent product of BASF, Ardex Endura, Nerolac-Perma
5.	Crystalline water proofing compound	Fosroc : Fosroc Crystalline
		Dr Fixit : Dr. Fixit Crystalline
		Sika : Sika Crystalline
		Asian Paints : Crystalline Quart
		& equivalent product of BASF, CICO, Ardex Endura, Pentron, Nerolac-Perma
6.	Grouts, Tile Adhesive	Latecrete, BASF, Ardex Endura, Ferrous Crete, Pidilite, UltraTech,
8	Stone Adhesive	Pidilite - Fevimate excel, BASF, Ardex Endura, MYK Laticrete
9	Particle Board	Action TESA, Greenlam, Merino
10	Laminates	Action TESA, Greenlam, Century Ply, Merino, Sunmica
11	Flush door shutters	Duro, Century, Durian, Green ply.
12	Fire Rated Doors	Signum Fire Protection, Shakti Metdoor, NAVAIR, Sukri, Promat International
13	False Ceiling System	Armstrong, Hunter Douglas, USG Boral, Saint Gobain, Aerolite, Durlum, Gyproc
14	Plywood/ Veneer	Green ply, Century, Merino, Duro, Durian
15	Melamine Polish	Asian Paints Melamine Gold, Wudfin of Pidilite, Timbertone of ICI Dulux.
16	Floor Spring & Door Closure	Godrej, Dorma, Dorset, Kich
17	Aluminium Section	Hindalco, Jindal, Indian Aluminum co.
18	Anodised Aluminium Hardware (Heavy Duty)	Kilong, Alualpha, Classic, Ebco
19	Clear/Float/Frosted/ Toughen Glass/ Refractive Glass	Saint Gobain, AIS, Modiguard, Ashai Float.
20	Stainless Steel Railing, Accessories etc.	Dorma, Kich, GEZE, Godrej
21	S.S. Door & window & Fittings	Jindal, Dorma, Kich, Dorset, Godrej, Ozone
22	Silicon based water repellant /Weather Sealant	G.E. Plastics, Dow Corning, Wacker, BASF, Pidilite (Dr. Fixit/Roff), Nerolac-Perma

S.N.	Material	List of Preferred Make
23	Poly-Sulphide Sealant	Fosroc, Pidilite (Dr. Fixit/Roff), Sika, BASF, Nerolac-Perma
24	Ceramic tiles	Kajaria, RAK,Somany, Johnson, Marbitto
25	Mosaic tiles/chequered tiles	Ultra tiles, NITCO, hyper (Mayur), Pavcon
26	Vitrified Tiles (Satin/Matt/Glazed finish)	Kajaria, RAK,Somany, Johnson, Marbitto
27	Dash / Anchoring Fasteners	HILTI, Fischer, Bosch, Wurth.
28	Cement Based Wall putty	Birla wall care, JK White, Berger, Asian Paints
29	Oil Bound Washable Distemper / Dry Distemper	Asian Paints : Professional Acrylic Distemper, Nerolac: Beauty Acrylic Distemper, Berger : Bison Acrylic Distemper, Dulux ICI : Maxilite
30	1 st Quality Acrylic Distemper (washable/Ready mix/ Low VOC)	Asian Paints : Tractor Aqua Lock Paint, Berger : Commando or equivalent paints of Nerolac or ICI-Dulux
31	Acrylic Emulsion Paints	Asian Paints : Professional Premium Interior Emulsion Paint, Nerolac : Beauty Gold, Berger : Rangoli total care, ICI-Dulux : Super Cover
32	Plastic Emulsion Paint	Asian Paints : Apcolite Heavy Duty Premium Emulsion Paint, Nerolac : Impression, Berger : Easy Clean, ICI-Dulux : 3 in 1
33	Premium Acrylic Emulsion Paints (Interior)	Asian Paints : Royale Luxury Emulsion, Nerolac : Impression , Berger : Silk, ICI Dulux : Velvet touch
34	Synthetic Enamel Paint	Asian : Apcolite Premium gloss enamel, Nerolac : Synthetic Hi gloss Berger : Luxol Hi gloss ICI -Dulux : Gloss Synthetic enamel
35	Cement Primer	Nerolac, BP White(Berger), Decoprime WT(Asian), White primer (ICI)
36	Steel Primer(Red Oxide Zinc Chromate Primer)	Asian Paints, Nerolac, Berger, ICI
37	Wood Primer	Asian Paints (Wood Primer - White/Pink), Berger ICI, Nerolac,
38	Epoxy Paint	Asian, Nerolac, Berger, ICI, Kansai Akzo Nobel
39	Fire Paint	Caboline, Akzo Nobel Coatings India Ltd., PROMAT, Jotun, Asian Paints, Berger
40	Mirror Glass	Atul, Modi Guard, Jaquar, CERA.
41	Stainless Steel Sink	Neelkanth, Niralli, CERA
42	UPVC Doors & Windows (PROFILE makers & their authorized Fabricators only)	Fenesta, KOMERLING, RHEAU, Aluplast.
43	Extruded Polystyrene Insulation Board	Dowcorning, Supreme, Texas, Analco
44	Heat Resistant Tiles	Swastik, Thermatek
45	Gypsum Plaster	Ferrous Crete, Gyproc Saint Gobain, Boral, UltraTech-Birla white, JK lakshmi

S.N.	Material	List of Preferred Make
46	Floor hardener	Ironite, Ferrok, Hardonate
47	Glass Wool	Dow Corning, U.P. Twiga, Isover
48	UPVC doors and window hardware	Rotto, Dorset, Kinlong
49	AAC Block Adhesive	Xtralite, Orifix, Ardex Endura, Ferrous Crete, UltraTech
50	AAC Block	UltraTech, Orilite, Seporex(Buildtex), HIL-Aerocon,
51	Laminated wall panelling	Century ply, Green ply, Royal Touch
52	Veneer wall panelling	Century ply, Green ply, Royal Touch
53	Wood work	Burma teak, Ghana, Sal wood, Nigeria, Ivory coast
54	led fixtures	Philips, wipro
55	Furniture	Godrej
56	Paint	Asian paint, Burger
57	PVC laminate	D-Stona
58	Hardware for door window	Jindal, Dorma, Dorset, Godrej, Ozone
59	Aluminium work	Standard make approved by EI
60	Glass work	Modi, saint gobain
61	clips, hangers fasteners	Standard make approved by EI
62	HDF Jali	Standard make approved by EI
63	Electrical items	Standard make approved by EI
64	Sanitary items	Jaguar, Kajaria, Roca, Cera
All items should confirm to relevant IS codes.		

TECHNICAL SPECIFICATIONS

NOTE: Normally all the required specifications are given below but if any how some specifications are left out or in case of any discrepancy, then guidelines of PWD Specification./ ISI / or other relevant specifications of the product shall be followed as per direction and satisfaction of JDA.

5.1.1 ANTI-TERMITE TREATMENT

5.5.1.1 Chemicals

The treatment of the areas shall be carried out by applying one of the following chemicals at not less than the designated concentration:

Chemicals	Concentration
Biflex	TC 0.05% concentration
Dieldrin	0.5% applied in oil solution or water
Trichlorobenzene	1 part to 3-part oil

The Contractor shall clearly indicate along with his quotation the chemical he proposes to use. A daily record shall be maintained by the Contractor indicating the amount of work done and the quantity of chemical consumed for the work.

5.5.1.2 Treatment at Junction of Walls and Floor

Special care shall be taken to establish continuity of the vertical chemical barrier on inner wall surfaces from the ground level (where it has stopped with the treatment described in 3.4 above) up to the level of the filled earth surface. To achieve this, a small channel 30 mm x 30 mm shall be made at all the junctions of

wall and columns with the floor (before laying the sub grade) and rod holes made in the channel up to the ground level 150 mm apart and the rod moved backward and forward to break up the earth and chemical emulsion poured along with channel at the rate of 7.5 liters/m² of the vertical wall or column surface of the sub structure so as to soak the soil right to the bottom. The soil should be tamped back into place after this operation.

5.5.1.3 Treatment of Soil along external perimeter of building

After the building is complete, the earth along the external perimeter of the building should be rodded at intervals of 150 mm and to a depth of 300 mm. The rods should be moved backward and forward parallel to the wall to break up the earth and chemical emulsion poured along the wall at the rate of 7.5 litres/m² of vertical surfaces. After the treatment, the earth should be tamped back into place. Should the earth outside the building be graded on completion of building, this treatment should be carried out on the completion of such grading. In the event of filling being more than 300 mm, the external perimeter treatment shall extend to the full depth of filling up to the ground level so as to ensure continuity of the chemical barrier.

5.5.1.4 Treatment for Walls retaining soil above floor level

Retaining walls like the basement walls or outer walls above the floor level retaining soil need to be protected by providing chemical barrier by treatment of retained soil in the immediate vicinity of the wall, so as to prevent entry of termites through the voids in masonry, cracks and crevices etc., above the floor level. The soil retained by the walls shall be treated at the rate of 7.5 liters/m² of the vertical surface so as to affect a continuous outer chemical barrier in continuation of the one formed under column centre.

5.5.1.5 Treatment of Soil surrounding pipes, wastes and conduits

When pipes, wastes and conduits enter the soil inside the area of the foundation, the soil surrounding the point of entry must be loosened around each such pipe, waste or conduits for a distance of 150 mm and up to a depth of 75 mm before the treatment is commenced.

When they enter the soil, they shall be similarly treated unless they stand clear of the walls of the building by about 75 mm for a distance of over 300 mm.

5.5.1.6 Treatment to Expansion Joints

Expansion joints at ground floor level are one of the biggest hazards for termite infestation. The soil beneath these joints should receive special attention when the treatment under 3.5 is carried out. This treatment should be supplemented by treating through the expansion joint after the sub grade has been laid at the rate of 2 liters/m.

5.5.1.7 Spraying Equipment

A pressure pump shall be used to carry out spraying operations to facilitate proper penetration of chemicals into the earth.

5.5.1.8 Safety Precautions

These chemicals shall be brought to site in the form of emulsifiable concentrates. The containers should be clearly labeled and should be stored carefully so that children and pets cannot get at them. They should be kept securely closed. Workers should wear clean clothing and should wash thoroughly with soap water, especially before eating and smoking. If chemicals splash into the eyes, they shall be flushed with plenty of soap, water and immediate medical attention should be sought. The concentrates are oil solutions and present a fire hazard owing to the use of petroleum solvents. Flames, sparks, etc. should not be allowed while mixing. Care should be taken in the application of chemicals to see that they are not allowed to contaminate wells or springs, which serve as sources of drinking water.

5.5.1.9 Guarantee - 10 years

In the unlikely event of any treatment becoming necessary subsequently during the guarantee period, necessary inspection and treatment as required shall be carried out free of cost.

5.1.2 CONCRETE WORK: -

5.5.2.1 Scope: -

This specification describes the general requirements for concrete to be used on projects using in-situ production facilities including the requirements in regard to the quality, handling, storage of ingredients, proportioning, batching, mixing and testing of concrete, the requirements in regard to the quality, storage, bending and fixing of reinforcement and the transportation of concrete from the mixer to the place of final deposit, placing, curing, protecting, repairing and finishing.

5.5.2.2 Applicable codes and Specifications: -

5.5.2.2.1 Cement: -

Cement used on the works shall comply with the requirements of IS:269-1976 for ordinary or low heat Portland cement, IS:8112-1976 for high strength ordinary Portland cement and IS:1489-1976 for Portland Pozzolana, IS:455-1989 for Slag Cement and obtained from approved sources.

If ordered by the Engineer-in-Charge certificate of tests from an approved laboratory shall be obtained at the Contractor's cost. Samples for test shall be extracted as in Clause 5.6 IS:3535-1966 within one week of delivery and the test shall be made within four weeks of delivery and the test shall be made within four weeks of delivery. All cement shall be stored in weatherproof structures and prevented from damage by moisture. These buildings shall be provided by the Contractor at his own cost and placed in locations approved by the Engineer.

Provision for storage shall be ample and shipments of cement as received shall be separately stored so as to provide easy access for identification and inspection of each shipment. Storage buildings shall have a capacity for the storage of sufficient cement to allow sampling & testing at least 15 days before use. The cement should be stacked on wooden platform leaving a gap of at least 150 mm between ground & the cement bag. The bags should not be touching to the walls & should be placed at least 300 mm away from sidewalls. Maximum 10 bags or max by 5'5" in height for safe handling should be allowed in each stack. While shifting the bags from one place to other no hooks shall be allowed.

Stored cement shall meet the test requirements at any time after storage when re-test is ordered by Engineer.

The Contractor shall keep an accurate record of the delivery of cement along with its batch no & week of manufacture if the cement is 4-week-old at the time of purchase should not be purchased and its use in the work. Copies of the record shall be supplied to the Engineer-in-Charge as required.

Cement shall be used in the sequence in which it is received & within 8 weeks from the date of manufacture. No cement shall be

unnecessarily stored for a long period. If the cement becomes lumpy it shall be removed from the site immediately. Any cement which has deteriorated or which has been damaged or contaminated, whether during transit to the site or at the site or otherwise, shall not be used and shall be immediately removed from the site and replaced at the expense of the Contractor.

5.5.2.2.2

Admixtures: -

The admixture shall be conformed to IS:9103. The use of admixtures to improve workability is allowed only if there is a proven evidence that neither the strength nor the other requisite qualities of concrete and/or steel, accessories, grout etc. are impaired by their use. The use of admixtures containing Calcium Chloride, Fluorides, Nitrates and Sulphates is prohibited.

The Engineer's decision on all matters relating to the use of admixtures shall be final.

Admixtures shall be stored in a suitable weatherproof building. Any material which has deteriorated or which has been contaminated or damaged whether during transit or at site shall not be used and shall be immediately removed from the site and replaced at the Contractor's own expense.

5.5.2.2.3

Dosage: -

Optimal dosage of a superplasticizer is important. Dosage beyond the optimal dosage may be detrimental and can cause segregation or excessive retardation, which can be harmful to concrete. The dosage optimization can be done by using Marsh Cone apparatus or using mini slump test or by the flow table methods described in ASTM C109.

5.5.2.2.4

Aggregates: -

All aggregates shall generally conform to the requirements of IS:383. Materials shall be used only from sources of supply approved by the Engineer. Any material which has deteriorated or been contaminated shall not be used for concrete. All aspects of aggregates handling and storage are subject to the approval of the Engineer and shall be such as to minimize segregation and breakage and prevent contamination by grass, soil, wood, sawdust, oil, aggregates of other sizes or other foreign materials and so that adequate supplies are available at site in advance of the requirements. Each size of aggregate shall be stored on a separate platform or stockpile at locations to be approved by the Engineer and such platform or stockpiles shall be sufficiently removed from each other to prevent the material at edges of the edges of the piles from becoming intermixed by constructing bund walls at constructional cost. If the aggregates are stockpiled on the ground, the bottom portion of the stockpiles within one foot of the ground shall not be used.

For both fine and coarse aggregates, tests shall be carried out, for physical characteristics, limits of deleterious substances and soundness prior to use and also whenever the source of supply is

changed. All tests will be conducted by the Contractor's expense at a laboratory or in facilities approved by the Engineer.

Sand shall be of approved quality, clean, sharp and free from injurious amount of silt dust, mica, shells, soft and flaky particles, shale, alkali, organic matter, loam or other deleterious substances. The sand shall be from a source approved by the Engineer, and if required by him it shall be thoroughly washed, screened and graded by the Contractor at his own expense to the satisfaction of the Engineer, and he shall include in his rate the cost of washing. It shall be within the range of grading zone I and grading zone II of table III of IS:383. The sand shall have a fineness modulus of not less than 2.2 or more than 3.2. Stone dust or grit shall not be permitted.

Coarse aggregates shall be rounded / angular crushed stone of uniform sizes and gravel or shingle shall not be permitted. The whole of the ingredients of the coarse aggregates shall consist of hard stone free from deleterious substances and contain soft or elongated pieces or white spots. If it is considered necessary, the Engineer may instruct that it be washed, screened and graded at the Contractor's expense. The Contractor shall include in his price for concrete the cost of washing and screening the aggregate. Coarse aggregates of size 4.75 mm to 10 mm called as M1 & of size 10mm to 20mm called as M2 shall stacked separately & should not be allowed to get intermixed at site prior to putting in concrete mixer by constructing bund walls at stock pits at contractors cost. The coarse aggregates shall have a fineness modulus of not less than 5.5 or more than 8.0.

5.5.2.2.5 **Mixing Water: -**

The water for mixing concrete shall be potable & shall be first tested at the Contractor's expense for its suitability by a laboratory approved by the Engineer. It is usually required to be fit for drinking, or to be taken from an approved source. This is to ensure that the water is reasonably free from such impurities as suspended solid, organic matter, dissolved salts which may adversely affect the properties of the concrete, especially the setting and hardening. If required IS:3025 and IS:3550 may be followed for testing. If the quality of water to be used for mixing concrete is in doubt, it should be assessed by comparing the setting times of cement paste and the compressive strength of concrete made with it and with tap water under similar conditions. Seawater shall not be used for concrete work.

5.1.3 REINFORCEMENT STEEL WORKS: -

5.5.4.1 General

The steel to be used for reinforcement concrete work shall comply with the requirements of Indian Standard Specification No. 2062, 432, 1139 and 1786. Steel bars made for rerolling old rails, bars etc. will not be allowed to be used on any account and the Contractor must produce proof that such bars are not being used. Should the results of tests conducted through an approved laboratory at the Contractor's expense made in accordance with the provisions of relevant Indian Standard Specification show that the steel does not comply with these specification, the Engineer may, at his discretion, reject the lot or lots from which the sample or samples were taken and the same shall not be used in the works but

shall be removed there from and the work already executed with such bars may be ordered to be demolished at the Contractor's cost. The Contractor will not be paid for the demolished work nor will the completion time limit be extended, in that case.

All steel used for reinforcement shall be free from loose scales or rust which must be removed with a stiff wire brush and coated with neat cement as directed. Bars must also be free from oil or paint.

All bending shall be done cold, gradually, evenly and without jerks. All protruding bars to which other bars are to be spliced later, must be protected from rusting by a coat of thin neat cement grout and contractor's rates shall be inclusive of this item. The steel shall be properly braced, supported and otherwise held in position by plastic or concrete spacer blocks and steel chairs so as to prevent displacement while concrete is put in. Tiles or stone chips will not be permitted to be used as spacer blocks. The correct number and size of reinforcing bars, stirrups and binders shall be provided and placed in position strictly according to the contract drawings and instructions. This must be looked after with proper care and checked over by a competent foreman of the Contractor personally and finally before pouring the concrete. A steel fitter should be in full time attendance while pouring concrete to adjust and fix the reinforcement.

5.5.4.2 Storage: -

The reinforcement shall not be kept in direct contact with the ground but stacked on top of an arrangement of timber sleepers or the like.

If the reinforcing rods have to be stored for a long duration, they shall be coated with cement wash before stacking and/or be kept under cover or stored as directed by Engineer.

Fabricated reinforcement shall be carefully stored to prevent damage, distortion, corrosion and deterioration.

5.5.4.3 Quality: -

All steel shall be of Grade 1 quality unless specifically permitted by Engineer. No rerolled material will be accepted. If demanded by Engineer, Contractor shall submit the manufacturer's certificate for steel. Random tests on steel supplied by Contractor may be performed by Owner as per relevant Indian Standards. All costs incidental to such tests shall be at Contractor's expense. Steel not conforming to specifications shall be rejected and shall be carried away from site by Contractor at his cost.

All reinforcement shall be clean, free from grease, oil, paint, dirt, loose mill scale, loose rust, dust, bituminous material or any other substances that might destroy or reduce the bond. All rods shall be thoroughly cleaned before being fabricated. Pitted and defective rods shall not be used. All bars shall be rigidly held in position before concreting. No welding of rods to obtain continuity shall be allowed unless approved by Engineer.

If welding is approved, the work shall be carried out as per IS:2751 according to best modern practices and as directed by Engineer.

In all cases of important connections, tests shall be made to prove that the joints are of the full strength of bars welded, special precautions, as specified by Engineer, shall be taken in the welding of cold worked reinforcing bars and bars other than mild steel.

5.5.4.4 Laps: -

Laps and splices for reinforcement shall be as shown on the drawings. Splices in adjacent bars shall be staggered and the locations of all splices, except those specified on the drawings or approved by Engineer. The bars shall not be lapped unless the length required exceeds the maximum available lengths of standard bars.

5.5.4.5 Bending: -

Reinforcing bars supplied bent or in coils, shall be straightened before they are cut to size. Straightening of bars shall be done in cold and without damaging the bars. This is considered as a part of reinforcement bending fabrication work.

All bars shall be accurately bent according to the sizes and shapes shown on the detailed working drawings/bar bending schedules. They shall be bent gradually by machine or other approved means. Reinforcing bars shall not be straightened and regent in a manner that will injure the material; bars containing cracks or splits shall be rejected. Bars shall be bent cold, except for diameter of over 25 mm, which may be bent hot, if specifically approved by Engineer. Bars, which depend for their strength for cold working, shall not be bent hot. Bars bent hot shall not be heated beyond cherry red color (not exceeding 845oC) and after bending shall be allowed to cool slowly without quenching. Bars incorrectly bent shall be used only if the means used for straightening and re-bending be such as shall not, in the opinion of Engineer, injure the material. No reinforcement shall be bent when in position in the work without approval, whether or not it is partially embedded in hardened concrete. Bars having kinks or bends other than those required by design shall not be used. Contractor shall prepare his own bar bending schedule as per RCC drawings as per requirement and as directed and instructed, keeping wastage of bar length to minimum possible in general & bigger diameter of bars in particular. Contractor shall keep a competent person for supervising bar cutting & bending so that already cut length of bar is utilized before a new length of bar is taken.

5.5.4.6 Fixing: -

Reinforcement shall be accurately fixed by any approved means and maintained in the correct position shown in the drawings by the use of blocks, spacers and chairs as per IS:2502 to prevent displacement during placing and compaction of concrete. Bars intended to be in contact at crossing points shall be securely bound together at all such points. The vertical distances required between successive layers of bars in beams or similar members shall be maintained by the provision of mild steel spacer bars at such intervals that the main bars do not perceptibly sag between adjacent spacer bars. Binding wire shall be 16 gauge annealed soft iron wire for tying bars.

5.5.4.7 Cover: -

Unless indicated otherwise on the drawings, clear concrete cover for reinforcement (exclusive of plaster or other decorative finish) shall be as follows:

At each end of reinforcing bar, not less than 25 mm nor less than twice the diameter of the bar.

For a longitudinal reinforcing bar in a column, not less than 40 mm, nor less than the diameter of the bar. In case of columns of minimum dimension of 200 mm or under, with reinforcing bars of 12 mm and less in diameter, a cover of 25 mm to be used & provided.

For longitudinal reinforcing bars in a beam, not less than 25 mm or less than the diameter of the bar.

For tensile, compressive, shear, or other reinforcement in a slab or wall not less than 13 mm, nor less than the diameter of such reinforcement.

For any other reinforcement, not less than 13 mm, nor less than the diameter of such reinforcement.

For footings and other principal structural members in which the concrete is deposited directly against the ground, cover to the bottom reinforcement shall be 75 mm. If concrete is poured on a layer of lean concrete the bottom cover may be reduced to 50 mm.

For concrete surfaces exposed to the weather or the ground after removal of forms, such as retaining walls, grade beams, footing sides and top, etc. not less than 50 mm.

Increased cover thickness shall be provided, as indicated on the drawings, for surfaces exposed to the action of harmful chemicals (or exposed to earth contaminated by such chemicals) acid, alkali, saline atmosphere, Sulphur us smoke etc.

For reinforced concrete members, totally or periodically immersed in sea water or subject to sea water spray, the cover of concrete shall be 50 mm more than those specified above.

For liquid retaining structures, the minimum cover to all steel shall be 40 mm or the diameter of the main bar, whichever is greater. In the presence of sea water and soils and waters of a corrosive character the cover shall be increased by 10 mm.

Protection to reinforcement in case of concrete exposed to harmful surroundings may also be given by providing a dense impermeable concrete with approved protective coatings, as specified on the drawings. In such a case, the extra cover mentioned above, may be reduced by Engineer to those shown on the drawings.

The correct cover shall be maintained by cement mortar (1:2) cubes, PVC cover blocks or other approved means. Reinforcement for footings, grade beams and slabs on subgrade shall be supported on precast concrete blocks as approved by Engineer. The use of pebbles or stones shall not be permitted.

The minimum clear distance between reinforcing bars shall be in accordance with IS:456 or as shown in drawings.

For bars in corrosive environment these covers will be increased by 20 mm in every case.

5.5.4.8 Inspection: -

Erected and secured reinforcement shall be inspected and approved by Engineer prior to placement of concrete.

5.1.4 MASONRY: -

5.5.5.1 Scope

This specification covers furnishing, installation, repairing, finishing, curing protection, maintenance and handling of masonry and allied works for use in structures and locations covered under the scope of the Contract.

5.5.5.2 General

All the connected masonry in structure shall be carried up neatly at one uniform level throughout but where breaks are unavoidable, the joint shall be

made in good long step so as to prevent cracks developing between new and old work. All joints shall be full of mortar. The work shall be kept constantly moist on all the faces for a period of at least ten days and wetted twice a day thereafter for a month. Green work shall be protected from rain by suitable covering. The work shall also be suitably protected from damage during construction.

5.5.5.3 Scaffolding

Simple scaffolding shall be allowed for the masonry work. In this case, the inner end of the horizontal scaffolding pole shall rest in a hole provided in the header course only. Only one header for each pole shall be left out. The holes left in masonry work for supporting the scaffolding shall be filled and made good before plastering.

The Contractor shall be responsible for providing & maintaining sufficiently strong scaffolding, so as to withstand all loads likely to come on it.

5.5.5.4 Mortar

Mix for mortar shall be specified in the schedule of items. For cement and sand mortar, cement and sand in required proportions shall be mixed dry in a mechanical mixer and then water added and mixed further. Minimum quantity of water shall be added to achieve working consistency. Surplus mortar dropping from masonry, if received on surface free from dirt may be mixed with fresh mortar if permitted by the Engineer who may direct additional cement to be added without any extra payment. No mortar that has stood for more than half an hour shall be used

5.5.5.5 Masonry work

5.6 STONEMASONRY:

Jaipur is surrounded by a belt of Aravali hills having good quality of building stone.

Stones available from quarries called SAIWAD, located in Tehsil Amer, at a distance of about 20 Km from the site, has good quality of stones available in different colours.

GENERAL SPECIFICATION OF STONEMASONRY:

Normally, stones used should be small and uniform to be lifted and placed by hand. The length of the stones should not exceed three times the height and the breadth of bases should be greater than 3/4 of the thickness of the wall, not less than 150mm.

The height of the stones may be up to 300mm. Stones with round surface should not be used. All stones should be wet before use. Percentage of water absorption shall not be more than 5%. Minimum crushing strength of building stones shall be 200 Kg /sq.cm.

5.7 RANDOM RUBBLE MASONRY BUILT IN COURSES:

The stones are hammer-dressed on bed and top surface unless natural cleavage of the stone give parallel faces. No face of stones to be narrower or shorter than its height and no such stones shall, tail into the wall less than its height and at least 1/3 of

the face stones shall tail into the wall twice their height.

Random Rubble stone masonry for foundation and plinth should be in Cement Sand Mortar 1:6 (1 Cement:6 Sand) for above 300 mm thick wall.

Hammer dressed exposed Random Rubble masonry to be built in courses with stone of approved quarry for superstructure above ground level in cement and mortar 1:6 (1 cement:6 Sand) including filling the joints in white cement marble powder (1:2) with an admixture of pigment matching the stone shade for 30 cm. thick wall.

5.7.5 BED & JOINTS:

Not to exceed 12 mm thick. The stones shall break joint on the faces for at least half the height with those of courses above and below.

5.7.6 HEIGHT OF COURSES:

Not less than 150 mm in height and brought up to level beds and shall be laid at right angle. Refer JDA's detailed drawings in this respect.

5.7.7 BOND SORT THROUGH STONES:

In the interior thickness of the wall bond stones of at least 450 mm long shall be given so as to approximately provide through-bond of long stones at every 1500 mm distance.

5.7.8 QUOINS OR CORNER STONES

Faces bed to be squared back carefully at least 100 mm and joints 65 mm.

5.7.9 HEARTING

Stones to be not less than 150 mm in any direction, carefully laid, hammered down with wooden mallet into place and solidly bedded with mortar, chips and spalls being wedged into void thick beds of joints and mortar.

5.8 BRICK MASONRY

Bricks shall be table molded, sound, hard, homogeneous in texture of uniform size, shape and color, must be well burnt so as to give a clear ringing sound when struck. They shall be clean, free from flaws, cracks, chips, stones or lumps of any kind, especially lime. These shall not show appreciable signs of efflorescence either dry or subsequent to soaking in water. They shall have sharp edges and angles and even surfaces and shall be sound & hard. They shall be from a source approved by the Engineer-in-Charge and quality of bricks should be such that they shall not absorb more than 20% of water by weight after immersion in water for 24 hours and shall have a crushing strength of 40 kg/cm² minimums.

All bricks shall be thoroughly soaked in water before use. They should be soaked for about twelve hours for this purpose. No broken bricks shall be used except as closures. The courses shall be laid flush in mortar and every course shall be thoroughly grouted. Joints shall be broken vertically and they shall not exceed 10 mm in thickness. The work shall not be raised more than 12 courses per day. It shall be kept constantly wetted for at least 10 days and wetted twice a day thereafter for a month. All joints shall be thoroughly flushed with mortar of mix as specified in the schedule of quantities, at every course. Care shall be

taken to see that the bricks are bedded effectively and all joints completely filled to the full depth.

The joints of brickwork to be plastered shall be raked out to a depth not less than 10 mm as the work proceeds. The surface of brickwork shall be cleaned down and watered properly before the mortar sets.

Before starting the brick masonry, the concrete surface e.g. beams, columns, slabs, chajjas etc. shall be thoroughly hacked and washed to remove all mud, dirt, loose particles etc. When fresh brick work is to be started on the old brick masonry, the surface should be thoroughly cleaned and washed to remove all loose mortar, mud, dirt etc.

The size of a brick shall be 230 x 115 x 75 mm. 230 mm & 115 mm thick walls will be built with fair face on one side only. All walls of greater thickness shall be built without exception with fair face to both sides.

The Contractor shall provide all necessary openings for doors and windows or other services and shall embed electrical fittings, fixtures and sleeves supplied by another agency, if required, at no extra cost.

The rates for brickwork shall also include the cost of the following:

- 1) Making good all holes, chases etc. to any depth due to conduit pipes, hold fasts, switches, plug boxes, exhaust fans openings and other openings.
- 2) Single Brick Masonry: Brickwork 115 mm they shall be provided with transoms & mullions when length or height of the wall exceeds 2 m. Materials and workmanship for a half brick on edges partition wall shall be specified above. The wall shall be stiffened at interval of 1 m vertically & 3 m horizontally by RCC M20. Stiffeners of size 115 mm x 115 mm thickness to the full length of wall and shall be provided with two numbers 8 mm MS Bars as center reinforcement (only the reinforcement will be paid separately under relevant items.) Measurement of brickwork shall be in square meter. The rate shall also include the cost of making good holes, chases etc. at any depth due to the conduit pipes, hold fasts, switches, plug boxes, exhaust fan openings and other openings.
- 3) Bad workmanship if observed will lead to the rejection of the work and the bad work will be demolished and redone to the satisfaction of the Engineer by the Contractor at his own cost.

5.1.5 PLASTERING: -

5.5.6.1 Scope

This specification covers applying the plaster to old and new contracted concrete and masonry in the structure as per specified proportions, in line and level including making good surface, curing and as per the instruction by Engineer.

5.5.6.2 Applicable Codes

IS:383	Specification for Coarse and Fine Aggregates
IS:412	Specification for Expanded Metal Sheets for General Purpose.
IS:1542	Specification for Sand for Plaster
IS:1635	Code of Practice for field Slaking of Building lime and Preparation of Putty.

IS:1661	Code of Practice for the Application of Cement and Cement Lime Plaster Finishes
IS:2394	Code of Practice for the Application of Lime Plaster Finish
IS:2402	Code of Practice for External Rendered Finishes
IS:2645	Specification for Integral Cement Waterproofing Compound.

5.5.6.3 General

The item refers to plastering concrete or masonry surface in cement mortar of specified proportion and specified thickness including scaffoldings, curing etc. complete as specified and directed.

5.5.6.4 Cement Plaster:

5.5.6.4.1 Cement

It shall conform to IS:269-1958 when the type of cement is not specified, ordinary Portland cement shall be used.

The weight of ordinary Portland cement shall be taken as 1140 kg/m³ (90 lbs per cubic foot). The measurement of proportion of cement should normally be on the basis of weight and whole bags, each undisturbed and sealed 50 kg. A bag being considered equivalent to 35 liters (0.034 cu.m.) in volume. When part bag is required, cement shall be taken by weight, assuming 35 liters to be equal to 50 kg. (1 cu.ft. = 90 lbs). Care should be taken to see that each bag contains full quantity of cement.

5.5.6.4.2 Tests

When the tests are considered necessary, they shall be carried out as indicated in IS:269-1958. The Contractor should ensure that the cement is of sound and required quality.

5.5.6.4.3 Storage

Cement required for the use shall be as fresh as possible and stored on planks raised 150 mm (6") to 200 mm (8") above the floor and stacked about 300 mm (12") away from the walls in suitable closed weatherproof buildings at the work site or at the selected approved site, in such a manner as to prevent deterioration by dampness or moist atmosphere or intrusion of foreign matter. Cement shall be stored in such a way as to allow the removal and use of cement in chronological order of receipt i.e. first received first used. Not more than 10 bags or max by 5'5" in height for safe handling shall be stacked vertically in one pile and maximum width of the piles should not be more than 3 m (10' -0"). Any cement, which has deteriorated, caked or which has been damaged shall not be used. Cement concerning which there is doubt shall not be used pending testing & satisfactory results. Cement that is condemned shall be immediately removed from the work site. When temporarily stored in the open for use within 48 hours, it shall be kept on platform of planks about 150 mm (6") to 200 mm (8") above ground and covered with a tarpaulin. Ordinary cement stored for more than one month from the date of receipt from the factory shall be subject to test and used only if found satisfactory. The cost of test shall be borne by the agency responsible for the storage after two months from receipt.

Different kinds of brands of cement of the same brand from different mills should be stored in different groups and should not be mixed during use except when directed in writing by the Engineer. The cement shall not be stored for unduly long periods. It should not be handled in such a way as to impair its strength or useful characteristics.

5.5.6.4.4

Sand

Sand shall conform to IS:383-1952 and equivalent portion of IS:515-1959 as directed by the Consultant.

Sand shall be crushed stone screenings or natural sand. Sand shall be clean, well graded, hard, strong, durable and gritty particles free from injurious amounts of dust, clay, kankar nodules, soft or flaky particles, shale, alkali, salts, organic matters, loam, mica or other deleterious substances and shall be approved by the Consultant.

The maximum size of particles shall be limited to 5 mm (3/16"). Where best trap sand available in the region contains murrum or laterite particles, such particles may be allowed up to 5%. If the fine aggregate contains more than 4% of clay, dust or silt it shall be washed. If the quality of fine aggregate is doubtful, it shall be tested for clay, organic impurities and other deleterious substances as laid down in IS:383-1952. It shall not contain deleterious materials in such quantity as to reduce the strength or durability of the mortar. Sea sand shall not be used.

The sand shall not contain more than 8% of silt as determined by field test with measuring cylinder.

The fine aggregate for cement mortar for first coat of plaster should generally satisfy the following grading:

I.S. Sieve	Percentage by Weight Passing Sieve
4.8 mm	100
2.4 mm	80 - 95
1.2 mm	70 - 90
0.6 mm	40 - 85
0.3 mm	5 - 50
0.15 mm	0 - 10

ness modulus shall not exceed 3.0.

The fine aggregate for cement mortar for second coat of plaster may have the following grading:

I.S. Sieve	Percentage by Weight Passing Sieve
4.8 mm	100
2.4 mm	100
1.2 mm	75 - 100
0.6 mm	40 - 85
0.3 mm	5 - 50
0.15 mm	0 - 10

ness modulus shall not exceed 1.6

IS:1543-1960 shall generally apply for sand for plaster.

5.5.6.4.5

Gradation

The gradation of materials from any one source shall not vary in composition beyond the range of values that governs it, in selecting source of supply. For determining the degree of uniformity, determination of

fineness modulus shall be made upon representative samples furnished by the Contractor from such source as he proposes to use. Fine aggregate from any one source having a variation in fineness modulus of the representative samples submitted by the Contractor shall be rejected or may be accepted subject to such change in the proportion of aggregate as the Engineer may direct.

5.5.6.4.6 Storage

The fine aggregate should be stacked carefully on a clean hard surface so that it will not get mixed up with deleterious foreign material. Sand shall not be stacked in high conical heaps so that segregation of heavier particles by sliding down may be prevented. It shall be placed in layers not thicker than those resulting from lorry loads dumped on the same plane.

5.5.6.4.7 Tests

The aggregates shall satisfy the tests referred to in IS:383-1952. Samples of sand to be used for a particular item shall be got approved by the Engineer, who shall keep it in his office for reference.

5.5.6.4.8 Water

Water for mixing cement mortar shall not be salty or brackish and shall be clean, reasonably clear and free from objectionable quantities of silt and traces of oil, acid and injurious alkali, salts, organic matter and other deleterious material, which will weaken the mortar. Water shall be obtained from sources approved by the Consultant. Sources of water shall be maintained at such a depth and water shall be withdrawn in such a manner as to exclude silts mud, grass or other foreign materials. Containers for transport, storage and handling of water shall be clean.

If required by the Consultant, it shall be tested by comparison with distilled water. Comparison shall be made by means of standard cement tests for soundness, time of setting and mortar strength as specified in IS:269-1958. Any indication of unsoundness, change in time of setting by 30 minutes or more, or decrease of more than 10% in strength of mortar prepared with the water sample when compared with the results obtained with mortar prepared with distilled water shall be sufficient cause for rejection of water tested. Seawater shall not be used.

Water fit for drinking will generally be found suitable for mixing cement mortar.

Water for curing cement mortar should not be too acidic or too alkaline. It should have a PH value ranging between 4.5 to 8.5. It should be free of elements, which significantly affect the hydration reaction or otherwise interfere with the hardening of mortar surfaces.

Hard and bitter water containing more than 100 p.p.m. of sulphates shall not be used for curing purpose.

Portable water will generally be found suitable for curing cement mortar.

5.5.6.4.9 Proportions

Cement and sand shall be mixed in specified proportions, sand being measured in measuring boxes. The proportions will be by volume on the basis of 50 kg. Bag of cement being equal to 35 liters (about 0.034 cu.m.) The mortar may be hand mixed or machine mixed as directed by the Engineer.

5.5.6.4.10 **Preparation**

In hand mixed mortar, cement and sand in the specified proportions shall be thoroughly mixed dry on a clean impervious platform by turning over at least 3 times or more till a homogeneous mixture of uniform color is obtained. Fresh and clean water as specified above shall be added gradually & thoroughly mixed to form a stiff plastic mass of uniform color so that each particle of sand shall be completely covered with a film of wet cement. The water cement ratio may be as under or as directed by the Engineer.

Cement	Sand	Water-Cement Ratio	Quantity of water per 50 kg of cement
1	1	0.25	12.5
1	1.5	0.28	14.0
1	2	0.30	15.0
1	2.5	0.35	17.5
1	3	0.40	20.0
1	4	0.53	26.5
1	5	0.60	30.0
1	6	0.70	35.0
1	8	0.90	45.0

Mixing platform shall be so arranged that no deleterious extraneous material shall get mixed with mortar nor the mixing water of the mortar shall flow out. Machine mixed mortar shall be prepared in an approved mixer. About 5% to 10% of mixing water shall be put into the mixer and sand & cement in the required proportions shall be then added. The remainder of water, quantity of which shall be predetermined by consideration of strength and consistency shall be added uniformly. Mixing will be continued until all particles of sand are uniformly coated with cement paste. Mixing for 1½ to 2 minutes will normally be sufficient. Water cement ratio shall be as per hand mixed mortar.

The mortar so prepared shall be used within 30 minutes of adding water; only such quantity of mortar shall be prepared as can be used within 30 minutes. The mortar remaining unused after that period or mortar which has partially hardened or is otherwise damaged shall not be tempered or remixed. It shall be thrown away.

5.5.6.4.11 **Scaffolding**

Scaffolding required for facility of construction shall be provided by the Contractor at his own expense.

Scaffolding shall be double or single as is warranted. Scaffolding shall be erected with steel sections or pipes, so as to be safe for all construction operations. The Contractor shall take all measures to ensure the safety of the work and working people. Any instructions by the Engineer in this respect shall also be complied with. The Contractor shall be entirely responsible for any damage to property or injury to persons resulting from ill-erected scaffolding, defective ladders and materials or otherwise arising out of his default in this respect. Proper scaffolding shall be provided to allow easy approach to every part of the work. Overhead work shall not be allowed. No log holes shall be made in the wall when scaffolding is being

erected. For internal / External plaster double scaffolding with steel pipes / H frames to be used.

5.5.6.4.12 Tools and Accessories

Tools & accessories used in plasterwork may advantageously conform to IS:1630-1960. All tools shall be cleaned by scraping and washing at the end of each day's work or after use. Metal tools shall be cleaned after each operation. All tools shall be examined to see that they are thoroughly cleaned before plastering is begun.

5.5.6.4.13 Program of work in relation to plastering

All general precautions as specified in IS:1661-1960, Clause 9, shall be done in IS:1661-1960, Clause 13. Care shall be taken to see that other parts of the work or adjacent works are not damaged while plastering.

5.5.6.4.14 Preparatory Work

All joints in the face work that is to be plastered shall be raked out to a depth equal to not less than the width of the joints or as directed by the Engineer. The raking shall be done taking care not to allow any chipping of masonry. In new work the raking out shall be done when the mortar in the joints is green. Smooth surfaces of concrete must be suitably roughened to provide necessary bond for the plaster. All dirt, soot, oil, paint or any other material that might interfere with satisfactory bond shall be removed. The surface to be plastered shall be cleaned and scrubbed with fresh water and kept wet for 6 hours prior to plastering. Level pads, rough grounds for windows to be fixed before plastering. It shall not be commenced unless the preparatory work is passed in writing by the Engineer.

5.5.6.4.15 Gauges

Patches of plaster 150 mm x 150 mm (6" x 6") shall be put on about 3 m (10' - 0") apart as gauges to ensure even plastering in one plane.

5.5.6.4.16 Plastering

In all plaster work, the mortar shall be firmly applied with somewhat more than the required thickness and well pressed into the joints and on the surface and rubbed and leveled with a flat wooden rule to give required thickness. Long straight edges shall be freely used to ensure a perfectly plane even surface. All corners must be finished to their true angles or rounded as directed by the Engineer. The surface shall be finished to plane or curved surfaces as shown on the drawings or as directed by the Engineer and shall present a neat appearance. The mortar shall adhere to the masonry surface intimately when set and there should be no hollow sound when struck. Plaster shall be done from top downwards.

At all the joints of concrete and brickwork or at the junction of different construction materials, 150 mm wide chicken wire mesh of 26 G thickness & 15 mm mesh size shall be used fixed after the first coat of plaster. The wire mesh will then be covered by the final coat of plaster.

5.5.6.4.17 Finishing

In any continuous face of a wall, finishing treatment of any type should be carried out continuously and day to day breaks made to coincide with architectural breaks in order to avoid unsightly junctions.

5.5.6.4.18 Moldings, Grooves, Bands etc.

These shall be worked true to template and drawn neat, clean and level. All exposed angles and junctions with doorframes etc. shall be carefully finished.

5.5.6.4.19 Watering and Curing

All plasterwork shall be kept damp continuously for a period of 14 days. To prevent excessive evaporation on the sunny or windward side of the buildings in hot, dry weather, matting or gunny bags may be hung over on the outside of the plaster in the beginning and kept moist. The fog curing of internal / external shall start within 90 minutes of completion of plastering to avoid hair cracks on plastered surface.

Should the Contractor fail to water the work to the satisfaction of the Engineer, the latter engage requisite labor, materials and equipment to water the work properly at the Cost of the Contractor.

5.5.6.4.20 Bad Work

Should the mortar of the plaster perish through neglect of watering or for any other default and if the work is not done as specified, the plaster shall be removed and redone at the Contractor's expense. It is most essential that the Contractor shall properly plan out his overall construction and finishing program in such a way as to ensure that all such plastered and form finished surfaces are completed and handed over by him free from any defects – especially from any of the following aesthetic defects: -

Smudges and stains as result of spilling of cement mortar, plaster or any other material on to the finished surfaces.

Rectification patches, which may be the result of plastered or form finished surfaces having been accidentally damaged or broken, or because of such surfaces having had to be chased or opened out after final finishing.

Even minor chipping, scratching or other forms of accidental damage to the finished surfaces, as a result of negligence or carelessness on the part of the site organization during construction.

Item to include

- Erecting, dismantling and removing the scaffolding.
- Preparing the surface to receive plaster.
- Providing cement plaster of the specified average thickness with specified number of coats.
- Any moldings, grooves, bands etc. if shown on the drawings or as specified unless separately provided in the tender.
- All labor, materials, use of tools and equipment to complete the plastering as per specifications.
- Curing

5.5.5 Oil Emulsion (Oil Bound) Washable Distempering

5.5.5.1 Materials

Oil emulsion (Oil Bound) washable distemper (IS 428) of approved brand and manufacture shall be used. The primer where used as on new work shall be cement primer or distemper primer as described in the item. These shall be of the same manufacture as distemper. The distemper shall be diluted with water or any other prescribed thinner in a manner recommended by the

manufacturer. Only sufficient quantity of distemper required for day's work shall be prepared.

The distemper and primer shall be brought by the contractor in sealed tins in sufficient quantities at a time to suffice for a fortnight's work, and the same shall be kept in the joint custody of the contractor and CPWP SPECIFICATIONS 2009 554 the Engineer-in- Charge. The empty tins shall not be removed from the site of work, till this item of work has been completed and passed by the Engineer-in-Charge.

Providing and applying two or more coats of plastic emulsion paint of matt finish: 50-60 micron each coat of approved brand, manufacturer and shade to give a smooth finish on new concrete surfaces over a coat of approved primer including the cost of preparing the surfaces with approved filling materials, along with sand papering wherever required, scaffolding etc. complete.

5.5.5.2 Preparation of the Surface

For new work the surface shall be thoroughly cleaned of dust, old white or color wash by washing and scrubbing. The surface shall then be allowed to dry for at least 48 hours. It shall then be sand papered to give a smooth and even surface. Any unevenness shall be made good by applying putty, made of plaster of paris mixed with water on the entire surface including filling up the undulations and then sand papering the same after it is dry.

In the case of old work, all loose pieces and scales shall be removed by sand papering. The surface shall be cleaned of all grease, dirt etc. Pitting in plaster shall be made good with plaster of paris mixed with the color to be used. The surface shall then be rubbed down again with a fine grade sand paper and made smooth. A coat of the distemper shall be applied over the patches. The patched surface shall be allowed to dry thoroughly before the regular coat of distemper is applied.

5.5.5.3 Application

5.5.5.4 Priming Coat:

The priming coat shall be with distemper primer or cement primer, as required in the description of the item. The application of the distemper primer shall be as described in 13.18.4.

Note: If the wall surface plaster has not dried completely, cement primer shall be applied before distempering the walls. But if distempering is done after the wall surface is dried completely, distemper primer shall be applied.

Oil bound distemper is not recommended to be applied, within six months of the completion of wall plaster. However, newly plastered surfaces if required to be distempered before a period of six months shall be given a coat of alkali resistant priming Paint conforming to IS 109 and allowed to dry for at least 48 hours before distempering is commenced.

For old work no primer coat is necessary.

5.5.5.5 Distemper Coat:

For new work, after the primer coat has dried for at least 48 hours, the surface shall be lightly sand papered to make it smooth for receiving the distemper, taking care not to rub out the priming coat. All loose particles shall be dusted off after rubbing. One coat of distemper properly diluted with thinner (water or other liquid as stipulated by the manufacturer) shall be applied with brushes in

horizontal strokes followed immediately by vertical ones which together constitutes one coat.

The subsequent coats shall be applied in the same way. Two or more coats of distemper as are found necessary shall be applied over the primer coat to obtain an even shade.

A time interval of at least 24 hours shall be allowed between successive coats to permit proper drying of the preceding coat. For old work the distemper shall be applied over the prepared surface in the same manner as in new work. One or more coats of distemper as are found necessary shall be applied to obtain an even and uniform shade.

15 cm double bristled distemper brushes shall be used. After each day's work, brushes shall be thoroughly washed in hot water with soap solution and hung down to dry. Old brushes which are dirty and caked with distemper shall not be used on the work.

5.5.6 CARPENTRY, JOINERY, DOORS:

5.5.9.1 Scope

The work in general shall consist of supplying and/or erecting and installing of all doors, windows, ventilators, louvers, rolling shutters, glazed partitions, etc. as shown on drawings with all materials complete including supply and fixing of glass and glazing.

The scope shall also include the assembly and erection of all doors, windows, louvers, glazed partitions, etc. Supplying and/or fixing of all door and window accessories and hardware are also included in the scope.

5.5.9.2 Applicable Codes and Specifications

The following codes, standards and specifications are made a part of this specification. All standards, specifications, codes of practices referred to herein shall be the latest edition including all applicable official amendments and revisions.

In case of discrepancy between this specification and those referred to herein, this specification shall govern.

IS: 4021	Timber door, window and ventilator frames.
IS: 2202	Wooden flush door shutters (Solid core Type) Part – I.
IS: 1003	Timber paneled and glazed shutters. (Parts I & II)
IS: 4020	Methods of tests for wooden flush doors: Type tests.
IS: 1761	Transparent sheet glass for glazing and framing purposes.
IS: 4351	Steel door frames.
IS: 1038	Steel doors, windows and ventilators.
IS: 1361	Steel windows for industrial buildings.
IS: 1081	Code of practice for fixing and glazing of metal (Steel and Aluminum) doors, windows and ventilators.
IS: 5807	Method of test for clear finishes for wooden furniture (Part I to III)
IS: 1477	Code of practice for painting of ferrous metals in buildings and allied Finishes (Part I & II)
IS: 2338	Code of practice for finishing of wood and wood-based materials (Part I).
IS: 1948	Aluminum doors windows and ventilators
IS: 1949	Aluminum windows for industrial buildings.

5.5.9.3 Woodworks:

Timber used for joinery shall be of good approved quality or Teak wood unless otherwise specified (Ref.IS:4021) and shall be well seasoned (IS:1141) cut square, of natural growth, uniform in texture, straight grained, free from excess wane, from sapwood dead knot or other defects and blemishes (Ref.IS:3364).

All timber for carpentry, joinery, rough frame work, backings, grounds, fixing strips and the like shall be treated with an approved wood preservative (Ref.IS:401) and the Contractor shall strictly observe the manufacturer's instructions for using this material. The maximum permissible moisture content in timber shall be in accordance with IS: 287-latest.

All workmanship shall be of the best quality (IS: 6534) Scantlings and boarding's shall be accurately sawn and shall be of uniform width and thickness throughout. All carpenter's work shall be left with a sawn surface except where otherwise specified. Work shall be framed together and securely fixed in the best possible manner and with properly made joints. All brads, nails, screws, plugs, pin, etc. to be provided as necessary and as directed and approved.

Timber of approved quality is to be purchased at the commencement of the contract for further seasoning on the site. The preparation of timber is to commence simultaneously with the beginning of the work generally and to proceed continuously until all the wood work is prepared and stacked on or near the site. All the timber of large scantlings is to be sawn immediately on arrival at site to allow for any shrinkage that may take place. All timber brought to site shall be given anti-termite treatment.

Joints in various members forming any timber frame shall be provided only as shown in the drawings or as directed by the Engineer. Two millimeters will be allowed for each wrought face of the sizes specified except when described as finished in which case they shall hold to the full dimensions specified.

All work is to be properly tenoned, shouldered, wedged, pinned, braded, etc. to the satisfaction of the Engineer and all properly glued with best quality glue. All joinery shall be finished off in a proper manner, planed and sand papered as required (IS: 2338).

Any joiner's work which shall be split, fracture, shrink, or show flaws or other defects due to unsoundness, inadequate seasoning or bad workmanship, shall be removed and replaced with sound material at the Contractor's expense.

Use of nails shall not be permitted. Fixing of members shall be done by using screws or round brads, heads of which shall be properly punched in ends of timbers built into walls shall have air space lest between themselves and the walls.

All exposed faces of woodwork shall be sand papered once before erection for approval of the Engineer. No color or other preservatives shall be applied without prior approval of the Engineer.

Doors, windows and ventilator frames, transoms and mullions shall be rebated. All dimensions shall be as per drawings. The top framing member of doors and top and bottom framing of windows and ventilators shall project about 150 mm in brick work. The verticals of door frames shall project about 50 mm below finished floor.

Frames for doors and windows will be provided with Mild Steel holdfasts made of 40 mm x 3mm thick flats 200 mm long and fixed into jambs M-15/10 P.C.C.

1200 mm high frames with 6 Nos and frames above 2000 mm with 8 Nos holdfasts. Each holdfast will be fixed to the frame with 3 Nos 50 mm GI screws. The doors shall be paneled or solid flush doors as described in the item of work. All flush doors shall be supplied with approved fittings such as hinges, mortice lock of approved make with handles on sides, oxidized brass tower bolts and latch arrangements, door stops etc. and as shown in drawings but exclusive of door closer. Door closers, where separately specified shall be of heavy-duty hydraulic type to be approved by Engineer/Architect.

Doors shall generally have no sills but if a few have to be provided; the CONTRACTOR shall do so at no extra cost to the OWNER.

For fixing timber frames to concrete, raw plugs and screws of 16 gauges shall be used wherever specified. Rawle plugs and screws of gauge 16 shall also be used for fixing raw rough grounds, framing, hangers, hat hooks, curtain rails etc. Unless otherwise specified, screws used for the work shall be galvanized.

All timber surfaces coming into contact with masonry or concrete shall be given two coats of wood preservative or so lignum approved by the Engineer.

Paneled and glazed shutters, styles and rails shall be as shown in the drawing, molded and mortised together (Ref IS: 1003). The shutters shall be square and free from twist. All glazing is to be of sheet glass of selected quality and approved by the Engineer/Architect.

It shall be clear and free from defects. It shall be cut to the required size and fixed to frame either with spring clips, with approved quality, or with teakwood beading as per details.

The Engineer may order any timber frame to be put together on the ground and submitted to suitable tests to his satisfaction before being placed in position. The cost of any such test shall be borne by the Contractor.

All surfaces of timber resting on or bedded in masonry or concrete shall be well coated with coal tar.

All fixing holes shall be pelleted and concealed from view. 35 mm thick flush type block board (IS:2202) shall be manufactured from selected timber well-seasoned and shall be of solid particle board core construction with 25 mm thick teak wood lipping all around the edge. The stiles and rails shall be of one piece or alternatively, two or more pieces glued together. The thickness of the cross band shall not be less than 3mm and the thickness of the facing shall be of best quality commercial ply thickness not less than 1.5mm. Where veneer finish, or Formica finishes or any other type is specified they shall be glued separately. All the plywood shall be glued under pressure. Glue used shall be phenol formaldehyde resins.

5.5.9.4 Flush door shutter with paint finish

Providing and fixing ISI marked flush door shutters conforming to IS:2202 (Part I) nondecorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. Flush door panel shall be 35 mm thick, with 25 mm thick teak wood lipping on all edges, including fixing with stainless steel butt hinges, screws and painting in approved color. Size and design of doors to be as per detailed door drawings. Painting shall include applying approved wood primer and 2 or more coats of paint of approved make and color.

5.5.9.4.1 Fixtures:

All doors and windows shall be provided with best quality fixtures as specified in the drawing. Samples of all fittings shall be submitted for approval by the

Engineer. Unless otherwise specified, hinges, tower bolts, AL drops, handles, baby latches, etc. shall be of best quality of specified size. Mortise lock, hydraulic closer and other fixtures shall be of approved make.

5.5.9.4.2 Painting:

Painting shall be carried out only after the joinery has been inspected and approved by the Engineer. The surface preparation and applying of primer coats of paint and final coats of paint shall be carried out as per specifications for painting. Unless otherwise specified a minimum of 2 coats of primer paint and 3 coats of final paint to be applied. Where polishing or varnishing is specified, the surface to be varnished or polished shall be protected from contamination such as inadvertent painting and surface damage. The polishing or varnishing shall be according to the specifications for varnishing or polishing under the section Painting.

The contractor shall submit samples of each type of hardware to the Engineer. The approved samples shall be retained by the Engineer for comparison of bulk supply. The samples shall be returned to the Contractor towards the end for incorporation in the job. The frames shall be erected in accordance with manufacturer's instructions. The frame shall be aligned and kept plumb by suitable supporting arrangement. As the masonry is being constructed the holdfasts are embedded in concrete mix 15/10. Where required for fixing with concrete member, raw plug and GI screws shall be used. The joints between the steel frame and masonry work, after being finished with plaster shall be finished with approved bitumen mastic.

Glass panes, unless otherwise specified shall be of 6mm thickness and shall be free from flaws, specks and bubbles. It shall have properly squared corners and straight edges, and shall be fixed to frame with glazing pins and approved putty.

5.5.11.1 Integral Cement Based Treatment for Water Proofing on Horizontal

A. Preparation of Surface

The Water Proofing Treatment over the lean concrete/levelling course surface should adhere to the surface firmly, the surface of levelling course should be roughened properly when the concrete is still green. In case the surface is not made rough before the concrete is set, the work of water proofing should not be executed till proper key is provided for the base layer of Cement Mortar 1:3.

B. Blending Cement/Water with Water Proofing Compound

The required quantity of cement bags to be used for a particular portion of work should be emptied on a dry platform. Water proofing compound bearing ISI mark and conforming to IS 2645 should then be mixed properly with the cement. The quantity of water proofing compound to be mixed should be as prescribed by the manufacturer but not exceeding 3% by weight of cement. The quantity of cement and water proofing compound thus mixed should be thoroughly blended and the blended cement should again be packed in bags.

For the water proofing compound in liquid form, the blending is to be done with water. This can be done by taking the just required quantity of water to be mixed in the particular batch of dry cement mortar.

The required quantity of water thus collected per batch of dry cement mortar to be prepared should be mixed with liquid water proofing compound from sealed tins with ISI mark. The water thus mixed with water proofing

compound shall be thoroughly stirred so that the water is blended with water proofing compound properly.

C. Laying Water Proofing Course

Before laying the base course of cement mortar 1:3, the lean concrete surface shall be cleaned neatly with water. Cement slurry. (ii), shall be applied only on the area of the concrete surface, that can be covered with the cement mortar (1:3) base course within half an hour. The cement slurry should cover every spot of the surface and no place shall remain uncovered. Just after the application of cement slurry on the surface, the cement mortar prepared as per clause 5.6.11.2.1 (v) should be used for laying the base course. Base Course should be laid to a perfect level with wooden/aluminum straight edge of at least 2 mtrs. long. The top surface of cement mortar should be finished neatly and later scratched when green with a suitable instrument before the base course dries and gets hard that is just before the base course takes up initial set. When the 25-mm thick base course is just getting set the cement slurry prepared as per clause 5.6.11.2.1 (iv) should be spread over the base course up to the area that shall be covered with just two to three stone slabs. The cement slurry shall be spread in such a way that the area of base course to be covered immediately shall be covered with slurry without any gap or dry spots. Immediately on applying cement slurry on the base course the Rough Kota Stone slab shall be laid over the base course and pressed gently so that the air gap can be removed.

The slurry applied on the surface which gets spread when the stone slab is pressed shall get accumulated in the joints of adjacent stone slabs and if any gap still remains between the stone slabs the same should also be filled with additional quantity of cement slurry. For laying the stone slabs in perfect level, two stone slabs at adjacent concerns/ends shall be fixed firmly to the required level and a string stretched over the two slabs, the intermediate slabs shall then be set to the level of the string.

D. Curing

Immediately after completing the fourth layer, arrangements shall be made for the top RCC slab as quickly as possible and in the meantime till the top slab is casted the water proofing treatment shall be kept wet continuously. In case the concreting of slab gets delayed for more than 2 weeks the curing can be stopped after 14 days.

E. Measurement

Length and breadth shall be measured along the finished surface correct to a cm and the area shall be worked out to nearest 0.01 sqm.

F. Rate

The rate shall include the cost of all labour & materials involved in all the operations described above. The cost of grading with cement concrete / cement mortar shall be paid for separately.

5.5.11.2 Water Proofing Treatment to Vertical and Horizontal Surface of Depressed Portion of WC, Kitchen and The Like

1) Before the Water Proofing Treatment

Before the water proofing treatment, the internal plaster of ceiling and walls of WC block leaving the portion for dado/skirting should be completed. Grooving / chasing for doing the concealed work of GI/CI pipes/Electrical conduits should be completed. Cleaning the depressed/sunken portion of WC of all debris, extra mortar sticking to the vertical and horizontal surface etc.

Necessary holes for 'P' trap /Nhani trap/Water escape pipe etc. should be completed.

2) **Preparing Surface and Fixing Pipes and Fittings**

Before the water proofing treatment work, proper key in the concrete surface should be provided. The depressed/sunken portion should be hacked by a hacking tool, after the concrete slab is cast and when this concrete is still green. The vertical surfaces of the depressed /sunken portion should be hacked with a hacking tool just after the shuttering is removed. In case of old work, the water proofing treatment on such surfaces shall be permitted after making proper spatter dash key. Fixing the 'P' trap in position and all other pipes work including the water escape pipe shall be fixed properly and the holes should be plugged carefully before taking up the water proofing work.

- **1st Course**

Cement duly blended with water proofing compound as explained shall be used for preparing the cement slurry.

The consistency of the slurry should be such that 4.4 kg. of blended cement with water proofing compound is used per sq. meter area of surface to be treated. The slurry should be started from the vertical faces towards the bottom of the floor. Particular care should be taken to see that the slurry is applied to corners without leaving any gap.

- **2nd Course**

Immediately on applying the blended cement slurry on the surface to be treated cement plaster 20 mm thick in CM 1:3 (1 blended cement: 3 coarse sand) shall be applied both on vertical and horizontal surfaces taking particular care to complete the entire depressed/ sunken portion of WC within a day so that the plaster can be done without any joint. Junctions shall be properly rounded. The surfaces of the plaster shall be left rough but finished in one plain and cured for a week.

On completion of the curing period both horizontal and vertical surfaces shall be cleaned properly and gently and allowed to dry.

- **3rd Course**

Only after the surface is completely dried the blown or residual bitumen shall be applied @ 1.7 kg. of bitumen per sqm area.

- **4th Course**

PVC sheet 400 micron thick shall be spread evenly without any kink immediately, so that the PVC sheet sticks to the surface firmly. PVC sheet shall be continued to be laid over the main slab up to 100 mm.

Overlapping of PVC sheet should be done with a minimum overlap of 100 mm, duly pasting the overlapped sheet with an application of bitumen @ 1.7 kg. / sqm.

The projections of pipes and 'P' trap outlet etc. inside the depressed/sunken portion of WC shall also be cladded with water proofing treatment layer up to a height of 150 mm, using a coat of bitumen with PVC sheet complete.

The surfaces of depressed/sunken portion of WC shall not be left without covering with specified filling material and base concrete, otherwise the PVC sheet layer may be tampered by the labour working in the vicinity.

Fixing up of WC pan, filling specified material and the top base concrete should be done as early as possible and the top horizontal layer of water proofing may be taken up later i.e. just before laying the floor tiles.

3) **Measurement**

Length and breadth shall be measured along the finished surface correct to a cm. and area shall be worked out to nearest 0.01 sqm. No payment however shall be made for the 100 mm overlap of PVC Sheet over the roof slab.

4) **Rate**

The rate shall include the cost of labour and materials involved in all the operations described above.

5.5.7 FLOORING / ALLIED WORK

5.5.12.1 Scope

This specification covers furnishing, installation, finishing, curing, testing, protection, maintenance till handing over various types of floor finishes and allied items (trades, risers, sills, cladding, dado etc.) of work as listed below:

5.5.12.2 Applicable Codes

IS:269 Specification for ordinary and Low Heat Portland Cement

IS:383 Specification for Coarse and Fine Aggregates

IS:1237 Specification for Cement Concrete Flooring Tiles

IS:1443 Code of Practice for Laying and Finishing of Cement Concrete Flooring Tiles

IS: 2571 Code of Practice for Laying In-situ Cement Concrete Flooring Tiles

IS: 457 Specification for Ceramic Unglazed Vitreous Acid Resisting Tiles

IS: 2114 Code of Practice for laying in situ Terrazzo Floor Finish

IS: 4860 Specification for Acid Resistant Bricks

IS: 5491 Code of Practice for laying in situ Granolithic Floor Topping

5.5.12.3 Vitrified Tiles in Flooring / Skirting

The base shall be cleaned and the bedding mortar 20 mm to 25 mm shall be laid. A neat cement grout shall be spread before laying tiles. The tiles shall be cured for 5 days. The joints shall be filled with cement slurry tinted to match the colour of tiles. For fixing the tiles in skirting the bedding mortar shall be 12 mm. The tiles shall conform to relevant I.S. code. The contractor shall produce test certificate for the tiles.

5.5.12.4 Garda Stone from Buddhpura (Polished/ flamed/ leathered finish), Granite, Marble Stone Flooring, Skirting and Facing:

5.5.12.4.1 Materials

Stones shall be of the best variety to be approved by the Engineer and shall be of specified thickness and size.

The stone slabs shall be sound, durable and uniform in size, thickness and color. They shall be free from soft veins, cracks or flaws and their edges shall be true and square and shall be machine cut and the surface double machine polished, if require as per item description. Sorting of stones of one-color shade shall be done prior to fixing to avoid color variation in the work.

5.5.12.4.2 Workmanship

The surface on which the stone slabs to be laid shall be cleaned of all dust and saturated with water.

The stone slabs shall be set in cement slurry over 20 mm thick lime mortar 1:2/cement mortar 1:4 bedding and tamped with wooden mallet. The joints shall be flushed with cement and cured for 7 days.

The final cutting / polishing shall be done as directed after the completion of curing period.

5.5.12.5 Marble / Granite Flooring, Skirting & Facing

5.5.12.5.1 Materials

Marble slabs shall be of the type mentioned in the item and of the color and quality approved by the Engineer. Slabs shall be hard, dense, uniform and homogenous in texture. They shall have even crystallizing grain and be free from defects and cracks.

The surface shall be machine polished to an even and perfectly plain surface and edges machine cut, true and square.

No slab shall be thinner than the specified thickness at its thinnest part. The dimensions of the slab shall be as specified in item. A few specimens of the finished slabs shall be deposited by the Contractor in the Engineer's office for reference.

5.5.12.5.2 Workmanship

They shall be laid to the pattern shown in the drawings or as directed by the Engineer.

The surface on which the marble / Granite slab is to be laid shall be cleaned of all dust and saturated with water.

The marble slabs shall be set in cement slurry over 20mm thick lime / cement mortar 1:1:2 bedding and tamped with wooden mallet. The joints shall not exceed 1 mm in thickness and shall be flushed with white cement and cured for 10 days.

Finishing shall be done as per IS:2114-1962. Normally polishing shall be done for flooring by machine. Hand polishing shall be allowed only for skirting and facing. A smooth polish shall be obtained in either case to the entire satisfaction of the Engineer.

5.5.12.6 Trimix Concrete Flooring

Trimix concrete is a method of producing high wear resistant & high compressive strength concrete minimizing water permeability & dusting.

The specification of work should conform to those specified by the manufacturer, as to achieve the desired results but in no case, shall be lesser than as mentioned hereunder

5.5.12.6.1 Concrete in floor

The surface where the trimix concrete method of laying the floor is to be adopted, shall be thoroughly cleaned of all dust, loose particles etc. It shall then be wetted to have just a moist surface & sprinkled with cement slurry. Then two side track rails on which leveling beam & a surface vibrator be mounted, shall be erected to proper/desired levels & gradient as to have the specified thickness of concrete. A stop ends then be placed at the starting end. Both track rails & stop ends should be preferably of mild steel. The concreting then be started with desired/specified grade of concrete. However, it is advisable to use M20 grade concrete minimum for better final results. The placing of machine mixed concrete begins from starting end & is continued to horizontal manner. Poker vibrators will be used to vibrate the laid concrete thoroughly with minimum 50 mm dia. needles. On completion of laying of approximate 5/6 m2 area the surface vibrator then be run over the concrete surface to achieve better overall compaction of concrete. This process is continued & the surface vibrator be run the second time along with leveling beam on the finished concrete surface.

Then the vacuum mat be placed on this leveled concrete & the excess water from the concrete is sucked off. A time of approximate 1.5 to 2.0 minutes per centimeter thickness of concrete slab is normally adopted for vacuum treatment. However, care to be taken at this stage is curling at ends due to excess use of vacuum mats. Immediately thereafter normal floating operation should begin or if special topping is specified then the same is worked into the concrete surface

with the float disc. The floater suggested here are power operated skin floaters. The floating is continued till desired finish is obtained. The curing of the surface shall be done by ponding method for at least 15 clear days prior to putting the surface to use. M.S. reinforcement 8 dia. at 250 mm c/c both ways shall be placed in concrete approx. 50 mm below the top surface of concrete. This mesh shall be for individual panels formed by side construction joint & expansion joint.

5.5.12.6.2 Joints in floor and sealing

- i. The Construction joints in concrete shall be spaced at approx. 40 m² area and /or as per item & will be made by sawing the already laid & finally cured concrete to obtain 3 mm to 4 mm by 30 mm to 40 mm deep joints. These joints shall be cleaned of all dust & be filled in with clear sand 3 mm by 26 mm to 36 mm deep & then the top be sealed properly by polysulphide joint sealant approx. 3 mm to 4 mm by 4 mm deep.
- ii. The Expansion joints shall be spaced at approx. 120 m² area and/or as per item & shall constitute formation of 20 mm to 25 mm clear joint between the two concrete. This joint be formed by placing the Shalitek board in position against the old concrete leaving 20 mm x 10 mm joint at top, which shall be filled in by polysulphide joint sealant.

5.5.12.6.3 HEAT RESISTANCE ON COMPLETE TERRACE & PORCH

5.5.12.7 FALSE CEILING /

- i. Different type of ceiling tiles shall have smooth laminated visual with Humidity Resistance (RH) of 95%, NRC 0.85 – 0.95 (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz) as per ASTM C423 standard, , Light Reflectance $\geq 85\%$ as per ASTM E-1477, Colour Black, Fire Performance of Class 0/1 as per BS 476 Part 6/7 complete in all respect as per direction given by the Engineer-In-Charge.

5.5.8 QUALITY ASSURANCE & QUALITY CONTROL

Testing of all materials and works as mentioned in the JDA/PWD publications or stipulated in the codes or as directed by the Engineer shall be carried out by the Contractor and test reports shall be submitted regularly to the Engineer for his perusal. The Contractor is to notify the Engineer the program of such tests well in advance, so that such tests, either conducted in his own laboratory, laboratory established at the site or any accredited laboratory or at Manufacturer's place can be witnessed by him / his representative or Third Party, if appointed by the Procuring Entity. Also establish an office for uses of client at site.

The Contractor is to abide by the stipulations/clauses appearing in the QA & QC Manual published by the JDA/PWD.

SECTION-IV

PROCURING ENTITY'S REQUIREMENTS

MEP WORKS

INDEX

[A] ELECTRICAL& MECHANICAL SUMMARY

- 1 GENERAL SCOPE OF WORK
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- 12 SOLAR POWER PLANT
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- 14 FIRE ALARM SYSTEM
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1.0 GENERAL SCOPE OF WORKS:-

Scope of work covers planning, designing, supply, installation, testing and commissioning of all E & M services such as Electric Sub-Station, D.G. Sets, External Lighting, Fire alarm, Solar Power, Lightning arrestor, drinking water cooler, reverse osmosis plant, required to be provided in the said scheme as per norms of various IS codes/ NBC 2016 / JDA specifications /ECBC/CEA, various bye laws and norms of local bodies. The work shall be executed as per scope & specifications of E & M works given hereafter and given in respective head / part of the scheme sub-head. If any services required to make the bldg. / scheme habitable is not covered in the scope of work, interior and services same shall either be pointed out in pre-bid meeting else, it shall be presumed that the same shall be provided within the quoted cost and nothing extra shall be paid on this account.

The scope of works also covers the preparation of layout plans, drawings for E&M schemes before the commencement of work. During execution, if the local bodies etc. require a modification, the same shall be executed without any extra cost. Finally, after execution, approvals/NOCs/clearances from local bodies etc. shall be the responsibility of successful bidder for which nothing extra is payable in case any modification / extra work is required. All statutory fees/charges required for obtaining clearances from CEA/Local Bodies shall be paid by the agency.

Power supply required for construction shall have to be arranged by the bidder at his own costs i/c required for testing & commissioning. Water required for testing of equipment's is also in scope of agency.

2.0 GENERAL:-

These additional terms & conditions are applicable to all the E & M works. The Agency shall submit within 45 days after award of work an undertaking from the OEM of lift and DG sets that they shall unconditionally support the lowest tenderer / JDA technically throughout the execution of contract as well as for Maintenance/Comprehensive Maintenance Contract for the useful life of the system, and

OEM shall provide all the spares required for healthy functioning of the equipment for at least seven years from the date of supply of equipment

The agency must study specifications and conditions carefully. The work shall be executed in close coordination with the progress of building work.

The order of preference in case of any discrepancy shall be as following:

Scope of work specifications and condition, additional conditions mentioned in this document.

JDA Specifications for civil and electrical as applicable.

Indian Standard Specifications of BIS including modifications /amendments. Relevant Sections of National Building Code 2016 with up-to-date amendments.

Sound engineering practice as per directions of the Engineer-in-Charge. All equipments shall be delivered with (i) manufacturer's test certificate, (ii) manufacturer's technical catalogues, and installation/instruction (O&M) manuals.

Scaffolding & any other T&P required for execution of work shall be arranged by the bidder and nothing extra shall be payable on that account. The layout plans/drawings/ other documents pertaining to E&M services shall have to be submitted for evaluation & approval, within 45 days of award of work.

Statutory fees required to be deposited for processing the case, shall be borne by the agency.

3.0 INSPECTION BEFORE DISPATCH:-

All routine tests shall be conducted before dispatch of equipment's. No equipment shall be dispatched from the manufacture's premises without such tests being conducted and test result recorded. These test certificates shall be given along with the supply of equipments. The JDA shall, if he so desires inspect and witness the pre-delivery tests. For this purpose, the agency shall give 15 days' notice. Agency shall arrange for inspection by the department. Agency shall bear expenses of JDA officials for inspection as far as traveling, boarding and / lodging is concerned. However, waiver if any, for inspection shall be at the discretion of the department without any cost implication but routine test & type test certificates shall have to be submitted for equipments.

Prior to dispatch, all equipments shall be adequately protected & insured for the whole period of transit, storage and erection against corrosion and incidental damages etc.

4.0 INSURANCE:-

The agency shall include storage cum erection insurance including third party insurance right from the storage to commissioning of various equipments with beneficiary as Engineer In-charge. All insurance which the agency is required to enter under the contract shall be effected with any authorized general insurance company and the agency shall produce the policies of insurance.

5.0 REMEDY OF FAILURE TO INSURE:-

If the agency fails to effect and keep in force the insurance referred to in the preceding sub-clause the department may affect and keep in force any such insurance and pay such premium as may be necessary for that purpose and from time to time deduct the amount, so paid by the department, from any money due or which may become due to bids or recover the same as debit from the agency bill.

6.0 QUALITY OF MATERIAL AND WORKMANSHIP:-

All parts of the equipment shall be of such design, size and material to function satisfactorily under all rated conditions of operation. All components of the equipments shall have adequate factor of safety. The work of fabrication and assembly shall conform to sound engineering practice. The mechanical parts subject to wear and tear shall be easily replaceable type. The construction of the equipments shall be such as to facilitate effortless operation, inspection, maintenance and repairs. All connections and contacts shall be designed to minimize risk of accidental short circuits caused by animals, birds and vermin etc. All identical items and their component parts should be completely, interchangeable including spare parts.

7.0 INSPECTION AND TESTING AT SITE:-

The installation shall be subject to necessary inspection during every stage of erection, by the JDA or his authorized representative. The successful bidder shall provide all facilities and assistance for the purpose.

The completed installation shall be inspected and tested by the JDA in the manner as will be laid down by him in consultation with the agency.

All instruments and facilities necessary for the tests shall be provided by the agency. All expenses regarding testing and inspection shall be borne by the agency.

8.0 COMPLETENESS OF WORK:-

The installations shall be completed in all respects and put in to operation even where certain details have not been mentioned/ left out in these specifications. Any discrepancy may be brought out in pre-bid meeting.

All E&M services such as External Electrical installations, Addressable fire alarm system, DG sets, Solar cctv etc shall be considered for declaring complete by the Engineer in Charge after trial run of 1 month. However, operation and maintenance of these installations during the maintenance / defect liability period of 60 months shall be carried out by the agency. 5 years warranty certificate will be provided by the agency of all the electrical items.

All electrical & mechanical fittings / fixture / appliances, to be provided for the work, should have latest minimum 3-star rating (of BEE) as available in market. Since, the proposed construction is for 3-star GRIHA rating, all fittings and fixtures shall be provided which suits to the GRIHA rating.

9.0 EXTERNAL LIGHTING (STREET, HIGH MAST POLE LIGHT ETC.):

Traditional Decorative Electrical Poles in coherence with architecture design of Vidhan Sabha with green rated LED luminaries shall be used for road and pathway lighting, decorative poles, down lighters, bollard for park lights and other fixtures as per the design presented by contractor subject to approval by JDA. Road lighting & park lighting shall be energized through U.G. cables. The road lighting and park lighting shall be controlled through main feeder pillars & various subfeeder pillars to cover the road & park lighting network.

DESIGN

External lighting shall be provided conforming to IS 1944 (Part- 1 & 2) 1970, National Building Code: (2016) & National Electrical Code-2005 with up to date amendment. Final approval must be taken from JDA.

CLASSIFICATION

The classification of lighting installations in public thoroughfares is based on volume, speed and composition of the traffic using them. It is left to the local engineer to decide upon the category of the lighting for the given road.

GENERAL PRINCIPLES

Aims of Lighting Installations Circulation Pathways - The aim of lighting along pathways is to permit users of the pathways at night to move about with greatest possible safety and comfort, and to enhance the aesthetics of the building without compromising upon the visual comfort of the residents and micro climate's living organism. Towards this end consideration has to be given while designing the lighting on pathways junctions and pedestrian crossings so that these can be easily identified by the residents:

The level of illumination of the junction should be substantially different from the near by roads. The Junctions may be lighted by either of the following methods:

A) Higher level of illumination – In case this scheme is adopted the level of illumination should be 150 percent of that of the pathways.

B) Change in height of columns – The size of columns adopted at the junction should be higher than those adopted on roads as per relevant code and standards.

GUIDELINES FOR SPECIFICATIONS

Several factors contribute to good lighting and these are enumerated for guidance in various parts of IS: 1994 * recommendations are made on the various components of design of lighting installation and those required detailed calculations of the level and uniformity of illumination on the Pathway surface and of glare. Several criteria may not be satisfied for want of data such as characteristics of surface, etc to get some idea of the extent to which the installation would perform, it may be preferable to mark a temporary trial installation of a

few luminaries on as stretch of pathways to be lighted. Table 6 to 7 gives a summary of recommendations on the various types of thoroughfares. These shall be used as ready reckoners, though for a detailed guidance reference should be made to the relevant part of IS:1994*

Note—Recommendations for Groups C, F and G lighting are under consideration.

TABLE-6 LIGHTING INSTALLATION IN PATHWAYS

S.N	Description	Std.to follow
1.	Average level of illumination on road surface Lux	8
2.	Ratio minimum/ average illumination ratio	0.3
3.	Transverse variation of illumination, percent Preferred	20
4.	Type of luminaries Preferred Permitted	Cut-off Semi-Cut-off Non-cut-off
5.	Mounting height, m	7.5-9
6.	Maximum spacing of Luminaries height ratio	Cut-off=3 Semi cut off=3.5 Non-Cut-Off=4

Note: 3 – Mounting heights less than 7.5 m are undesirable except in special cases, such as roads bordered by trees.

TABLE-7 LIGHTING INSTALLATION IN PATHWAYS

S.No.	Description(1)	Remarks(2)
A	Grade Separated Junctions	
i.	Lighting by conventional street lighting technique.	
1)	General Principles	As in IS:1944(part-1 &2)-1970*
2)	Mounting height, M	10-12
3)	Luminaire	Cut-off
4)	Light sources	LED
ii.	Lighting by High-mast lighting	
1)	Minimum Service Level Value (Lux)	30
2)	Uniformity Ratio $\frac{E_{min}}{E_{avg}}$	0.4
3)	Height of masts, m	Not less than 20
4)	Choice of Luminaire	See IS:1944(Parts 1&2)-1970*

Code of practice for lighting of public thoroughfares: part 1 General principles.

10.0 SUB STATION WORK (TRANSFORMER & DG):-

11/0.433 KV substations will be installed at outside the main building:-

- a) Oil type transformer
- b) HT Panel (VCB)
- c) LT panel with withdraw able type ACBs, MCCBs.
- d) Essential Supply Panel.
- e) Power factor improvement panel (Thyristor based)
- f) HT Panel (for ring main)
- g) Earthing
- h) Safety requirements

From LT Panels (Non-Essential & Essential) nos. of feeder cables shall be laid for meter rooms/risers, feeder pillars for external lighting & main panels of E&M Services.

Design of substation will be based on relevant IS Codes in accordance with Loading as per NBC. Scheme of sub stations shall be as per approval of JVVNL.

General Guidelines for calculating total installed capacity of substations (KVA) are given below.

The electrical load shall be worked out as per NBC and Relevant IS code or as per JVVNL norms and must be got approved by JDA.

Building Diversity Factor—as per NBC and Relevant IS Code.

Power Factor for calculating KVA load = as per NBC and Relevant IS Code

Transformer Loading Factor—as per NBC and Relevant IS Code

Future Expansion taken should be 10%

Transformer stand by capacity should be minimum 33%

1. Common services

- I. All Lifts
- II. Ventilation System(Liftlobby, Liftwell&fireshaft)
- III. (Normal+Fire)
- IV. Basement & Parking –Minimum 1.25KW/1000Sq.ft(Lighting&Powerload)
- V. Fire Fighting Pumps
- VI. Water Supply Pump
- VII. STP
- VIII. Common Area(StairCase, Lobby)Light&Power
- IX. Street Lighting

Diversity factor–0.6 Power Factor– 0.8 Loading Factor–0.8

The rating of transformers shall not be less than 1250 KVA. Final approval must be taken from JDA.

REFERENCE IS CODE

11KV Breaker for MV Distribution network shall be vacuum circuit breaker type with minimum 350 MVA short circuit breaking capacity and conforming to IEC62271-100.

Distribution Transformer (11/0.433KV) shall be either oil type or Dry cast Resin type depending upon location of sub-station/Transformer.

Oil type Distribution Transformer (11/0.433KV) shall conform to IS1180-Part-I (Energy Efficiency Level-2).

Air Circuit Breaker, moulded case circuit breaker shall confirm IS-13947-1, Miniature circuit Breaker shall confirm to IEC/60947-2 or IS 8828.

SCOPE OF DIESEL GENERATING SET

This specification covers the requirements of design, manufacture, assembly, testing, packing and forwarding, transportation, erection and commissioning of following DG Set.

2 Nos. 500 KVA, 430V D.G. Set (Outdoor) with base frame, battery & battery charger & fuel tank.

D.G control panels with required switchgear & protection. Generator control unit (GCU) shall be included in panel to provide control for AMF operation.

Acoustics enclosure to restrict the vibration level to 70db at 1mtr distance from the DG set.

Flue gas ducting with silencer in IS 2002, 6mm thick. (Or A106 Gr. B., Sch 40) SS 304 bellow, lightly resin branded mineral wool, 100mm thick with 22g Aluminium cladding and exhaust chimney. Length of chimney shall be as per local regulations.

All statutory approvals such as local supply co. and pollution control board NOC and approval of electrical inspector for installation drawings and installation work from Electricity Department, Pollution Control Board etc.

Earthing grid for DG and panel, earth pits in scope of contract.

All civil work, power cabling etc. shall be in scope of contract.

All piping / hose between Day tank and DG set.

AVM pads (gel filled) for engine and alternator frame mounting.

Site Conditions

	Ambient Temperature	45°C
	Relative Humidity	90%
	Altitude above MSL	Not more than 1000 mtrs. from MSL
	Atmosphere	Industrial / Polluted

Electrical System

	Nominal Voltage	430 V $\pm$ 10%
	Frequency	50 Hz. $\pm$ 3%
	No. of Phases	3 Phase, 4 wire

Standards

The diesel engine, the alternator and accessories shall comply with the latest editions of the relevant Standards & codes as below but not limited to the following.

1	Diesel engine	ISO 3046/1/DIN 6271/BS-5514/BS-649.
2	Alternator	BS 2613/IS 4722
3	Control Panel	IS 4237

Generating Set

	Quantity	2 Nos.
	Rating	500 KVA at 0.8 P.F. at 45°C
	Voltage	430 Volts/3 phase/4 Wire
	Frequency	50 Hz.
	Duty	24 Hours, Continuous

11.0 MISCELLANEOUS WORK

A) DRINKING WATER COOLER

Self contained drinking water cooler with energy efficient hermetic sealed type compressor, non cFC refrigerant suitable for operation on 230v/1pH/50Hz ac supply, Full stainless steel [S304] body and tank, stainless steel water tray, minimum two nos faucets and suitable drainage system complete in all respect with 300mm height MS fabricated and painted platform. complete in all respect of the following capacity

cooling capacity 150 Ltr./Hr. and storage capacity 150 Ltrs

cooling capacity 80 Ltr./Hr. and storage capacity 120 Ltrs
--

B) REVERSE OSMOSIS PLANT

RO water system with Filtration stage = Particulate filter-Membrane life enhancer filter - sediment filter - Pre carbon filter -RO Membrane filter - Post carbon filter, Input power Rating - 230 v AC , 50 HZ, Percentage of Rejection TDS - 90% or better having following features (a) Double purification by RO with ESS or latest technology with TDS indicator.(b) Spin welded RO Membrane Housing to prevent tempering. (c) Push fit components for leak proof performance (d) Fully automatic operation with auto start and auto off. (e) SS/ABS construction for corrosion free lifespan. (f) Equally suitable for water from all bore wells, overhead storage tanks, water tankers and even municipal taps.(g) RO Membrane Flushing - Auto Flush @ Every Start, Every Stop and every One Hour of working for one minute. complete in all respect with following capacity

i) Purification capacity- 50 LPH, Duty Cycle 270-500 liters/day

ii) Purification capacity- 25 LPH, Duty Cycle 170-250 liters/day

C) LIGHTNING ARRESTER

Early streamer Emission type lightning arrester on GI mast with air terminal configured as spheroid which is comprised of separate electrically isolated 4 panels surrounding an earthed central finial, the terminal shall be tested by CPRI for impulse current of 45 kA (8 / 20 Sec) with 5 positive & 5

negative impulse, the arrester having following protection radius at level 1 (15-32Mtr.), conductor of 70 Sq.mm single core insulated flexible copper cable with accessories as required.

D) RUBBER MATS FOR SUBSTATION

Rubber mat shall be provided in front to cover the full length of all panels. Where back space is provided for working from the rear of the panel, rubber mat shall also be provided to cover the full length of panel.

3.3 KV, 2 mm thick with proof voltage 10 KV / 3 min. and Break Down Voltage 30 KV

11 KV, 2.5 mm thick with proof voltage 22 KV / 3 min. and Break Down Voltage 45 KV

12.0 RAIN WATER HARVESTING:-

Rain water harvesting system to be designed in accordance with requirement of following codes and standards:

- i) Unified Building Bylaws.
- j) Manual on -Rain Water Harvesting & Conservation by Govt. of India, Central Public Works Department (CPWD), New Delhi, June 2002.
- k) Guidelines from Central Ground Water Board – Ministry of Water Resources, Govt. of India.
- l) Part -A National Building Code of India 2016

Following parameters to be considered for planning rain water harvesting.

- Rain water harvesting tanks / recharging wells to be designed for 15 minutes rainfall of peak rain fall considered as 90 mm/hr as per rain water harvesting manual.
- Rainwater recharging wells with boreholes shall be as per NBC-2016.

PROPOSED STORM WATER DRAINAGE SYSTEM

The system to be proposed after studying the site conditions and considering the following factors:

- The slope pattern of site terrain.
- The existing conditions of site and surrounding.
- The final levels and patterns of different type of roads.
- The need for incorporation of rain water harvesting with in the site area.
- Final disposal to external drainage system as per site.

Planning of drainage system shall be as follows:

- i) The rainwater from the terraces and related clean paved areas of individual Buildings shall be collected in the collection chambers and shall be ultimately connected to the main storm-water drainage system.
- ii) The network of storm water system shall be mostly catch basins and RCC pipe network, as per requirements.
- iii) For Roof Drainage: Rain water pipes for roof drainage shall be designed as per NBC-2016, Table-23 of Part-9
- iv) For design of storm water drainage system, 25 mm/hr average rainfall will be considered.

For surface and sub-

surface drainage of the basement area, and for disposal of the rainwater pipes coming from the terraces, a minimum average fill of 750 mm shall be required, ranging 900mm all-around to 600mm at the edge of the basement retaining wall. This is recommended with a view to dispose the storm water drainage through the catch-basins and pipes system, to the external main stormwater network, without entering inside the basement.

Parameters for Rain water Calculations

(I) Areas

Total area of the Site... As per Site m²
 Terrace/Roof area... As per Site m²
 Paved/Pavement/Road area... As per site m²
 Greens/Landscaped/Lawn areas... As per site m²

(II) Intensity of rainfall

25 mm/hr average rain fall will be considered for design of storm water drainage system.

(I) Co-efficient of run of factors to be adopted

Type of catchment	Coefficients
Roof catchments	
- Tiles	0.8-0.9
- Corrugated metal sheets	0.7-0.9
Ground surface coverings	
- Concrete	0.6-0.8
- Brick pavement	0.5-0.6
Untreated ground catchments	
- Soil on slopes less than 10 percent	1.0-0.3
- Rocky natural catchments	0.2-0.5

(II) Co efficient for Calculation for Capacity for Collection Wells for Harvesting

Peak Hourly rain fall as per rain water Harvesting manual—90mm/h

Retention time for capacity of Recharge Tank-- 15 Minute

13.0 SOLAR PHOTOVOLTAIC POWER PLANT:-

Ongrid Solar Photovoltaic Power Plant conforming to MNRE specifications as amended, consisting of Mono/Poly Crystal line silicon solar cells, net metering facility, necessary protections, earthing, mounted

on Aluminium/ GI structure of suitable strength with following components complete as required:- A) Solar Photovoltaic Module of capacity 330W or above, manufactured in India, conforming to IS14286/ IEC61215, IS/IEC61730-Part-1, IS/IEC61730- Part-2. Solar Photovoltaic Module conversion efficiency shall not be less than 16.5%. PV modules used in solar power plants/systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years. B) Power Conditioning Unit (PCU) of 350-800VDC Input voltage range and 400VAC, three phase, 4 wire, 50Hz $\pm$ 2.5Hz, output voltage suitable to generate AC Power with efficiency not less than 97%, total harmonic distortion less than 3% and suitable for ambient temperature from 0 to 50 degree C. The PCU shall adjust the voltage and frequency level to suit the Grid Voltage Frequency. C) Data Monitoring System complete with accessories. D) Fixing of Array junction box & Main junction box with IP65 protection and termination arrangement for incoming and outgoing cable along with glands, lugs and other accessories etc. as required. E) Lightning and surge voltage protection. F) Connections & Interconnections by supplying & fixing required size XLPE insulated copper conductor 1.1kV grade armoured power and control cables between solar modules, main power cable to grid supply PCU unit along with supplying & fixing of necessary channel/ conduit lugs and other accessories etc. as required.

14.0 FIRE DETECTION & ALARM SYSTEM:-

Fire detection & alarm system in building shall be designed and provided as per NBC-2016 (Part-IV, Fire & Life Safety)

Each floor shall have addressable monitor modules which will link microprocessor controlled addressable main panel of each tower/buildings. Detectors in common area shall be intelligent type.

Fire detection & alarm system in non-residential buildings shall be designed and provided as per NBC-2016 (Part-IV, Fire & Life Safety).

Valves & Accessories:-

PN rating of all valves and accessories shall be selected as per application. All valves shall have supervisory switch with signaling to fire alarm panel.

Monitoring by Fire Alarm Panel:-

Automatic Fire Alarm System shall be provided. The Fire Alarm System Panel shall also monitor the following in addition to its own function.

- i. Sprinkler Flows switches.
- ii. Water Level in Fire tanks both under ground and terrace tanks.
- iii. Hydrant & Sprinkler Pressures of all zones.
- iv. Pump ON/OFF Status.
- v. Open/ Close status of isolation valves with supervisors switch.

15.0 IP BASED SURVEILLANCE SYSTEM

A) DOME CAMERA

2 Megapixel Fixed Lens Camera IR Dome Type: 1/2.8" Progressive Scan CMOS, 1920 × 1080 at 25fps, 2.8mm Fixed lens, 0.028 Lux at F1.2, ICR, ONVIF, support H.265, H.264, MJPEG, 120db WDR, 3D Digital Noise Reduction, Three individually configurable stream, 12 VDC & PoE, IR range: 40m, Support on-board storage up to 128 GB (SD card not included), IP67, IK10, Edge Analytics- Line crossing detection, Intrusion detection, Motion detection, Scene change detection, video tampering, UL, CE, FCC certified.

B) BULLET CAMERA

2 Megapixel Fixed Lens Camera IR Bullet Type: 1/2.8" Progressive Scan CMOS, 1920 × 1080 at 25fps, 2.8 mm Fixed lens, 0.01 Lux at F1.2, 0 Lux with IR, ICR, ONVIF (PROFILE S, PROFILE G), support H.265, H.264, MJPEG, 120db WDR, 3D Digital Noise Reduction, Three individually configurable stream, 12 VDC & PoE, IR range: 40m, Support on-board storage up to 128 GB (SD card not included), IP67, Edge Analytics- Line crossing detection, Intrusion detection, Motion detection, Scene change detection, Video tampering, UL, CE, FCC certified.

NVR 32 Channel, NVR 16 Channel & NVR 8 Channel: Connect Up to 32 IP Cameras, Dual OS, Up to 8 Megapixels Resolution, HDMI output with 4k output and VGA output with 2MP Output, Support H.265, H.264, MJPEG, Incoming Bandwidth 256 Mbps, 4 SATA Hard Disks, ANR Technology, 4 SATA interfaces for 4 HDDs and capacity of each HDD upto 6TB, 2 USB at least 1 × USB with 3.0, Serial interface: 1 RS-485, 1 RS-232, Alarm I/O 16/4, 2 RJ-45 10 /100/1000 Mbps self-adaptive Ethernet interface, Multiple network monitoring: Web viewer, CE, FCC, UL certified.

Also required all accessories like Port Network Switch Gigabit POE, connector, hard disk, server rack, extension cord, wireless mouse, led tv, cat-6 cable for cameras etc.

Section VA

General Conditions of Contract

("Copy of appendix XI of PWF&AR, Govt. of Rajasthan effective from 01.07.99 and subsequent addendum dated 19.03.2001 & 29.03.2001 and other amendments up to date. In case of any typographical error or omission or alteration the original version of the same shall be valid.")

DEFINITIONS

The "Contract" means the documents forming the bid and acceptance thereof and the formal agreement executed between the Jaipur Development Authority and the Contractor, together with the documents referred to therein, including these conditions, Notice inviting Bids, Instructions to Bidders, Special Conditions of Contract, Specifications, Drawings and Designs, Tender and other information submitted by the Contractor and instructions issued from time to time by the Engineer-in-charge and all these documents taken together shall be deemed to form one contract and shall be complementary to another.

In the contract the following expressions shall, unless the context otherwise requires, have the meanings herein respectively assigned to them:-

The "WORKS OR WORK" shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by, or by virtue of the contract contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional.

The "SITE" shall mean the land an/or the other places on, into or through which work is to be executed under the contract, or any adjacent land, path or street, through which work is to be executed under the contract, or any adjacent land, path or street, which may be allotted or used for the purpose of carrying out the contract.

The "CONTRACTOR" shall mean the individual or firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representatives of such individual or the persons composing such firm or company, the successor of such firm or company and the permitted assign of such individual or firm or company.

The "ENGINEER-IN-CHARGE" shall mean the Executive Engineer In charge of Jaipur Development Authority who shall supervise and be in-charge of the work.

The "GOVERNMENT DEPARTMENT" shall mean the Jaipur Development Authority (JDA).

The "Accepting Authority" shall mean Executive Committee of Jaipur Development Authority.

The "Director" or "Chief Engineer" shall mean Director (Engineering-III) of Jaipur Development Authority.

The 'Superintending Engineer' shall mean the Superintending Engineer-VI of Jaipur Development Authority.

"ESTIMATED COST" shall mean the cost of the work or works as estimated on the basis of the TENDERED rate or rates agreed to between the parties to the contract.

Where the context so requires, words importing the singular only also include the plural and vice-versa. Any reference to masculine gender shall wherever required include feminine gender and vice versa.

Headings and marginal notes to these General Conditions of Contract shall not be deemed to form a part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.

The clause 23 of condition of contract under section 2 of GCC i.e. standing committee for settlement of disputes is read as:

If any question, difference or objection, whatsoever shall arise in any way, in connection with or arising out of this instrument, or the meaning of operation of any part thereof, of the rights, duties or liabilities of either party men, save in so far, as the decision of any such matter, as herein before provided for, and been so decided, every such matter/ constituting a total claim of Rs. 50,000/- or above, whether its decision has been otherwise provided for an whether it has been finally decided accordingly, or whether the rights or obligations of the parities, as the result of such termination, shall be referred for decision to the empowered standing committee, which would consist of the followings:

Jaipur Development Commissioner, JDA, Jaipur -Chairman

Director (Engineering), JDA, Jaipur

Director (Finance), JDA, Jaipur

Director (Law), JDA, Jaipur

Superintending Engineer, JDA, Jaipur

The Engineer-in-Charge, on receipt of application along with nonrefundable prescribed fee, (the fee would be two percent of the amount in dispute, not exceeding Rs. One lac) from the contractor, shall refer the disputes to the committee within a period of three months from the date of receipt of application.

Procedure and application form referring cases for settlement by the Standing Committee shall be, as given in form RPWA 90.

GENERAL CONDITIONS OF CONTRACT

("Copy of appendix XI of PWF&AR, Govt. of Rajasthan effective from 01.07.99 and subsequent addendum up to date. In case of any typographical error or omission or alteration the original version of the same shall be valid.")

Clause 1: Security Deposit

"The security deposit @ 3% of the gross amount of the running bill shall be deducted from each running bill and shall be refunded as per rules on completion of the contract as per terms and conditions. The earnest money deposited shall however be adjusted while deducting security deposit from the first running bill of the contractor. There will be no maximum limit of security deposit.

A contractor may, however, elect to furnish bank guarantee or any acceptable form of security for an amount equal to the full amount of security deposit @ 3% of the work order before or at the time of executing the agreement. In that case earnest money may be refunded only after furnishing of the bank guarantee as above. During the execution of the work or after completion of the work also a contractor may replace the security deposit by furnishing bank guarantee for an equal amount. However, during execution of the work if cost of work exceeds as shown at the time of furnishing bank guarantee, balance security deposit shall be deducted from the Running Account Bills."

No Price variation is payable in this contract.

All compensation or other sums of money payable by the Contractor to Government under the terms of his contract may be deducted from or paid by the sale of a sufficient part of his Security Deposit, or from interest arising therefrom, or from any sums, which may be due or may become due to the Contractor by the Government on any account whatsoever, and in the event of his Security Deposit being reduced by reason of any such deduction or sale as aforesaid, the Contractor shall within ten days thereafter, make good in cash or Bank Guarantee of Nationalized/Scheduled bank, as aforesaid, any sum or sums which may have been deducted from or raised by sale of his Security Deposit or any part thereof.

In case of Bank Guarantee of any Nationalized/Scheduled Bank is furnished by the Contractor to the Government, as part of the Security Deposit and the bank goes into liquidation or, for any reason is unable to make payment against the said Bank Guarantee, the loss caused thereby shall fall on the Contractor and the Contractor shall forthwith, on demand, furnish additional security to the Government to make good the deficit.

The liability or obligation of the bank under the Guarantee Bond shall not be affected or suspended by any dispute between the Engineer-in-Charge and the Contractor, and the payment, under the Guarantee Bond by the bank to the Government shall not wait till disputes are decided. The bank shall pay the amount under the Guarantee, without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the Contractor. The demand, so made, shall be conclusive as regards to amount due and payable by the bank, under the guarantee limited to the amount specified in the Guarantee Bond. The guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.

The Bank Guarantee shall remain valid up to the specified date unless extended on demand by the Engineer-in-Charge which shall include the period of completion of the contract and the defect removal period as per terms of the Agreement. Bank's liability shall stand automatically discharged unless a claim in writing is lodged with the Bank within the period stated in the Bank Guarantee including the extended period. After satisfactory completion of the contract and clearance of all dues by the Contractor, the Chief Engineer or duly

authorized Engineer will discharge the Bank Guarantee after expiry of the original or the extended period, as the case may be. In case the date of expiry of the Bank Guarantee is a holiday, it will be deemed to expire on the close of the next working day.

Government is not concerned with any interest accruing to the Contractor on any form of Security (primary or collateral) lodged by him with the bank or any sums payable to sureties obtained by the Bank as counter guarantee to secure its own position. These will be the matters between the Bank and the Contractor.

Clause 2: Compensation for delay

The time allowed for carrying out the work as entered in the tender, shall be strictly observed by the Contractor and shall be reckoned from the 10th day after the date of written order to commence the work is given to the Contractor. If the Contractor does not commence the work within the period specified in the work order, he shall stand liable for the forfeiture of the amount of Earnest Money and Security Deposit. Besides, appropriate action may be taken by the Engineer-in-Charge/competent authority to debar him from taking part in future tenders for a specified period or black list him. The work shall, throughout the stipulated period of completion of the contract, be proceeded with all due diligence, time being essence of the contract, on the part of the Contractor. To ensure good progress during the execution of work, the contractor shall be bound, in all cases in which the time allowed for any work exceeds one month (save for special jobs), to complete 1/8th of the whole of the work before 1/4th of the whole time allowed under the contract has elapsed, 3/8th of the work before 1/2 of such time has elapsed and 3/4th of work before 3/4th of such time has elapsed. If the contractor fails to complete the work in accordance with this time schedule in terms of cost in money, and the delay in execution of work is attributable to the contractor, the contractor shall be liable to pay compensation to the Government at every time span as below: -

A.	Time Span of full stipulated period	1/4th	1/2th	3/4th	Full
B.	Work to be completed in terms of money	1/8th	3/8 th	3/4th	Full
		(Rs.)	(Rs.)	(Rs.)	(Rs.)
C.	Compensation payable by the contractor for delay attributable to contractor at the stage of:	Delay up to one fourth period of the prescribed time span – 2.5% of the work remained unexecuted			
		Delay exceeding one fourth period but not exceeding half of the prescribed time span – 5% of the work remained unexecuted.			
		Delay exceeding half of the prescribed but not exceeding three fourth of the time span – 7.5% of the work remained unexecuted			
		Delay exceeding three fourth of the prescribed time span – 10% of the work remained unexecuted			

Note: In case delayed period over a particular span is split up and is jointly attributable to Government and contractor, the competent authority may reduce the compensation in proportion of delay attributable to Government over entire delayed period over that span after clubbing up the split delays attributable to Government and this reduced compensation would be applicable over the entire delayed period without paying any escalation.

Following illustrations is given: -

First time span is 6 months, delay is of 30 days which is split over as under: -

5 days (attributable to Government) + 5 days (attributable to contractor) + 5 days (attributable to Government) + 5 days (attributable to contractor) + 5 days (attributable to Government) + 5 days (attributable to contractor)

Total delay is thus clubbed to 15 days (attributable to Government) and 15 days (attributable to contractor).

The normal compensation of 30 days as per clause 2 of agreement is 2.5% which can be reduced as $2.5 \times 15/30 = 1.25\%$ over 30 days without any escalation by competent authority.

Note: The compensation, levied as above, shall be recoverable from the Running Account Bill to be paid immediately after the concerned time span. Total compensation for delays shall not exceed 10 percent of the total value of the work.

The contractor shall, further, be bound to carry out the work in accordance with the date and quantity entered in the progress statement attached to the tender.

In case the delay in execution of work is attributable to the contractor, the spanwise compensation, as laid down in this clause shall be mandatory. However, in case the slow progress in one-time span is covered up within original stipulated period, then the amount of such compensation levied earlier shall be refunded. The Price escalation, if any, admissible under clause 45 of Conditions of Contract would be admissible only on such rates and cost of work, as would be admissible if work would have been carried out in that particular time span. The Engineer-in-Charge shall review the progress achieved in every time span, and grant stagewise extension in case of slow progress with compensation, if the delay is attributable to contractor, otherwise without compensation.

However, if for any special job, a time schedule has been submitted by the Contractor before execution of the agreement, and it is entered in agreement as well as same has been accepted by the Engineer-in-charge, the Contractor shall complete the work within the said time schedule. In the event of the Contractor failing to comply with this condition, he shall be liable to pay compensation as prescribed in foregoing paragraph of this clause provided that the entire amount of compensation to be levied under the provisions of this Clause shall not exceed 10% of the value of the contract. While granting extension in time attributable to the Government, reasons shall be recorded for each delay.

Clause 3: Risk & Cost Clause

The Engineer-in-charge or the Competent Authority defined under rules may, without prejudice to his rights against the Contractor, in respect of any delay or inferior workmanship or otherwise, or any claims for damages in respect of any breaches of the contract and without prejudice to any rights or remedies under any of the provisions of this Contract or otherwise, and whether the date for completion has or has not elapsed, by notice in writing, absolutely determine the Contract in any of the following cases:

If the Contractor having been given by the Engineer-in-charge, a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient or otherwise improper or un-workman like manner shall omit to comply with the

requirements of such notice for a period of seven days, thereafter, or if the Contractor shall delay or suspend the execution of the work so that either in the judgement of the Engineer-in-charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion or he has already failed to complete the work by that date,

If the Contractor, being a company, shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager, on behalf of a creditor, shall be appointed or if circumstances shall arise, which entitle the court or creditor to appoint a receiver or a manager or which entitle the court to make a winding up order,

If the contractor commits breach of any of the terms and conditions of this Contract,

If the contractor commits any acts mentioned in, clause 19 thereof.

When the Contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in charge on behalf of the Governor of Rajasthan shall have powers: -

To determine or rescind the contract, as aforesaid (of which determination or rescission notice in writing to the Contractor under the hand of the Engineer-in charge shall be conclusive evidence), upon such determination or rescission, the earnest money, full security deposit of the contract shall be liable to be forfeited and shall be absolutely at the disposal of Government.

To employ labour paid by the Department and to supply materials to carry out the work or any part of the work, debiting the Contractor with the cost of the labour and the price of the materials (of the amount of which cost and price certified by the Engineer-in-charge shall be final and conclusive against the contractor) and crediting him with the value of the work done in all respects in the same manner and at the same rates, as if it had been carried out by the Contractor under the terms of this Contract. The certificate of the Divisional Officer, as to the value of the work done, shall be final and conclusive evidence against the Contractor provided always that action under the sub-clause shall only be taken after giving notice in writing to the Contractor. Provided also that; if the expenses incurred by the Department are less than the amount payable to the Contractor at his agreement rates, the difference shall not be paid to the Contractor.

After giving notice to the contractor to measure up the work of the contractor and to take such part thereof, as shall be unexecuted out of his hands, and to give it to another contractor to complete, in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him (of the amount of which excess, the certificate in writing of the Engineer-in-charge shall be final and conclusive) shall be borne and paid by the original Contractor and may be deducted from any money due to him by Government under this contract or on any other account whatsoever, or from his Earnest Money, Security Deposit, Enlistment Security or the proceeds of sales thereof, or a sufficient part thereof, as the case may be. In the event of any one or more of the above courses being adopted by the Engineer-in-charge, the Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of contract. And, in case action is taken under any of provisions aforesaid, the Contractor shall not be entitled to recover or be paid, any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-charge has certified, in writing, the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified.

Clause 4: Contractor remains liable to pay compensation, if action not taken under clause 3

In any case in which any of the powers conferred by clause 3 hereof, shall have become exercisable and the same shall have not been exercised, the non-exercise, thereof, shall not constitute waiver of any of the conditions hereof, and such power shall, notwithstanding, be exercisable in the event of any future case of default by the Contractor for which, by any clause or clauses hereof, he is declared liable to pay compensation amounting to the whole of his Security Deposit /Earnest Money/Enlistment security and the liability of the Contractor for past and future compensation shall remain unaffected.

Powers to take possession of, or require removal, sale of Contractor's plant

In the event of the Engineer-in-Charge putting in force, powers vested in him under the preceding Clause 3 he may, if he so desires, take possession of all or any tools, plants, materials and stores, in or upon the works or the site, thereof or belonging to the contractor or procured by him and intended to be used for the execution of the work or any part thereof, paying or allowing for the same in account, at the contract rates or, in case of these not being applicable, at current market rates, to be certified by the Chief Engineer or duly authorized Engineer (whose certificate thereof, shall be final and conclusive), otherwise the Engineer-in-Charge may, by notice in writing to the contractor or his clerk of the works, foreman or other authorized agent, require him to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice), and in the event of the contractor failing to comply with any requisition, the Chief Engineer or other duly authorized Engineer may remove them at the contractor's expenses, sell them by auction or private sale on account of the Contractor and at his risk in all respects, and the certificate of the Chief Engineer or other duly authorized Engineer, as to the expense of any such removal, and the amount of the proceeds and expense of any such sale shall be final and conclusive against the Contractor.

Clause 5: Extension of time

If the contractor shall desire an extension of the 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 within 30 days of the date of the hindrance, on account of which he desires such extension as aforesaid, and the Authority Competent to grant extension under the rules/delegations of power or other duly authorized Engineer shall, if in his opinion, (which shall be final) reasonable grounds be shown therefore, authorize such extension of time, if any, as may, in his opinion, be necessary or proper, if the period of completion of contract expires before the expiry of the period of one month provided in this clause, the application for extension shall be made before the expiry of the period stipulated for completion of the contract. The competent authority shall grant such extension at each such occasion within a period of 30 days of receipt of application from contractor and shall not wait for finality of work. Such extensions shall be granted in accordance with provisions under clause (2) of this agreement.

Clause 5 A: Monthly Return of Extra Claims

Contractor has to submit a return every month for any work claimed as extra. The Contractor shall deliver the return in the office of the Executive Engineer and obtain Receipt Number of the Receipt Register of the day on or before 10th day of every month during the continuance of the work covered by this contract, a return showing details of any work claimed as extra by the contractor which value shall be based upon the rates and prices mentioned in the contract

or in the Schedule of Rates in force in the District for the time being. The contractor shall be deemed to have waived all claims, not included in such return, and will have no right to enforce any such claims not included, whatsoever be the circumstances.

Clause 6: Final Certificate

On completion of the work, the contractor shall send a registered notice to the Engineer-in-charge, giving the date of completion and sending a copy of it to the officer accepting the contract, on behalf of the Governor and shall request the Engineer-in-charge to give him a certificate of completion, but no such certificate shall be given nor shall the work be considered to be complete until the contractor shall have removed from the site on which the work shall be executed, all scaffolding, surplus materials and rubbish and cleared off the dirt from all wood work, doors, walls, floors, or other parts of any building in, upon or about which the work is to be executed or of which he may have possession for the execution thereof, he had filled up the pits. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and cleaning off dirt and filling of pits on or before the date fixed for completion of the work, the Engineer-in-charge may, at the expense of the contractor, remove such scaffolding, surplus materials, and the rubbish and dispose of the same, as he thinks fit, and clean off such dirt and fill the pits, as aforesaid, and the contractor shall forthwith pay the amount of all expenses, so incurred, and shall have no claim in respect of any such scaffolding or surplus materials, as aforesaid, except for any sum actually realized by the sale thereof. On completion, the work shall be measured by the Engineer-in-charge himself or through his subordinates, whose measurements shall be binding and conclusive against the contractor. Provided that, if subsequent to the taking of measurements by the subordinate, as aforesaid, the Engineer-in-charge had reason to believe that the measurements taken by his subordinates are not correct, the Engineer-in-charge shall have the power to cancel the measurements already taken by his subordinates and acknowledged by the Contractor and to take measurements again, after giving reasonable notice to the Contractor, and such re-measurements shall be binding on the Contractor.

Within thirty days of the receipt of the notice, Engineer-in-charge shall inspect the work and if there is no visible defects on the face of the work, shall give the Contractor, a certificate of completion. If the Engineer-in-charge finds that the work has been fully completed, it shall be mentioned in the certificate so granted. If, on the other hand, it is found that there are certain visible defects to be removed, the certificate to be granted by Engineer-in-charge shall specifically mention the details of the visible defects along with the estimate of the cost for removing these defects. The final certificate of work shall be given after the visible defects pointed out as above have been removed.

Clause 7: Payment on Intermediate Certificate to be regarded as advance

No payments shall be made for works estimated to cost less than rupees twenty-five thousand, till after the whole of the works shall have been completed and a certificate of completion given. But in the case of works estimated to cost more than rupees twenty five thousand, the Contractor shall on submitting the bill therefore, be entitled to receive a monthly payment proportionate to the part, thereof, then approved and passed by the Engineer-in-charge, whose certificate of such approval and passing of sum, so payable, shall be final and conclusive. Running Account Bill shall be paid within 15 days from presentation. But all such intermediate payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed, and shall not preclude the requiring of bad, unsound and imperfect or unskillful work to be removed and taken away and re-constructed or re-erected, or considered as an admission of the due

performance of the contract, or any part thereof, in any respect, or the accruing of any claim, nor shall it conclude, determine, or effect in any way the powers of the Engineer-in-charge under these conditions or any of them to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be made/submitted by the Contractor within one month of the date fixed for completion of the work, otherwise the Engineer-in-charge's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on all parties.

Clause 7A: Time Limit for Payments of Final Bills

The final bill shall be paid within 3 months on presentation by the contractor after issuance of final completion certificate in accordance with clause 6 of the conditions of contract. If, there shall be any dispute about any item(s) of the work, then the undisputed item(s) only, shall be paid within the said period of 3 months. If a final bill (which contains no disputed item or disputed amount of any item) is not paid within the period of three months from presentation of final bill or 6 months from the date of receipt of registered notice regarding completion of work in accordance with clause 6 of the conditions of the contract, the defects, if any, shall be brought to the notice of the higher authority. The period of 3 months shall commence from the date of rectification of the defects. The higher authority shall ensure that in no case final bill should be left unpaid after 9 months from the receipt of registered notice regarding completion of work. The contractor shall submit a memorandum of the disputed items along with justification in support within 30 days from the disallowance thereof, and if he fails to do so, his claims shall be deemed to have been fully waived and absolutely extinguished.

Clause 8: Bills to be submitted on completion of specified stage of work

In case of Lump Sum contract, bills will be submitted by the contractor on completion of various stages of work as specified in the contract document. The claim as far as admissible, authorized or paid, if possible, before expiry of 10 days from the presentation of the bill. The claims for additions & alterations, if any, may also be included in the bills if their measurements have been recorded and checked.

Clause 8A: Bills to be submitted on completion of specified stage of work

In case of Lump Sum contract, bills will be submitted by the contractor on completion of various stages of work as specified in the contract document. The claim as far as admissible, authorized or paid, if possible, before expiry of 10 days from the presentation of the bill. The claims for additions & alterations, if any, may also be included in the bills if their measurements have been recorded and checked.

Clause 8B: Recovery of Cost of Preparation of the Bill

In case of contractor of class A and AA do not submit the bill within time fixed, the Engineer in Charge may prepare the bill as per the provision of clause 8 of the general conditions of the contract but @ 0.5 % of amount of such a bill shall be made and credited to the general revenue on account of preparation of bill.

Clause 9: Bills to be on printed forms

The Contractor shall submit all bills on the printed forms, to be had on application, at the office of the Engineer-in-charge and the charges in the Bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions, and not mentioned or provided for in the tender, at the rates hereinafter provided for such work.

Clause 9A: Payments of Contractor's Bills to Banks

Payments due to the Contractor may if so desired by him, be made to this Bank instead of direct to him, provided that the contractor has furnished to the Engineer-in-Charge (I) an authorization in the form of a legally valid document, such as a Power of Attorney conferring authority on the Bank to receive payments, and (ii) his own acceptance of the correctness of the account made out, as being due to him, by Government, or his signature on the bill or other claim preferred against

Government before settlement by the Engineer-in-Charge of the account or claim, by payment to the Bank. While the receipt given by such bank shall constitute a full and sufficient discharge for the payment, the Contractor should, whenever possible, present his bill duly receipted and discharged through his Banker. Nothing, herein contained, shall operate to create in favor of the Bank any rights vis-a-vis the Governor.

and stores.

Clause 10: Rejection of materials procured by the Contractor

The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion, are not in accordance with the specifications and, in case of default, the Engineer-in-Charge shall be at liberty to employ other person(s) to remove the same without being answerable or accountable for any loss of damage, that may happen or arise to such materials to be substituted thereof, and in case of default, Engineer-in-Charge may cause the same to be supplied and all costs, which may attend such removal and substitution, are to be borne by the Contractor.

Clause 10B: Penal rate in case of excess consumption

The Contractor shall also be charged for the materials consumed in excess of the requirements calculated on the basis of standard consumption approved by the department, at double of the issue rate including storage and supervision charges or market rate, whichever is higher. A Material Supply and Consumption Statement, in prescribed Form RPWA35A shall be submitted with every Running Account Bill, distinguishing material supplied by the Government and material procured by the Contractor himself. The recovery for such material shall be made from Running Account Bill next after the consumption and shall not be deferred. Certificate of such nature shall be given in each Running Account Bill.

Clause 10 C: Hire of Plant and Machinery

Special Plant and Machinery, required for execution of the work, may be issued to the Contractor, if available, on the rates of hire charges and other terms and conditions as per departmental Rules, as per Schedule annexed to these conditions. Rates of such Plant & Machinery shall be got revised periodically so as to bring them at par with market rate.

Clause 11: Works to be executed in accordance with specifications, Drawings, Orders etc.

The Contractor shall execute the whole and every part of the work in the most substantial and satisfactory manner and both as regards materials and otherwise in every respect, in strict accordance with the Specifications. The Contractor shall also conform exactly fully and faithfully to the designs, drawings (either designed by department or designed by contractor and approved by Engineer-in-charge during additional execution) and instructions in writing relating to the work signed by the Engineer-in-charge and lodged in his office and to which the Contractor shall be entitled to have access at such office or on the site of the work for the purpose of inspection during office hours and the Contractor shall, if he so require, be

entitled, at his own expense, to make or cause to be made copies of specifications and of all such designs, drawings and instructions, as aforesaid. A certificate of executing works as per approved design, specifications etc. shall be given on each Running Account Bill.

The specifications of work, material, methodology of execution, drawings and designs shall be signed by the Contractor and Engineer-in-charge while executing agreement and shall form part of agreement.

Clause 12:

The Engineer-in-charge shall have power to make any alterations, omissions or additions to or substitutions for 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 agreed to do the main work. The time for the completion of the work shall be extended 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. The rates for such additional, altered or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order:

If the rates for the additional, altered or substituted work are specified in the contract for the work, the contractor is bound to carry out the additional, altered or substituted work at the same rates as are specified in the contract for the work.

If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the such rates will be derived from the rates for a similar class of work as are specified in the contract for the work.

If the rates for the altered, additional or substituted work cannot be determined in the manner specified in the sub-clauses (i) to (ii) above, then the rates for such composite work item shall be worked out on the basis of the concerned Schedule of Rates of the District/area specified above minus/plus the percentage which the total tendered amount bears to the estimated cost of the entire work put to tender. Provided always that if the rate for a particular part or parts of the item is not in the Schedule of Rates, the rate for such part or parts will be determined by the Engineer-in-Charge on the basis of the prevailing market rates when the work was done.

If the rates for the altered, additional or substituted work item cannot be determined in the manner specified in sub-clauses (i) to (iii) above, then the contractor shall within 7 days of the date of receipt of order to carry out the work, inform the Engineer-in-Charge of the rate which it is his intention to charge for such class of work supported by analysis of the rate or rates claimed and the Engineer-in-Charge shall determine the rate or rates on the basis of prevailing market rates, and pay the contractor accordingly. However, the Engineer-in-Charge, by notice in writing, will be at liberty to cancel his order to carry out such class of work and arrange to carry it out in such manner, as he may consider advisable. But under no circumstances, the contractor shall suspend the work on the plea of non-settlement of rates on items falling under the clause.

Clause 13: No compensation for alteration in or restriction of work to be carried out.

If, at any time after the commencement of the work the Government shall, for any reason, whatsoever, not require the whole work, thereof, as specified in the tender, to be carried out, the Engineer-in-charge shall give notice, in writing, of the fact to the Contractor, who 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 the work in full but which he did not derive in consequence of the full amount of the work not having been carried out. Neither, shall he have any claim for compensation by reason of alterations having been made in the original specifications, drawings, and design, and instructions, which shall involve any curtailment of the work, as originally contemplated. Provided, that the Contractor shall be paid the charges for the cartage only, of materials actually brought to the site of the work by him for Bonafied use and rendered surplus as a result of the abandonment or curtailment of the work or any portion thereof, and taken them back by the Contractor, provided however, that the Engineer-in-charge shall have, in all such cases, the option of taking over all or any such materials at their purchase price or at local market rates whichever may be less. In the case of such stores, having been issued from Government Stores, charges recovered, including storage charges, shall be refunded after taking into consideration any deduction for claim on account of any deterioration or damage while in the custody of the contractor, and in this respect the decision of the Engineer-in-charge shall be final.

Clause 14: Action and compensation payable in case of bad work

If, it shall appear to the Chief Engineer or any authorized authority or the Engineer-in-charge or his subordinates in-charge of the work, or to the committee of the retired officers/officers appointed by the State Government for the purpose that any work has been executed with unsound, imperfect or unskillful workmanship, or with material of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted, or otherwise not in accordance with contract, the Contractor shall on demand in writing from the Engineer-in-charge, specifying the work/materials or articles complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for, will rectify or remove and reconstruct the work, so specified, in whole or in part, as the case may be, remove the materials or articles, so specified, and provide other proper and suitable materials or articles at his own cost, and in the event of his failing to do so, within a period to be specified by the Engineer-in-Charge in his demand as aforesaid, then the Contractor shall be liable to pay compensation at the rate of one percent, on the tendered amount of work for every week not exceeding ten percent, while his failure to do so shall continue, and in the case of any such failure, the Engineer-in-Charge may rectify or remove and re-execute the work or remove and replace with others, the materials or articles complained of as the case may be, at the risk and expense, in all respects of the contractor.

Clause 15: Work to be open to inspection: Contractor or his responsible Agent to be present

All work, under or in course of execution or executed in pursuance of the contract shall, at all times, be opened to inspection and supervision of the Engineer-in-charge and his superior officers e.g. Superintending Engineer, Additional Chief Engineer, Chief Technical Engineer, Chief Engineer, and his subordinates and any other authorized agency of the Government and the contractor shall, at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge or his subordinate and any other authorized agency of Government or committee of retired officers/officers appointed by the State Government for the purpose to visit the works shall have been given to the

Contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for the purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the Contractor himself.

Clause 16: Notice to be given before any work is covered up

The Contractor shall give not less than 7 days' notice, in writing, to the Engineer-in-charge or his subordinate-in-Charge of the work, before covering up or otherwise placing beyond the reach of measurement, any work in order that the same may be measured, and correct dimensions thereof, be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Engineer-in-Charge of the work, and if, any work shall be covered up or placed beyond the reach of measurement without such notice having been given or consent obtained, the same shall be uncovered at the Contractor's expense or in default, thereof, no payment or allowance shall be made for such work, or for the materials with which the same was executed.

Clause 17: Contractor liable for damage done and for imperfections

If the Contractor or his work people or servants shall break, deface, injure or destroy any part of a building, in which they may be working or any building, road, fence, enclosure, or cultivated ground contiguous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work, while in progress, from any cause, whatsoever, or any imperfections become apparent in it, within a period specified in clause 37, after a certificate, final or otherwise of its completion, shall have been given by the Engineer-in-charge, may cause the same to be made good by other workmen and deduct the expense (of which the certificate of the Engineer-in-charge shall be final) from any sums that may be then, or at any time thereafter, may become due to the Contractor, or from his security deposit, or the proceeds of sale thereof, or of a sufficient portion thereof.

Clause 18: Contractor to supply plant, ladders, scaffolding etc.

The Contractor shall arrange and supply, at his own cost, all material (except such special materials, if any, as may, in accordance with the contract, be supplied from the Engineer-in-charge's stores), plants, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works requisite or proper for the proper execution of the work, whether original, altered, or substituted, and whether included in the specification or other documents, forming part of the Contract, or referred to in these conditions, or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge, as to any matter as to which, under these conditions, he is entitled to be satisfied or which he is entitled to require, together with carriage thereof, to and from the work. The Contractor shall also arrange and supply, without charge, the requisite number of persons with the means and materials, necessary for the purpose of setting out work and counting, weighting and assisting in the measurement or examination at any time and from time to time of the work, or materials. Failing his so doing, the same may be provided by the Engineer-in-charge, at the expense of the Contractor, and the expenses may be deducted from any money due to the Contractor under the Contract, or from his Security Deposit or the proceeds of sale thereof, or a sufficient portion thereof. The Contractor shall also provide all necessary fencing and lights required to protect the public from accident and shall be bound to bear the

expenses of defense of every suit, action or other proceeding at law, that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay any damages and costs which may be awarded in any such suit, action proceeding to any such person or which may, with the consent of the Contractor, be paid to compromise any claim by any such person.

Clause 19: Work not to be sub-let, Contract may be rescinded and Security

Deposit and Performance Forfeited for sub-letting, bribing or if Contractor becomes insolvent.

The Contractor shall not be assigned or sublet without the written approval of the Director Engineer, and if the contractor shall assign or sublet his contract or attempt so to do, or become insolvent, or commence any insolvency proceedings or make any composition with his creditors, or attempt so to do, or if any bribe, gratuity, gift, loan, requisite reward or advantage, pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the Contractor or any of his servants or agents to any public officer or person, in the employ of Government, in any way, relating to his office or employment, or if, any such officer or person shall become, in any way, directly or indirectly, interested in the contract, the Chief Engineer may, thereupon, by notice, in writing, rescind the contract and Security Deposit of the Contractor shall, thereupon, stand forfeited and be absolutely at the disposal of Government and the same consequences shall ensue as, if the contract had been rescinded under Clause 3 hereof, and in addition the Contractor shall not be entitled to recover or be paid for any work therefore, actually performed under the Contract.

Clause 20: Sums payable by way of compensation to be considered as reasonable compensation without reference to actual loss

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

Clause 21: Changes in constitution of firm

Where the Contractor is a partnership firm, the previous approval, in writing, of the Engineer-in-charge shall be obtained before any change is made in the constitution of the firm. Where the Contractor is an individual or a Hindu undivided family business concern, such approval, as aforesaid, shall likewise be obtained before the Contractor enters into any partnership agreement thereunder the partnership firm would have the right to carry out the work thereby undertaken by the Contractor. If, previous approval, as aforesaid, is not obtained, the Contract shall be deemed to have been assigned in contravention of Clause 19 hereof, and the same action may be taken, and the same consequences shall ensue, as provided in the said clause 19.

Clause 22: Work to be under direction of Engineer-in-charge

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

Clause 23: Standing Committee for Settlement of Disputes

If any question, difference or objection, whatsoever shall arise in any way, in connection with or arising out of this instrument, or the meaning of operation of any part thereof, or the rights,

duties or liabilities of either party then, save in so far, as the decision of any such matter, as herein before provided for, and been so decided, every such matter constituting a total claim of Rs. 50,000/- or above, whether its decision has been otherwise provided for and whether it has been finally decided accordingly, or whether the Contract should be terminated or has been rightly terminated, and as regards the rights or obligations of the parties, as the result of such termination, shall be referred for decision to the empowered Standing Committee, which would consist of the followings:-

Jaipur Development Commissioner, JDA, Jaipur -Chairman

Director (Engineering), JDA, Jaipur

Director (Finance), JDA, Jaipur

Director (Law), JDA, Jaipur

Superintending Engineer, JDA, Jaipur - Member Secretary

The Engineer-in-charge, on receipt of application along with non-refundable prescribed fee, (the fee would be two percent of the amount in dispute, not exceeding Rs. one Lac) from the Contractor, shall refer the disputes to the committee, within a period of three month from the date of receipt of application. Procedure and Application for referring cases for settlement by the Standing Committee shall be, as given in Form RPWA 90.

Clause 23A: Contractor to indemnify for infringement of Patent or design

Contractor shall fully indemnify the Governor of Rajasthan against any action, claim or proceeding, relating to infringement or use of any patent or design, or any alleged patent or design, rights, and shall pay any royalties, which may be payable in respect of any article or part thereof, included in the contract, in the event of any claims made under or action brought against Government. In respect of any such matters, as aforesaid, the Contractor shall be, immediately, noticed thereof, and the Contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation, that may arise there from provided that the Contractor shall not be liable to indemnify the Governor of Rajasthan, if the infringement of the patent or design or any alleged patent or design, right is the direct result of an order passed by the Engineer-in-Charge in this behalf.

Clause 24: Imported Store articles to be obtained from Government

The contractor shall obtain from the stores of the Engineer-in-charge, all imported store articles which may be required for the work or any part thereof, or in making up articles required thereof, or in connection therewith, unless he has obtained permission, in writing, from the Engineer-in-charge, to obtain such stores and articles from else-where. The value of such stores and articles, as may be supplied to the Contractor by the Engineer-in-charge, will be debited to the Contractor, in his account, at the rates shown in the schedule attached to the contract, and if they are not entered in the schedule, they will be debited at cost price, which for the purposes of this contract, shall include the cost of carriage and all other expenses, whatsoever, which shall have been incurred in obtaining delivery of the same at the stores aforesaid plus storage charges.

Clause 25: Lump-sums in estimates

When the estimate, on which a tender is made includes lump sums, in respect of parts of the work, the Contractor shall be entitled to payment in respect of the item of work involved, or

the part of the work in question at the same rates, as are payable under the contract for such items or if the part of the work in question is not, in the opinion of the Engineer-in-charge, capable of measurement, the Engineer-in-charge may at his discretion pay the lump sum amount entered in the estimate and the certificate in writing of the Engineer-in-charge shall be final and conclusive with regard to any sum or sums payable to him under the provisions of this clause.

Clause 26: Action where no Specification

In case of any Class of work for which there is no such specification as is mentioned in the contract document referred in ITB Clause 4.1, such work shall be carried out in accordance with the detailed specification of the department and also in accordance with the instructions and requirement of the Engineer-in-charge.

Clause 27: Definition of work

The expression “works” or “work” where used in these conditions, shall, unless there be something either in subject or context, repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed, whether temporary or permanent, and whether original, altered, substituted or additional.

Clause 27A: Definition of Engineer-in-charge

The term “Engineer-in-charge” means the Divisional officer who shall supervise and be in-charge of the work and who shall sign the contract on behalf of the Governor.

Clause 28:

It cannot be guaranteed that the work will be started immediately after the tenders have been received. No claims for increase of rate will be entertained, if the orders for starting work are delayed.

Clause 29: Payments at reduced rates on account of items of work not accepted and not completed to be at the discretion of the Engineer-in-charge

The rates for several items of works, estimated to cost more than Rs. 1,000/-, agreed within, will be valid only when the item concerned is accepted as having been completed fully in accordance with the sanctioned specifications. In cases, where the items of work are not accepted, as so completed, the Engineer-in-charge may make payment on account of such items, at such reduced rates, as he may considers reasonable, in the preparation of final or on account bills, and his decision in the matter shall be final and binding.

Clause 29A: Payments at part rates

The rates for several items of works may be paid at part rates provisionally in running bills in proportion to the quantum of items executed at the discretion of Engineer-in- charge. In case of item rates, if the rate quoted for certain items are very high in comparison to the average/overall tendered premium, then the payment at running stages shall not be made

more than the average sanctioned premium. The deferred payment, will however be released after successful completion of the work.

Clause 30: Contractors Percentage:

The percentage referred to in the “Tender for works” will be deducted/ added from/ to the gross amount of the bill before deducting the value of any stock issued.

Clause 31: Contractor to adhere to labour laws/regulation

The Contractor shall adhere to the requirements of the Workmen's Compensation Act and Labour Legislation in force from time to time and be responsible for and shall pay any compensation to his workmen which would be payable for injuries under the Workmen's Compensation Act, here-in-after called the said Act. If such compensation is paid by the State as Principal employer under Sub Section (1) of section 12 of the said Act, on behalf of the Contractor, it shall be recoverable by the State from the Contractor under Sub Section (2) of the said section. Such compensation shall be recovered in the manner laid down in clause 1 of the Conditions of Contract.

Note: All contracts with Government shall require registration of workers under the building & other Construction Workers (Regulation of Employment & Conditions of Services) Act, 1996 and extension of benefit to such workers under the Act. Deduction of cess at source will be made as per provisions of the said Act, in force from time to time.

Clause 32: Withdrawal of work from the Contractor

If the Engineer-in-charge shall at any time and for any reasons, whatever, including inability to maintain prorate progress, think any portion of the work should not be executed or should be withdrawn from the Contractor, he may, by notice in writing to that effect, require the Contractor not to execute the portion of the work specified in the notice, or may withdraw from the Contractor the portion of work, so specified, and the Contractor shall not be entitled to any compensation, by reason of such portion of work having been withdrawn from him. The Engineer-in-charge may supplement the work by engaging another agency to execute such portion of the work at the cost of the original contractor, without prejudice to his rights under clause 2. He shall also be competent to levy compensation for delay in progress. The recovery of excess cost shall be made from next available running bill or any other claim and shall not be deferred.

Clause 33:

The Contract includes clearance, leveling and dressing of the site within a distance of 15 meters of the building on all sides except where the building adjoins another building.

Clause 34: Protect works

The Contractor shall arrange to protect, at his own cost, in an adequate manner, all cut stone work and other work, requiring protection and to maintain such protection, as long as work is in progress. He shall remove and replace this protection, as required by the Engineer-in-Charge, from time to time. Any damage to the work, so protected, no matter how it may be

caused, shall be made good by the Contractor free of cost. All templates, forms, moulds, centering, false works and models, which in the opinion of the Engineer-in-Charge, are necessary for the proper and workman like execution of the work, shall be provided by the Contractor free of cost.

Clause 35: Contractor liable for settlement of claims caused by his delays

If the progress of the work has fallen so much in arrears as to prevent other contractors on the work, from carrying out their part of the work within the stipulated time, he will be liable for the settlement of any claim, put in by any of these contractors for the expenses of keeping their labour unemployed, to the extent considered reasonable by the Engineer-in-Charge.

Clause 36A:

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

Clause 36B:

The cost of all water connections, necessary for the execution of work, and the cost of water consumed and hire charges of meters and the cost of electricity consumed in connection with the execution of work, shall be paid by the Contractor, except where otherwise specifically indicated.

Clause 36C: Payment of Sales Tax, and any other Taxes

Royalty or other tax on materials, issued in the process of fulfilling contract, payable to the Government under rules in force, will be paid by the Contractor himself.

Clause 36D:

In respect of goods and materials procured by the Contractor, for use in works under the contract, sales tax will be paid by the Contractor himself. But in respect of all such goods manufactured and supplied by the Contractor and works executed under the contract, the responsibility of payment of sales tax would be that of the Engineer-in- charge.

Clause 37: Refund of Security Deposit

The Security Deposit will be refunded after the expiry of the period, as prescribed below: -

In case of contracts relating to hiring of trucks and other T&P, transportation including loading, unloading of materials, the amount of Security Deposit is refundable along with the final bill.

Supplies of material: As per provisions of G.F.&A.R.

Ordinary repairs: 3 months after completion of the work provided the final bill has been paid.

Original works/special repair works: Security Deposit will be refunded six months after completion, or expiry of one full rainy season, or after expiry of defect liability period as defined in the special condition of agreement, whichever is later provided the final bill has been paid.

In case of PWD original works/special repairs works costing more than Rs. 10.00 Lacs, partial amount of Security Deposit will be refunded during the defect liability period @ 10%

of SD amount after lapse of one year of completion and thereafter 10% of original amount of SD at the end of each subsequent year. The remaining amount of SD be refunded after the expiry of Defect Liability period.

Clause 38: Fair Wage Clause

The Contractor shall pay not less than fair wages/minimum wages to labourers engaged by him on the work as revised from time to time by the Government, but the Government shall not be liable to pay anything extra for it except as stipulated in price escalation clause (clause 45) of the agreement.

Explanation: "Fair Wage" means minimum wages for time or piece work, fixed or revised, by the State Government under Minimum Wages Act, 1948.

The Contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wages to labourers indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work as if the labourers have been immediately or directly employed by him.

In respect of all labourers immediately or directly employed on the work, for the purpose of the Contractor's part of this agreement, the Contractor shall comply with or cause to be complied with the Public Works Department Contract's Labour Regulations made, or that may be made by the Government, from time to time, in regard to payment of wages, wages period, deductions from wages, recovery of wages not paid, and unauthorized deductions, maintenance of wages register, wage card, publication or scale of wages and other terms of employment, inspection and submission of periodical returns and other matters of a like nature.

The Engineer-in-charge shall have right to deduct from the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers, by reasons of non-fulfillment of the conditions of the contract, for the benefit of the worker or workers, non-payment of wages or of deductions made therefrom, which are not justified by the terms of the contract, or as a result of non-observance of the aforesaid regulations.

Vis-a-Vis the Government of Rajasthan, the Contractor shall be primarily liable for all payments to be made and for the observance of the regulations aforesaid, without prejudice to his right to claim indemnity from his sub-contractors.

The regulations, aforesaid, shall be deemed to be part of this contract and any breach, thereof, shall be deemed to be breach of the Contractor

Clause 39 A	
Requirement of technical representative(s) and recovery rate	

The bidder should propose a panel of expert(s) as under:

- i. Project lead with a recognized degree in B Tech from a reputed institute and at least seven (7) years of total professional experience
- ii. At least one expert each having a Degree/ Diploma from a reputed institute in the fields of:
 - (a) One Civil Engg with experience of minimum 05 years;
 - (c) One Electrical Engineer with experience of minimum 05 years.

(d) Quality control Engg. With relevant qualification and with experience of minimum 05 years.

The bidder should enclose duly attested CVs of the above experts.

Clause 39 B:

The Contractor shall comply with the provisions of the Apprenticeship Act, 1961, and the Rules and Orders issued, thereunder, from time to time. If he fails to do so, his failure will be a breach of contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

Clause 40: Safety code

The Contractor shall follow the safety code (s) of the department and as specified in special conditions of contract. The contractor will take adequate precautions to avoid accidents, occupational illness with least disturbance to the environment, adjoining road users and traffic.

Clause 41: Near Relatives barred from tendering

The Contractor shall not be permitted to tender for works in Circle, in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of the Superintending Engineer and Assistant Engineer (both inclusive). He shall also intimate the names of persons, who are working with him in any capacity, or are subsequently employed by him and who are near relatives to any gazetted officer in the Organization/Department. Any breach of this condition by the Contractor would render him liable to be removed from the approved list of contractors of the Department. If such facts are noticed (a) before sanction of tender, his offer shall be declared invalid and earnest money shall be forfeited, (b) after sanction of the tender then the tender sanctioning authority may at his discretion forfeit his earnest money, security deposit and enlistment deposit and work/remaining work may allot to any registered contractor on the same rates as per rules.

Note: By the term "near relative" is meant wife, husband, parents, and grand-parents, children and grandchildren, brothers and sisters, uncles and cousins and their corresponding in-laws.

Clause 42: Retired Gazetted Officers barred for 2 years

No Engineer of Gazetted rank or other Gazetted officer, employed in Engineering or Administrative duties in an Engineering Department of the Government of Rajasthan, is allowed to work as a Contractor for a period of 2 years of his retirement from Government service without the previous permission of Government of Rajasthan. This contract is liable to be cancelled, if either the Contractor or any of his employee is found, at any time, to be such a person, who had not obtained the permission of Government, as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

Clause 43: Quality Control

The Government shall have right to exercise proper Quality Control measures. The Contractor shall provide all assistance to conduct such tests.

Clause 43 A:

The work (whether fully constructed or not) and all materials, machines, tools and plant, scaffolding, temporary buildings and other things connected therewith, shall be at the risk of the contractor until the work has been delivered to the Engineer-in-charge, and a certificate from him, to the effect, obtained.

Clause 44: Death of Contractor

Without prejudice to any of the rights or remedies under the contract, if the Contractor dies, the legal heirs of the Contractor or the Chief Engineer or duly authorized Engineer shall have the option of terminating the contract without any compensation.

Clause 45: Price Variation Clause: Deleted

No Price variation will be paid in this EPC contract.

Clause 46: Force-Majeure

Neither party shall be liable to each other, for any loss or damage, occasioned by or arising out of acts of God such as unprecedented floods, volcanic eruptions, earthquake or other invasion of nature and other acts.

Clause 47: General Discrepancies and Errors

In case of percentage rate tenders, if there is any typographical or clerical error in the rates shown by Department in the "G" Schedule, the rates as given in the Basic Schedule of Rates of the Department for the area shall be taken as correct.

Clause 48: Post payment Audit

The JDA shall have right to cause an audit and technical examination of the works, and the final bills of the contractor, including all supporting vouchers, abstracts, etc., to be made within 2 years after payment of the final bill, and if, as a result of such audit and technical examination, any sum is found to have been over paid in respect of any work done by the Contractor under the contract, or any work claimed by him to have been done by him under the Contract and found not to have been executed or executed below specifications, the Contractor shall be liable to refund the amount of over payment, and it shall be lawful for Department to recover the same from him in the manner prescribed in Clause 50 or in any other manner legally permissible, 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 the Government to the Contractor.

Clause 48B: Check Measurements

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 (about which the decision of the department shall be final). Checking of measurement by superior officer shall supersede measurements by the subordinate officer, and the former will become the basis of the payment. Any over/excess payments detected, as a result of such check measurement or otherwise at any stage up to the date of completion and the defect removal period specified elsewhere in this contract, shall be recoverable from the Contractor, as any other dues payable to the Government.

Clause 49: Dismantled materials

The Contractor, in course of the work, should understand that all materials e.g. stone, bricks, steel and other materials obtainable in the work by dismantling etc. will be considered as the property of the Government and will be disposed off to the best advantage of the Government, as per directions, of the Engineer-in-charge.

Clause 50: Recovery from Contractors

Whenever any claim against the Contractor for the payment of a sum of money arises out of or under the contract, the Department shall be entitled to recover such sum by appropriating, in part or whole of the Security Deposit, Security Deposit at the time of enlistment of the Contractor. In the event of the security being insufficient, or if no security has been taken, then the balance or the total sum recoverable, as the case may be, shall be deducted from any

sum, then due or which at any time, thereafter, may become due to the Contractor, under this or any other contract with the Governor of Rajasthan. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the Department on demand the balance remaining dues. The department shall, further, have the right to effect such recoveries under Public Demand Recovery Act.

Clause 51: Jurisdiction of Court

In the event of any dispute arising between the parties hereto, in respect of any of the matters comprised in this agreement, the same shall be settled by a competent Court having jurisdiction over the place, where agreement is executed and by no other court, after completion of proceedings under Clause 23 of this Contract.

SECTION VB
SPECIAL CONDITION OF CONTRACT

SPECIAL CONDITIONS

SCHEDULE 'H'

1. Use of Bitumen mixture Tar mechanical lime grinder, cement concrete mixer & vibrator is essential for the work. Which shall have to be arranged by the contractor at his own level/cost?
2. The contractor shall follow the contractor labour regulation and abolition Act 1970 & Rule 1971.
3. The JDA shall have right to cause on audit and technical examination of the work and the final bills of the contractor including all supporting vouchers, abstract etc. to be made within two years after payment of the final bills and if as a result such audit any amount is found to have been over paid/excess in respect of any work done by the contractor under the contract or any work claimed by him to have been done under this contract and found not to have been executed the contractor shall be liable to refund such amount and it shall be lawful ;for the JDA to recover such sum from him in ;the manner prescribed in special condition no. 8 or any other manner legally permissible and if it is found that the contractor was paid less then that 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 paid by the JDA to the contractor.
4. The contractor shall not work after the sunset and before sunrise without specific permission of the EIC.
5. Whenever any claim against the contractor for the payment of a sum of money arises out or under the contracts, the JDA shall be entered to recover the sum by appropriating in part or whole of the security deposit of the contractor. In the event of the security being insufficient or if no security has been taken from the contractor then the balance of the total sum recoverable as the case may shall be deducted from any sum then due or which a any time there contract with the JDA should this sum be sufficient to recover the full amount recoverable, the contractor shall pay to JDA on demand the balance remaining due. The JDA shall further have the right to effect such recoveries under P.D.R. Act.
6. The rate quoted by the contractor shall remain valid for a period of 4(four) months from the date of submission of bids.
7. By submission of this tender the contractor agree to abide with all printed conditions provided in the PWD manual from 64 (Chapter 3-para 36) and subsequent modification.
8. No conditions are to be added by the contractor and conditional tender is liable to be rejected.
9. All transaction in the execution of this work and this tender will be liable to sale-tax vide section 2□B□ read with sub clause (4) Sale-tax Rule, 1954.
10. If any tenderer withdraws his tender prior to expiry of said validity period given at S.No. 6 or mutually extended prior or makes modifications in the rates, terms and conditions of the tender within the said period which are not acceptable to the department or fails to commence the work in the specified period, fails to execute the agreement the department shall without prejudice to any, other right or remedy, be at liberty to forfeit the amount of Bid Security (EMD) given in any form absolutely. If any contractor, who having submitted a tender does not execute the agreement or start the work or dose not complete the work and the work has to be put to retendering, he shall stand debarred for six months from participating of tendering in JDA in addition to forfeiture of Bid Security (EMD) / Security Deposit and other action under agreement.
11. The contractor shall arrange his own machinery required for the work as mentioned in the section-III of the tender document.

12. The contractor shall arrange his own storage tanks upto 10 Tones capacity for storing bulk bitumen wherever supplied by the department.
13. Rules regarding enlistment of contractors provide that work upto five times limit for which they are qualified for tendering can be allotted to them. Therefore, before tender the contractors will keep this in mind, and submit the details of work. Tenders with incomplete or incorrect information are liable to be rejected.
14. Any material not conforming to the specifications collected at site shall have to be removed by the contractor within a period of 3 days of the instructions, issued by the Engineer-In-charge in writing. Failing which, such material shall be removed by the Engineer-In-charge at risk and the contractor after expiry of 3 days period.
15. The material collected at site and paid provisionally shall remain under the watch and ward of the contractor till it is consumed, fully on the work.
16. The rates provided in tender documents are inclusive of all Taxes royalty.
17. For paver work at least 3 road rollers shall be simultaneously deployed.
18. Bitumen for tack coat or any other purposes, shall be applied only by a bitumen sprayer of a mechanical pressure.
19. No extra lead of earth/material shall be paid over and above as specified in 'G' schedule. Source/borrow pit area for earth shall have to be arranged by the Contractor at his own cost.
20. Undersigned has full right to reject any or all tenders without given any reasons.
21. Mortar of Masonry work and lean concrete will be permitted mixer with hopper.
22. As per Supreme Court decision "All contracts with Governments shall require registration of workers under the building and other construction workers (Regulation of Employment and Conditions of Service) Act, 1996 and extension of benefits to such workers under the act."
23. Special Conditions of Contract regarding Defect Liability Period (DLP) for Roads works costing Rs. 25.00 lacs and more shall be applicable.
24. The tender are required to submit copy of their enlistment as contractor.
25. Conditions of RPWA-100 will be mandatory & acceptable to the contractor.
26. Any tender received with unattested cutting/overwriting in rates shall be rejected and such bidder will be debarred from tendering for three months in JDA.
27. All the provisions of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT, 2012 and Rules, 2013 will be applicable. If there is any contradictions in existing special conditions and provisions of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT, 2012 and RULES, 2013, provisions of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT, 2012 and RULES 2013 shall be applicable.
28. The Contractor will have to install display boards at site of work as directed by Engineer in charge. Failing which penalty of Rs. 5000.00 per day will be imposed.
29. As per order no D-352, dated 29.08.2018, the last date of bid submission is considered a key date for deciding the base indexes.
- 30^प निविदा में निर्धारित राशि से अधिक/कम Bid Security राशि बिडर द्वारा Online नहीं जमा कराई जावें, सिस्टम द्वारा भी कम/अधिक राशि बिड स्वीकार नहीं की जावेगी।
31. If any bidder quotes a rate below than the estimated rates i.e. rates below than 'at par' then the bidder has to deposit the difference amount i.e. difference amount of the rates as per 'at par' and quoted "below" as "Work Performance Guarantee". This amount has to be deposited before the commencement of work and will be refunded after successful completion of DLP period. Lowest

bidder will be issued LOA (Letter of Acceptance) and within 14 days period he has to deposit difference amount in the form of B.G./FDR/NSC. The validity of these shall be for a period upto completion of DLP and shall have to be extended time to time up to actual completion of work as per requirement. In case of non-deposition of the same in specified period, the Bid Security will be forfeited. In case work is not completed satisfactorily, the “Work Performance Guarantee” will be forfeited and other action will be taken as per Contract Agreement. The difference amount is to be calculated on total cost of the bid i.e Rs. 5.66 crore.

**Signature of Contractor
with full address & Mobile No.**

**Executive Engineer Project HQ
JDA, Jaipur.**

RTTP Annexure A: Compliance with the Code of Integrity and No Conflict of Interest

- (a) Any person participating in a procurement process shall-
- (b) Not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
- (c) Not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (d) Not indulge in any collusion, Bid rigging or anticompetitive behavior to impair the transparency, fairness and progress of the procurement process;
- (e) Not misuse any information shared between the procuring entity and the bidders with an intent to gain unfair advantage in the procurement process;
- (f) Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (g) Not obstruct any investigation or audit of a procurement process;
- (h) Disclose conflict of interest, if any; and
- (i) Disclose any previous transgressions with any entity in India or any other country during the last three years or any debarment by any other procuring entity.

Conflict of interest:-

The Bidder participating in a bidding process must not have a Conflict of Interest.

A Conflict of interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.

(i) A bidder may be considered to be in conflict of interest with one or more parties in the bidding process if, including but not limited to:

- (a) Have controlling partners/shareholders in common; or
- (b) Receive or have received any direct or indirect subsidy from any of them; or
- (c) Have the same legal representative for purposes of the bid; or
- (d) have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder, or influence the decisions of the procuring Entity regarding the bidding process; or
- (e) The bidder participates in more than one bid in a bidding process. Participation by a bidder in more than one bid will result in the disqualification of all bids in which the bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a bidder, in more than one bid; or
- (f) the bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods, works or services that are the subject of the Bid; or
- (g) Bidder or any of its affiliates has been hired (or proposed to be hired) by the procuring entity as engineer-in-charge/consultant for the contract.

Signature of Bidder
with full address & Mobile No.

RTTP Annexure B: Declaration by the Bidder regarding Qualifications

Declaration by the Bidder

In relation to my/our Bid submitted tofor procurement ofin response to their Notice inviting Bids No.....Dated.....I/wehereby declare under Section 7 of Rajasthan Transparency in Public Procurement Act, 2012 that :

1. I/we possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Procuring Entry;
2. I/we have fulfilled my/our obligation to pay such of the taxes payable to the union and the state government or any local authority as specified in the Bidding Document.
3. I/we are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and not the subject of legal proceedings for any of the foregoing reasons;
4. I/we do not have, and our directors and officers not have, been convicted of any criminal offence related to my/our professional conduct or the making of false statements or misrepresentations as to my/our qualifications to enter into a procurement contract within a period of three years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
5. I/we do not have a conflict of interest as specified in the Act, Rules and the Bidding Document, which materially affects fair competition;

Date :

Signature of bidder

Place :

Name :

Designation :

Address :

RTTP Annexure C: Grievance Redressal during Procurement Process

The designation and address of the First Appellate Authority is Executive Committee (EC), JDA,
The designation and address of the Second Appellate Authority is **A.C.S./P.S., UDH, Govt. of Rajasthan.**

(1) Filing an appeal:-

- a) if any bidder or prospective bidder is aggrieved that any decision, action or omission of the procuring entity is in contravention to the provisions of the Act or the rules or the guidelines issued there under, he may file an appeal to First Appellate authority, as specified in the Bidding document within a period of ten days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved:
 - b) Provided that after the declaration of a bidder as successful the appeal may be filed only by a bidder who has participated in procurement proceedings:
 - c) Provided further that in case a procuring entity evaluates the technical bids before the opening of the financial bids, an appeal related to the matter of financial bids may be filed only by a bidder whose technical bid is found to be acceptable.
- (2) The officer to whom an appeal is filed under Para (1) shall deal with the appeal as expeditiously as possible and shall endeavor to dispose it of within thirty days from the date of the appeal.
- (3) If the officer designated under Para (1) fails to dispose of the appeal filed within the period specified in Para (2), or if the bidder or prospective bidder or the procuring entity is aggrieved by the order passed by the first appellate authority, the bidder or prospective bidder or the procuring entity, as the case may be, may file a second appeal to second appellate authority specified in the bidding document in this behalf within fifteen days from the expiry of the period specified in Para (2) or of the date of receipt of the order passed by the first appellate authority, as the case may be.

(2) Appeals not to lie in certain cases:-

No appeal shall lie against any decision of the procuring entity relating to the following matters, namely:-

- (a) Determination of need of procurement
- (b) Provisions limiting participation of bidders in the bid process
- (c) The decision of whether or not to enter into negotiations
- (d) Cancellation of a procurement process
- (e) Applicability of the provisions of confidentiality

(3) From of Appeals:-

- a) An appeal under Para (1) or (3) above shall be in the annexed form along with as many copies as there are respondents in the appeal.
- b) Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee,
- c) Every appeal may be presented to first appellate authority or second appellate authority, as the case may be, in person or through registered post or authorized representative.

(4) Fee for filing Appeal:-

- (a) Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable.

- (b) The fee shall be paid in the form of bank demand draft or banker's cheque of a scheduled bank in India payable in the name of appellate authority concerned.

(5) Procedure for disposal of Appeal:-

- (a) The first appellate authority or second appellate authority as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing
- (b) On the date fixed for hearing, the first appellate authority or second appellate authority, as the case may be shall-
 - (i) Hear all the parties to appeal present before him; and
 - (ii) Peruse or inspect documents, relevant records or copies thereof relating to the matter.
- (c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the appellate authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.
- (d) The order passed under sub-clause (c) above shall also be placed on the state public procurement portal.

Date :

Signature of bidder

Place :

Name :

Designation :

Address :

FORM No. 1
[see rule 83]
Memorandum of Appeal under the Rajasthan
Transparency in Public procurement Act, 2012

Appeal No.....ofBefore
the.....(First/Second Appellate authority)

- 1- Particulars of appellant :
 - (i) Name of the appellant :
 - (ii) Official address, if any:
 - (iii) Residential address :
- 2- Name and address of the respondent(s):
 - (i)
 - (ii)
 - (iii)
- 3- Number and date of the order appealed against and name and designation of the office/authority who passed the order (enclose copy), or a statement of a decision, action or omission of the procuring Entity in contravention to the provisions of the Act by which the appellant is aggrieved:
- 4- If the Appellant propose to be represented by a representative the name and postal address of the representative:
- 5- Number of affidavits and documents enclosed with the appeal:
- 6- Grounds of appeal :
(Supported by an affidavit)
- 7- Prayer :

Place :.....

Date :

Appellant's Signature

RTPP Annexure D: Additional Conditions of Contract

1. Correction of arithmetical errors

Provided that a financial bid is substantially responsive, the procuring entity will correct arithmetical errors during evaluation of financial Bids on the following basis:

- i. if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the procuring entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- ii. (ii) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- iii. (iii) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.

If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its bid shall be disqualified and its bid security shall be forfeited or its bid securing declaration shall be executed.

2. Procuring Entity's Right to Vary quantities.

- (i) At the time of award of contract, the quantity of goods, works or services originally specified in the bidding documents may be increased or decreased, by a specified percentage, but such increase or decrease shall not exceed twenty percent, of the quantity specified in the bidding documents. It shall be without any change in the unit prices or other terms and conditions of the bid and the conditions of contract.
- (ii) If the Procuring entity does not procure any subject matter of procurement or procures less than the quantity specified in the bidding document due to change circumstances, the bidder shall not be entitled to any claim or compensation except otherwise provide in the conditions of contract.
- (iii) In case of procurement of goods or services, additional quantity may be procured by placing a repeat order on the rates and conditions of the original order. However, the additional quantity shall not be more than 25% of the value of goods of the original contract and shall be within one month from the date of expiry of last supply. If the supplier fails to do so, the procuring entity shall be free to arrange for the balance supply by limited bidding or otherwise and the extra cost incurred shall be recovered from the supplier.

3. Dividing quantities among more than one bidder at the time of award (In case of procurement of Goods):-

As a general rule all the quantities of the subject matter of procurement shall be procured from the Bidder, whose Bid accepted. However, when it is considered that the quantity of the subject matter of procurement to be procured is very large and it may not be in the capacity of the Bidder, whose Bid is accepted, to deliver the entire quantity or when it is considered that the subject matter of procurement to be procured is of critical and vital nature, then in such cases, the quantity may be divided between the Bidder, whose Bid is accepted and the second lowest Bidder or even more Bidder in that order, in a fair, transparent and equitable manner at the rates of the Bidder, whose Bid is accepted.

Special Conditions of Contract regarding Defect Liability Period (DLP)
Table-I

S.No.	Type of work	DLP Period
1	Building work	
	(i) Work pertaining to finishing and other civil works, furniture, sanitary works electrical works, drainage works and painting works.	5 Years
2	UPS, CCTV, fire alarm, solar system and other MEP works	5 Years

DLP for all the components of the work under this project shall be Five years.

2. General

2.1 Inspection of works during Defect Liability Period

2.1.1 The contracting agency shall undertake joint detailed inspection along with committee as approved., at once in three months in case of all works. The committee can reduce this frequency in case of emergency. The Contracting agency shall forward to the Engineer-in-charge the record of inspection and rectification immediately after the joint inspection. The Contracting agency shall pay particulars attention on those sections, which are referred as likely to be damaged.

2.1.2 One register has to be maintained by every site engineers for recording the inspection details of works in his jurisdiction under defect liability period.

2.2 Conditions regarding Security Deposit

2.2.1 Security for DLP-

The contracting agency shall have to furnish security deposit (SD)/Performance Security in the form of Bank Guarantee in favor of Secretary JDA, Jaipur valid from the actual date of completion, which shall be assigned by the Engineer-in-charge.

2.2.2 Refund of SD (Performance Guaranty)-

The SD shall be refunded after expiry of defect liability period after report of concerned engineering of satisfactory performance during the defect liability period as

S.No.	Released SD DLP period	5th year
1	At the end of 1 year	10 %
2	At the end of 2 Years	10 %
3	At the end of 3 Years	10 %
4	At the end of 4 Years	20 %
5	At the end of DLP(5 Years)	50 %

Various conditions for managing DLP are as under:-

- (i) During DLP period if contractor fails to repair any work even after issue of 7 days written notice, same work shall be got executed by respective Executive Engineer at the contractor's risk and cost and the double of actual expenditure shall be recovered from his performance security/security deposit. This process shall be applicable throughout the DLP period. In case of failure of any obligation under part of contractor during DLP should be debarred and blacklisted from JDA for three years as per RTPP Rule 2012 and 2013 where he defaults twice in a single agreement or in two different works.
- (ii) Quarterly inspection as per rules shall be carried out and DLP registers shall be maintained by respective Executive Engineers to monitor the DLP repairs.
- (iii) Special and regular inspection shall also be carried out as per order no. JDA/Ex.En& TA to DE-I/ 2014-15/D-223 dated 12.03.2015 and order no. SE (PMGSY) CIRCULAR 2006/D-115 dated 04.05.2006 point no. 3
- (iv) In case JDA feels to take up work on any existing DLP due to any reason, following procedure should be adopted.
- (v) At the time of withdrawal total liability of repairs as per DLP conditions to be carried out and contractor shall be asked to complete the same. After completion of assessed repairs DLP period shall be released after deduction amt as per table below.

% recovery on withdrawal of DLP on work order amt.	1 Year	2 Year	3 Year	4 Year	5 Year
DLP period					
5 Years	9.00	7.88	6.45	4.62	2.47

Note :- Calculation is to be done on quarterly basis.

- (a) In case Contractor fails to carry out these repairs, same shall be carried out at his risk and cost. If the total amt. of such repairs works out to be more than total retained amt. of SD, same shall be recovered from other works and as per PDR rules. The amount as per Table-III is also to be deducted in addition to this amount.
- (b) Based upon type of work, DLP conditions for works to be carried out during DLP period with their frequency of respective type of work shall be prepared by respective SE's after approval of these periods.

2.2.3 Force Majeure

The defect arises due to earthquake, cyclone, and natural calamities shall not be the responsibly of contracting agency.

Signature of Contractor

With Full Address

Executive Engineer HQ

JDA, Jaipur.

The following Particular Conditions of Contract shall complement, amend, and supplement the GCC. Whenever there is a conflict, the provisions herein shall prevail over those in the GCC

Definitions

1.The Intended Completion Date will be 18 Months from Start Date followed by DLP .

The **Start Date** is the date as specified in the work order. This is the date when the Contractor can commence work on the Contract, but does not necessarily coincide with Possession Date of all the locations of Site.

2. Interpretation

Sectional Completion will be not allowed.

3. Language and Law

The law which shall govern the conduct of the Contract and according to which the Contract shall be construed is that in force in the State of Rajasthan, India. The language of the contract shall be in English.

4. Communications

Any notification under this Contract shall be served on the party concerned when received by telex, hand delivery, courier delivery, or registered letter at the addresses listed in the Contract Data Any notification under this Contract shall be served at the addresses provided below:

Address of the Contractor:

Name: _____

Address: _____

Address:

Executive Engineer HQ
Jaipur Development Authority

Room No143, Main Building
Ram Kishor Vyas Bhawan, Indira Circle,
Jawahar Lal Nehru Marg, Jaipur-302004

6. Insurance

The minimum amount of Third-Party Liability insurance cover shall be *Rs 10,00,000 (Rupees ten Lakhs only)* per occurrence or event, with the number of occurrences not less than four. The Contractor shall promptly notify the Engineer of each claim made under the Third-Party Liability coverage, and shall renew the Third-Party Insurance after each such occurrence in order to maintain the number of covered occurrences at not less than four.

The minimum coverage against damage to the Works and materials during construction shall be *Rs. 5,00,000 (Rupees Five Lakhs only)*.

7. Possession of Site

The employer will give possession of the sites as elaborated in the Notice to Proceed on the Date of Start as mentioned in NTP. The contractor will not be entitled to any delay or compensation event unless his work as per the agreed “Schedule of Work” is actually held up because of delay in the Employer’s hand over of the site to the contractor. Refer Section V, Work Requirements for further details.

8. The work program shall be given in Inception Report submitted by the Selected Bidder and the same shall be final and binding, once approved by the Engineer. The Contractor shall submit the detailed method statement defining Contractor’s methodology for implementation backed with his proposal for equipment planning & deployment duly supported with broad output calculation. The Drawings for any particular activity shall be issued to the contractor at least 30 days in advance of the schedule date of the start of the activity as per the approved program.
9. The Contractor shall provide an updated Work Program by the last day of each Month, which shall clearly demonstrate the actual progress achieved on each activity, the effect of the progress achieved on the timing of the remaining work, and the proposed changes in activities that will enable the Contractor to complete the Works within the Intended Completion Date. In case the Contractor fails to submit an updated Work Program within this time limit, the Engineer will be entitled to withhold an amount of Rs. 1,00,000/- (Rupees One lakh only) or 1% of the Contract Value (Whichever is more) from the next payment certificate, and continue to withhold this amount until the next payment after the date on which the overdue program has been submitted.
- 10.1 If in the opinion of the Engineer, the work on site is not progressing satisfactorily in accordance with the mutually agreed “Work Program” and the delay is likely to affect the overall completion of the work within the intended date of completion, he may by a written notice to the Contractor ask him to expedite the works within 15 days suitably to make for deficiencies.
- 10.2 If the contractor fails to take appropriate action in time in pursuance of 10.1, the Engineer may by another notice inform him the components of work that will be carried out by him through another agency in parallel to the other activities being carried out by the contractor at his cost with a view of expediting the works and reducing delays. The value of the work so carried out will be credited to the contractor’s account, but he will not be responsible for the quality of the said work. The Engineer will recover the cost spent plus 5% for supervision charges from the next bill or

If the contractor fails to take appropriate action in time in pursuance of 10.1, the Engineer may withhold 25% amount of the delayed part of the work from the next running bills, till the contractor achieves the progress as per the agreed Work Plan.

If authority still feels the slow progress of the project then authority is free to make payments to the eligible vendors of materials and labors and get the work executed without consent of the contractor. However the contractor will be responsible for the whole project.
- 10.3 In addition to the Updated Program, Monthly updated progress reports shall be prepared by the Contractor and submitted to the Engineer in six copies in the first week of every calendar month.

Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works. Each report shall include:

- (a) Photographs and detailed descriptions of progress.
- (b) charts showing the status of Construction Documents, purchase orders, manufacture and construction;
- (c) records of personnel and Contractor's Equipment on Site;
- (d) copies of quality assurance documents, test results and certificates of Materials;
- (e) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and

Comparisons of actual and planned progress, with details of any aspects which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome such aspects.

11. Identifying Defects:

Unless otherwise indicated elsewhere in the contract, the Quality Assurance and Quality Control (QA/QC) document, shall be followed.

12. Correction of Defects:

- (i) The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins from the physical completion date specified in the completion certificate/ taking over certificate. The Defects Liability Period may be extended for as long as Defects remain to be corrected. The **Defect Liability Period** is 1 year from the date of completion mentioned in the certificate of Completion pursuant to the provisions of Clause 48.
- (ii) The Engineer shall certify that all Defects have been corrected. If the Employer considers that Correction of a Defect is not essential; he can request the Contractor to submit a quotation for the corresponding reduction in the Works Contract Price. If the Employer accepts the quotation, the corresponding change in the Contract Price is a Variation. The Defects Correction Period is 14 (fourteen) Days from the date of receipt by the Contractor of the Employer's notice to correct any Defects in the Works.
- (iii) If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer may have the defect corrected by other contractor(s) and recover the cost paid for the same plus 5% for supervision charges from any amount due to the contractor.

13. Contract Price

This is a Lump Sum contract on EPC basis.

The Contract Price includes all duties, taxes, royalty, and fees that may be levied in the accordance with the laws and regulations in force as on the Base Date on the Contractor's equipment, Plant, Materials and supplies to be acquired for the purpose of this Agreement and on the services to be performed under this Agreement. Nothing in this Agreement shall relieve the Contractor from its responsibility to pay any tax including any tax that may be levied in India on profits made by it in respect of this Agreement.

14. Payments

14.1 The Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs, unless otherwise provided for in this Agreement.

14.2 Unless otherwise stated in this Agreement, the Contract Price covers all the Contractor's obligations

for the Works under this Agreement and all things necessary for the Construction, and the remedying of any Defects in the Project.

14.3 All payments under this Agreement shall be made in Indian Rupees.

14.4 No price escalation will be paid under this EPC contract.

14.6 The Authority shall make payments to the Contractor as certified by the Engineer on completion of a stage, as specified, and valued in accordance with the proportion of the Contract Price assigned to each item and its stage. Contractor will be paid as per the Payment Schedule prescribed below:

14.7 The bidder will complete the whole project in all respects including all basic facilities at the stage of running this project.

SCHEDULE OF STAGE PAYMENT

(A) FOR CIVIL WORK

S.N.	Stages of Payment	Breakup of % of Interior and Furnishing Works Value in Contract		Detailed Breakup of %
1.	Development of Exterior works in Gandhi Darshan Museum building			
1.1	All Finishing work	5.00%		
	Completion of Finishing work like Sand stone Masonry Walls, Good Earth Filling, Cement Plaster, Pointing etc in the building			
	A. Completion of Exposed Sand stone Masonry Walls		2.50%	
	a. Amphitheatre & Ghat			2.00%
	b. External Steps & Ramps			0.50%
	B. Completion of Good Earth Filling.		2.00%	
	a. Amphitheatre & Ghat			0.03%
	b. Planter			0.20%
	c. At level 2.4m			1.50%
	C. Completion of plaster and pointing		0.50%	
	a. Amphitheatre & Electrical Room			0.03%
	b. External Steps & Ramps			0.20%
1.2	Flooring Work in Steps	1.50%		
	a. Amphitheatre & Electrical Room			0.70%
	b. External Steps & Ramps			0.10%
	c. Entrance Block			0.10%
	d. Court Near Toilet			0.10%
	e. Plaza			0.50%
1.3	Completion of water proofing, Tile and plinth protection works in all respect.	1.00%		
	a. Amphitheatre			0.60%
	b. Floor Area			0.20%
	c. Wall Area			0.20%
1.4	Completion of Flush Door	0.50%		
1.5	Completion of Toe wall & Railing work	1.00%		
1.6	Completion of Plaster of Paris and paint Work	0.50%		
2	Outer work at around the Building			
2.1	Completion of Internal Road	10.00%		

S.N.	Stages of Payment	Breakup of % ofInterior and Furnishing Works Value in Contract	Detailed Breakup of %
2.2	Completion of Internal Road Surrendered for Mosque	3.00%	
2,3	Completion of Entrance Gateway	1.00%	
2.4	Completion of Boundary wall and Plinth Protection work	5.00%	
2.5	Completion of Under Ground Water Tank	5.00%	
2.6	Completion of Tensile Structure and SITC of Tripod Turnstile gates	2.00%	
2.7	Completion of Bamboo Jali and Grill work at approach road	1.00%	
3	Furniture Works	0.50%	
4	Misc Work		
	Miscellaneous for outer development including drainage work, P.C.C, R.C.C, Excavation Masonry Coping Cat-eye, Blinker, Road Signage, Exterior Signage except Museum etc.	5.00%	
5	Restoration of the site & handing over the site		
	A. On completion of all civil Exterior work of Building	3.00%	

(B) FOR ELECTRICAL WORKS

S.N.	Stages of Payment	Breakup of % of Electrification Works Value in Contract		Detailed Breakup of %
1.	Supply, Installation, Testing & Commissioning of outer Mechanical, Electrification & Plumbing works			
1.1	Completion of External Lighting	3.0%		
1.2	Completion of Transformer,DG & HT Work	25.0%		
	A. HT work		7.50%	
	B. SITC of transformer		4.50%	
	C. SITC of DG set		13.00%	
1.3	Completion of IP Based Surveillance System	3.0%		
1.4	Completion of Solar Photovoltaic Power Plant	10.0%		
1.5	Completion of Rain Water Harvesting Pit Work	2.0%		
1.6	Completion of Fire Alarm System Work	5.0%		
1.7	Miscellaneous & Safety Work	2.0%		
2.0	On completion of complete electrical & mechanical works in all respect	5.0%		

Note :-

1. Any variations in drawings and designs for the betterment of the project made by consultant with variations upto 2% of contract value no additional cost shall be payable. The assessment of additional work shall be based on prevailing BSRs or market rates.
2. In case of execution of any substitute item, if required to be executed for the betterment of project,the difference payment of the same shall be made with mutual agreement after proper assessment of rates based on BSR's or Market Rates.

15. Advance Payment

Advances to contractors are as a rule prohibited, and every endeavor should be made to maintain a system under which no payments are made except for work actually done.

Exceptions are, however, permitted in the following cases:

- (a) Cases in which a contractor, whose contract is for finished work, requires an advance on the

security of the materials brought to site. Divisional officers may, in such cases, make advances upto an amount not exceeding 75 percent of the current value of the materials (as assessed by themselves according to their character), provided that they are of an imperishable nature and that a formal indenture is drawn up in Form 31 with the contractor under which the Government secure a lien on the materials and are safe-guarded against losses due to the contractor postponing the execution of the work or the shortage or misuse of the materials and against the expense entailed for their proper watch and safe custody. Payment of such advances should be made only on the certificate of an officer, not below the rank of Sub-Divisional officer, that the quantities of materials, upon which the advances are made have actually been brought to site, that the contractor has not previously received any advance on that security and that the materials are all required by the contractor for use on items of work for which rates for finished work have been agreed upon. The officer granting such a certificate will be held personally responsible for any overpayment which may occur in consequence. Recoveries of advances, so made, should not be postponed until the whole of the work entrusted to the contractor is complete. They should be made from this bills for work done as the materials are used, the necessary deductions being made, whenever the items of work, in which they are used are billed for.

Note-1 Divisional Officers are responsible that:-

- i. When secured advances have been made for materials, recoveries are made regularly from the very first payment made for those items of actual work in which such materials have been used.
- ii. No secured advances are made for any materials, unless they are to be used within three months at the most.
- iii. Materials are actually measured in details before making secured advances on them and their value is based on the actual rates for the purpose of determining the percentage at which secured advances on materials should be made.

Note-2 Imperishable materials include Bricks, Rolled Steel Joists, etc. while articles such as Lime, Sand, kankar, etc. are perishable. Coal is, however, excluded from both the categories and no advance is permissible on his article.

- (b) Cases in which, in the interest of works, it is absolutely necessary to make petty advances, in such cases advances upto Rs. 250 may be allowed by subordinates.
- (c) In all other cases, only with the sanction of the Government who may, in exceptional circumstances authorize such advances as may be deemed indispensable, taking the necessary precautions for securing the Government against loss and for preventing the system from becoming general or continuing longer than is absolutely essential. A register in Form RPWA 68 shall be maintained in respect of Advance Payments made in exceptional circumstances with the sanction of the Government.
- (d) Note: The Executive Engineer has full powers to make advance payments to Electric Supply under taking under the Indian Electricity Act, 1910 for execution of works.

18. Completion

- (i) "When whole of the work has been substantially completed and have satisfactory passed any Tests on Completion prescribed by the contractor, the Contractor may give a notice to that effect to the Engineer, with a copy to the Employer, accompanied by a written undertaking to finish with due expedition any outstanding work. The Engineer shall issue a certificate complying completion of the works to the contractor."

- (ii) “If any part of the permanent work has been substantially completed and has satisfactorily passed any Tests on Completion prescribed by the Contract, the Engineer may issue a Completion Certificate in respect of the part of the Permanent Work before completion of the whole of the Works and, upon the issue of such Certificate, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work in the part of the Permanent Work during the Defects Notice Period.” Hence the defect liability period starts on the date on which part/substantial completion certificate is issued, for that particular part of the permanent work has been substantially completed.

19 Taking Over

“The Employer shall take over the whole works or section of works within Seven (7) days of issuance of Completion Certificate.

20. Site Environmental Plan (SEP)

The Contractor should prepare a detailed Site Environmental Plan (SEP) as per the Environmental and Social Management Framework and EMP format attached for location/s identified to be potentially impacted such as but not limited to the work site, base camp. The SEP should include arrangement for disposal of sites for excavated materials, sanitary and other waste, and storage location for fuel, oil and lubricants, facilities for equipment, labour and housing, among others. The SEP should be reviewed and approved prior to construction activities by the Engineer.

21. Safety, Security and Protection of the Environment

(A) General

- i. This section of the Specification sets out limitations on the Contractor's activities specifically intended to protect the environment.
- ii. The Contractor shall take all necessary measures and precautions and otherwise ensure that the execution of the works and all associated operations on site or off-site are carried out in conformity with statutory and regulatory environmental requirements including those prescribed elsewhere in this document.
- iii. The Contractor shall take all measures and precautions to avoid any nuisance or disturbance arising from the execution of the Works. This shall wherever possible be achieved by suppression of the nuisance at source rather than abatement of the nuisance once generated.
- iv. In the event of any spoil, debris, waste or any deleterious substance from the Site being deposited on any adjacent land, the Contractor shall immediately remove all such material and restore the affected area to its original state to the satisfaction of the Engineer. This should be monitored regularly in accordance with the Environmental Management Plan.
- v. During construction, the area should be to avoid trespassing of animals and people. Unauthorized persons should not be allowed within the construction area.
- vi. During construction, there should be signs to inform public of on-going work, warning on dangers due to trenches along roads, excavations on different sites.
- vii. Contact town authorities to arrange for the use of excavated material where possible, such as in construction projects, to raise the level of land prior to construction of roads or buildings, or to fill previously excavated areas.
- viii. Especially for cleaning, desilting, and dredging of drainages: Contact town authorities to arrange for testing and analysis of sludge/excavated materials for hazardous components. If material are hazardous, coordinate with authorities for approve disposal sites;

- ix. Prevent generation of dust by removing excavated materials as soon as it is excavated, by loading directly onto trucks and covering with tarpaulins to prevent dust during transportation.
- x. All excavation should be done in the dry seasons to avoid any impacts on surface water drainage if water collects in any quantity, it will need to be pumped out, and it should be then be donated to neighboring farmers to provide a beneficial use to the communities most affected by this aspect of the work.
- xi. Plant five (5) trees for every tree to be cut and can only be cut after taking the necessary approvals.
- xii. Consult town authorities to identify any buildings at risk from vibration damage and avoiding use of pneumatic drills or heavy vehicles in the vicinity.
- xiii. Providing wooden bridges for pedestrians and metal sheets for vehicles to allow access across open trenches where required (including access to houses).
- xiv. Carefully planning of transportation routes with the municipal authorities to avoid sensitive areas as far as possible, including narrow streets, congested roads, important or fragile buildings and key sites of religious, cultural or tourism importance.
- xv. Consulting historical and archaeological authorities at both national and state level to obtain an expert assessment of the archaeological potential of the site. Alternate location should be considered if the area is medium or high risk.
- xvi. Developing a protocol in conducting any excavation work to ensure that any chance finds are recognized and measured are taken to ensure they are protected and conserved this should involve having excavation observed by a person with archaeological field training, stopping work immediately to allow further investigation if any finds are suspected; and calling the state archaeological authority if a find is expected and taking any action they acquire ensuring its removal or protection in situ.
- xvii. Living spaces for access between mounds of excavated soil and providing footbridges so that pedestrians can cross open trenches;
- xviii. Increasing the workforce in these areas to ensure that work is completed quickly;

(B) . Water Quality

- i. The Contractor shall prevent any interference with the supply to or abstraction from, and prevent any pollution of, water resources (including underground percolating water) as a result of the execution of the Works.
- ii. Areas where water is regularly or repetitively used for dust suppression purposes shall be laid to fall to specially constructed settlement tanks to permit sedimentation of particulate matter. After settlement, the water may be re-used for dust suppression and rinsing.
- iii. All water and other liquid waste products arising on the Site shall be collected and disposed of at a location on or off the Site and in a manner that shall not cause either nuisance or pollution.
- iv. The Contractor shall not discharge or deposit any matter arising from the execution of the Works into any waters except with the permission of the Engineer and the regulatory authorities concerned.
- v. The Contractor shall at all times ensure that all existing stream courses and drains within, and adjacent to, the Site are kept safe and free from any debris and any materials arising from the Works.
- vi. The Contractor shall protect all watercourses, waterways, ditches, canals, drains, lakes and the like from pollution as a result of the execution of the Works.

22. Air Quality

- i. The Contractor shall devise and arrange methods of working to minimize dust, gaseous or other air-borne emissions and carry out the Works in such a manner as to minimize adverse impacts on air quality.
- ii. The Contractor shall utilize effective water sprays during delivery manufacture, processing and handling of materials when dust is likely to be created, and to dampen stored materials during dry and windy weather. Stockpiles of friable materials shall be covered with clean tarpaulins, with application of sprayed water during dry and windy weather. Stockpiles of material or debris shall be dampened prior to their movement, except where this is contrary to the Specification.
- iii. Any vehicle with an open load-carrying area used for transporting potentially dust producing material shall have properly fitting side and tail boards. Materials having the potential to produce dust shall not be loaded to a level higher than the side and tail boards, and shall be covered with a clean tarpaulin in good condition. The tarpaulin shall be properly secured and extend at least 300 mm over the edges of the side and tail boards.
- iv. In the event that the Contractor is permitted to use gravel or earth roads for haulage, he shall provide suitable measures for dust palliation, if these are, in the opinion of the Engineer, necessary. Such measures may include spraying the road surface with water at regular intervals.

23. Noise

- i. The Contractor shall consider noise as an environmental constraint in his planning and execution of the Works.
- ii. The Contractor shall take all necessary measures so that the operation of all mechanical equipment and construction processes on and off the Site shall not cause any unnecessary or excessive noise, taking into account applicable environmental requirements. The Contractor shall use all necessary measures and shall maintain all plant and silencing equipment in good condition so as to minimize the noise emission during construction works.
- iii. Using modern vehicles and machinery with standard adaptations to reduce noise and exhaust emissions and ensuring they are maintained to manufacturers' specifications.

24. Control of Wastes

- i. The Contractor shall control the disposal of all forms of waste generated by the construction operations and in all associated activities. No uncontrolled deposition or dumping shall be permitted. Wastes to be controlled shall include, but shall not be limited to, all forms of fuel and engine oils, all types of bitumen, cement, surplus aggregates, gravels, bituminous mixtures, etc. The Contractor shall make specific provision for the proper disposal of these and any other waste products, conforming to local regulations and acceptable to the Engineer.

25. Emergency Response

- i. The Contractor shall plan and provide for remedial measures to be implemented in the event of occurrence of emergencies such as spillages of oil or bitumen or chemicals.
- ii. The Contractor shall provide the Engineer with a statement of the measures he intends to implement in the event of such an emergency which shall include a statement of how he intends to provide personnel adequately trained to implement such measures.
- iii. Should any pollution arise from the Contractor's activities he shall clean up the affected area immediately at his own cost and to the satisfaction of the Engineer, and shall pay full compensation to any affected party.

26 Protection of Trees and Vegetation

The Contractor shall ensure that no trees or shrubs or waterside vegetation are felled or harmed except for those required to be cleared for execution of the Works. The Contractor shall protect trees and vegetation from damage to the satisfaction of the Engineer. No tree shall be removed without the prior approval of the Engineer and any competent authorities. Should the Contractor

become aware during the period of the Contract that any tree or trees designated for clearance have cultural or religious significance he shall immediately inform the Engineer and await his instructions before proceeding with clearance. In the event that trees or other vegetation not designated for clearance are damaged or destroyed, they shall be repaired or replaced to the satisfaction of the Engineer, who shall also impose a penalty to twice the commercial value of any timber affected, as assessed by the Engineer.

27. Water Supply and Electric Power

The Contractor shall make his own arrangements at his own expense for water supply and electric power supply for construction, testing and other purposes. Only clean water free from deleterious

28. Fire Prevention

68.1 The Contractor shall take all precautions necessary to ensure that no vegetation along the line of the road outside the area of the permanent works is affected by fires arising from the execution of the Works. The Contractor shall obtain and follow any instructions of the competent authorities with respect to fire hazard when working in the vicinity of gas installations. Should a fire occur in the natural vegetation or plantations adjacent to the road for any reason the Contractor shall immediately suppress it. In the event of any other fire emergency in the vicinity of the Works the Contractor shall render assistance to the civil authorities to the best of his ability. Areas of forest, scrub or plantation damaged by fire considered by the Engineer to have been initiated by the Contractor's staff or labour shall be replanted and otherwise restored to the satisfaction of the Engineer at the Contractor's expense.

29. Fossils

The Contractor shall make his staff available for briefing on archaeological matters as directed by the Engineer.

30. Clearance of Contractor's Facilities

On or before expiry of the Defects Notice Period the Contractor shall clear away all his temporary facilities including but not limited to offices, camps, storage and holding yards, workshops, crushing and mixing plant, diversion and haul roads so that the land is returned to at least its previous condition and, in the case of agricultural land, potential productivity. Clearance shall include but not be limited to tasks such as the removal of unwanted structures, removal of metallic and concrete debris, removal and disposal of any soil contaminated by diesel, bitumen or other polluting material, ripping to relieve compaction, grading, replacement of topsoil, and turfing and grassing, as appropriate. Where improvements have been made such as land filling or installation of boreholes or construction of boat landings these may be retained subject to the agreement of the landowner. The Employer reserves the right to inspect the site of any facilities established or used by the Contractor in connection with the Works and to undertake any corrective measures necessary to restore the land, and to recover the cost from monies due or to become due to the Contractor.

31. Fair Wages

31.1 The Contractor shall pay not less than fair wage/minimum wages to laborer's engaged by him on the work as revised from time to time by the Government of Rajasthan, but the Government shall not be liable to pay anything extra for it except as stipulated in price adjustment clause (Clause 41) of the Contract.

(Explanation: "Fair wage" means minimum wages for time or piece work, fixed or revised, as established by the State Government under the Minimum Wages Act, 1948.)

31.2 The Contractor shall, notwithstanding the provisions of any Contract to the contrary, cause to be paid fair wages to laborers indirectly engaged on the work, including any labour engaged by his sub-Contractors in connection with the said work, as if the laborers have been immediately or directly employed by him.

- 31.3 In respect of all laborers, immediately or directly employed on the work, for the purpose of the Contractor's part of this agreement, the Contractor shall comply with or cause to be complied with, the Public Works Department Contract Labour Regulations' made, or that may be made, by the Government, from time to time, in regard to payment of wages, wage period, deductions from wages, recovery of wages not paid, and unauthorized deductions, maintenance of wages register, wage card, publication of scale of wages and other terms of employment, inspection and submission of periodical returns, and all other matters of a like nature.
- 31.4 The Engineer shall have the right to deduct, from the money due to the Contractor, any sum required or estimated to be required for making good the loss suffered by a worker or workers by reasons of non-fulfillment of the conditions of the Contract for the benefit of the worker or workers, non-payment of wages or of deductions made there from, which are not justified by the terms of the Contract or as a result of non-observance of the aforesaid regulations.
- 31.5 Vs-à-Vs the Government of Rajasthan the Contractor shall be primarily liable for all payments to be made and for the observance of the regulations aforesaid, without prejudice to his right to claim indemnity from his sub-Contractors.
- 31.6 The regulations, aforesaid, shall be deemed to be part of this Contract and any breach thereof, shall be deemed to be breach of the Contract.

32. Safety and Accident Prevention Officer

Due precautions shall be taken by the Contractor, at his own cost, to ensure the safety and protection against accidents of all staff and labour engaged on the Works, local residents in the vicinity of the Works, and the public travelling through the Works. The Contractor shall have on his staff on Site a designated officer qualified to promote and maintain safe working practices. This officer shall have authority to issue instructions and shall take protective measures to prevent accidents, including but not limited to the establishment of safe working practices and the training of staff and labour in their implementation.

33. Protective Clothing and Footwear

- 33.1 The Contractor shall, at his own expense, provide protective clothing and equipment to all staff and labour engaged on the Works to the satisfaction of the Engineer, and on his failure to do so the Employer shall be entitled to provide the same and recover the cost from the Contractor. Such clothing and equipment shall include, at a minimum, protective footwear for workmen undertaking concrete mixing work, protective footwear and gloves for any workmen performing bituminous paving works, protective footwear, clothing, cream, gauntlet-type gloves, hats, safety glasses or goggles and filter masks for workmen undertaking lime stabilisation works, hard hats for workmen engaged on bridge construction, and otherwise as appropriate to the job in hand and to the Engineer's satisfaction.
- 33.2 Ensuring that all workers are provided with and use appropriate Personal Protective Equipment (PPE), Health and safety training should be conducted for all site personnel; availability of documented procedures to be followed for all site activities; and documentation of work-related accidents;

34. First-Aid Services

The Contractor shall, at his own expense, provide first aid equipment at all camps and work sites to the satisfaction of the Engineer, and shall ensure that at all work sites where 40 or more persons are engaged on the Works there shall at all times be a person qualified in first-aid with access to appropriate first-aid equipment. A first-aid post shall be established at each base camp comprising a

suitable room with two beds, washing and examination facilities, appropriate medical supplies, and staffed on a full-time basis by a qualified paramedical attendant.

35. Health and Pests

The Contractor shall at his own expense and throughout the period of the Contract ensure that suitable arrangements are made for the prevention of epidemics and for all necessary welfare and hygiene requirements for his staff and labour, and shall comply with all the regulations and requirements of the local health authorities with respect to disease prevention and control. He shall warn his staff and labour of the dangers of communicable diseases including those transmitted by insects, water, faecal/oral contact and sexual activity. The Contractor shall take the precautions necessary to protect all staff and labour employed on the Site from insect nuisance, rats and other pests and minimise the dangers to health and the general nuisance caused by the same. Should malaria or other insect-borne diseases be prevalent in the area, he shall provide his staff and labour with suitable prophylactics, equip living accommodation with screens and bed-nets, and carry out spraying with approved insecticides, as appropriate and to the Engineer's satisfaction.

36. Disorderly Conduct

The Contractor shall at all times take reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the Works against the same. "Disorderly conduct" shall include but not be limited to harvesting of natural resources such as firewood or fish by the Contractor's labour when this is done to the detriment of pre-existing local interests.

37. Records of Labour and Accidents

The Contractor shall maintain full records of numbers, working hours and wages of labour, safety, health and welfare of persons, accidents, and damage to property and make such reports on these matters to the Engineer as he may from time to time prescribe.

38. General

Unless otherwise indicated elsewhere in the Contract, The General Specification for civil works and the Quality Assurance and Quality Control (QAQC) document, as issued by the PMU of RUIDP, shall be followed. The QAQC document of JDA is an integral part of the document and it will be provided with the bid document. A copy of the same shall be made available at the site by the contractor.

39. Site Office for Engineer and Other Supervisory Staff

The Contractor shall arrange to provide office of minimum 300 sq. ft. size as per specification with two tables, four chairs, one steel almirah, sufficient number of display board, telephone etc. fully furnished office accommodation within 15 days from the date of commencement of same and shall become property of the Contractor at the completion of the work. The electrical charges / water charges and all other charges shall be arranged within the area of the work. Approval shall be taken from Engineer prior to making arrangement of the office. The construction of site office and its or maintenance are incidental to the work. The office shall be functional until work is completed. If Engineer found that office arranged by the contractor is not being maintained properly then Engineer has right to deduct a reasonable amount from that payment. In case adequate space is not available for setting up of such office, the Engineer may waive such requirement on being requested by the Contractor, in writing.

40. Field Laboratory

40.1 Within 15 (Fifteen) days from the date of commencement of the work, the Contractor shall arrange to provide an adequately equipped field laboratory as per Specifications and directions of the Engineer,

including maintenance of the same. This shall be removed at the completion of the work. All dismantled items of field laboratory and all equipment shall be property of the Contractor at the completion of the work. The Laboratory shall be functional till the work is completed. If Engineer found that Laboratory arranged by the Contractor is not being maintained properly then Engineer has right to deduct a reasonable amount from payment. The construction of Field Laboratory & its maintenance are incidental to the work. Notwithstanding the above, the Engineer may agree to the Contractor's proposal to use facilities of accredited/ Government laboratories, upon scrutinising the details of such laboratories, submitted by the Contractor. Even in that case also, the Contractor will keep and maintain certain basic equipment at site as mentioned under Section V: Procuring Entity's Requirement.

- 40.2 The calibration of the laboratory equipments and instruments shall at the initial stage to be certified by agencies approved by the Engineer. Laboratory equipments shall be properly maintained and calibrated throughout the period of the Contract by the Contractor at his own expense. The Contractor shall notify the Engineer in sufficient advance prior to conducting any tests for the materials and work. The Engineer will also inspect the laboratory and the contractor shall provide adequate facilities to the Engineers for his independent verification of the accuracy and adequacy of the facilities.

41. Pre-Construction Inspection, Testing & Review of Data for Materials, Plant & Equipment

- 41.1 The contractor shall place order for the material and the equipment only after the approval of the Engineer. The Contractor shall submit the detailed drawings for the approved manufacturer and the procedure of submission, review and revision shall be specified herein below.
- 41.2 The Contractor shall inform the Engineer about the likely dates of manufacturing, testing and dispatching. The Contractor shall notify the Engineer for Inspection and Testing, at least twenty-eight days prior to packing and shipping and shall supply the manufacturer's test results and quality control certificates. The Engineer will decide whether he or his representative will inspect and test the material/ equipment or whether he will approve it on the basis of manufacturer's certificate.
- 41.3 The inspection and test categories shall be applied prior to delivery of the equipment, of various categories as indicated in the technical specifications for each type of the equipment.

Category A: - The Drawing has to be approved by the Engineer before manufacturing and Testing. The material has to be inspected by the Engineer or by an Inspecting agency approved by the Engineer at the manufacturer's premise before packing and dispatching. The Inspection charges of the agency will be borne by the Employer but the contractor has to pay the inspection charges. The Contractor shall provide the necessary equipment and facilities for tests and the cost, thereof, shall be borne by the

Category B:- The drawings of the Equipment have to be submitted and to be approved by the Engineer prior to manufacture. The material has to be tested by the manufacturer and the manufacturer's test certificates are to be submitted and approved by the Engineer before dispatching of the Equipment. Notwithstanding the above, the Engineer, after examination of the test certificates, reserves the right to instruct the Contractor for retesting, if required, in the presence of Contractor's representative.

Category C: The material may be manufactured as per standard and delivered to the site.

42. Supply of Colored Record Photographs

The Contractor shall, at his own cost, arrange to take colour photographs at various stages / facets of the work including interesting and novel features of the work as directed by the Engineer and supply two copies of colour record photographs mounted in the albums including negatives with specification and these shall be kept by Employer.

43. Public Awareness / Information Display

The Contractor shall, at his own cost, arrange to provide, erect and maintain necessary display boards/ banners etc. at selection points of project site giving such information as considered necessary for public awareness/ information/ safety as directed by the Engineer.

44. Contractor's Responsibilities

The contractor shall promptly inform the Employer and the Engineer of any error, omission, fault, or any other defect in the design or drawings or specification for the works, which he discovers when reviewing the contract documents, or in the process of execution of the works. The Engineer will resolve the ambiguity or correct the error and will notify the contractor of the interpretation to be adopted.

45. Services

45.1 Underground and overhead services are likely to be met with during construction. These are to be protected against damage by the Contractor at his own cost.

45.2 The contractor shall be required to carry out removal / shifting of existing utilities at his own cost. The contractor work program shall include this activity. The work shall be carried out under supervision of concerned department. The supervision charges of the line agencies shall be paid by the contractor and shall be reimbursed on actual on submission of receipt.

45.3 In cases of utilities to be shifted by Govt. departments, no amount shall be paid extra for shifting/ co-ordination. The employer would provide full support to contractor in coordinating with line agencies; however, no claim on account of delay in shifting of utilities by line department will be admissible.

46. Setting Out

46.1 The Contractor(s) shall set out the whole of the work in conjunction with an officer to be deputed by the Engineer and during the progress of the work to amend on the requisition of the Engineer any errors which may arise therein and provide all the necessary labour materials and equipments for so doing. The contractor(s) is/are to provide all tools, plant, machinery, labour and materials (with the exceptions noted in the relevant clauses for issue of departmental materials as per schedule attached) which may be necessary and required for the work. All materials and workmanship shall conform to the relevant specifications mentioned in the tender documents.

46.2 During execution of pile foundation, if there is any variation in soil strata which was not anticipated earlier, the matter shall be referred to Engineer – in – charge for review and modification of design by the competent authority, if considered necessary. Time taken in this process is consider in the original completion period, however no claim on account of delay in getting the sanction from competent authority will be admissible.

46.3 The contractor shall carryout the detailed topographic survey at site and prepare the pre-commencement survey map for approval of the Engineer's representatives. Based on the approved Pre-commencement survey map, the contractor will prepare the necessary working drawings for the purpose of execution.

46.4 Contractor shall be responsible for taking all traffic block and shutdowns etc. from west central railway authority for execution in railway land / spans. Contractor will get all designs and drawings approved from west central railway authority for all temporary and permanent works of railway land / spans. This will be all incidental to the work. No separate claim on this account shall be payable.

46.5 Defect liability period shall be 5 year. Contractor shall furnish an affidavit from the manufacture / supplier firms before actual date of completion.

47. Labor

47.1 Engagement of Staff and Labor

- a) Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, housing, feeding and transport.
- b) The contractor shall pay equal wages for men and women for work of equal value or type.
- c) The Contractor shall provide and employ on the Site in the installation of the Facilities such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged to use local labor that has the necessary skills.
- d) The Contractor shall be responsible for obtaining all necessary permit(s) and/or Visa(s) from the appropriate authorities for the entry of all labor and personnel to be employed on the Site into the country where the Site is located. The Employer will, if requested by the Contractor, use his best endeavors in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national or government permission required for bringing in the Contractor's personnel.
- e) The Contractor shall at its own expense provide the means of repatriation to all of its and its Subcontractor's personnel employed on the Contract at the Site to the place where they were recruited or to their domicile. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.
- f) Be required to employ atleast 50% of the labour force from communities within a radius of 2kms from the site, if sufficient people are available.

47.2 Persons in the Service of Employer

The Contractor shall not recruit, or attempt to recruit, staff and labor from amongst the Employer's Personnel.

47.3 Labor Laws

- (a) The Contractor shall comply with all the relevant labor Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.
- (b) The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst its employees and the labor of its Subcontractors.
- (c) The Contractor shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor.

47.4 Rates of Wages and Conditions of Labour

- (a) The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.
- (b) The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages and allowances as are chargeable under the Laws for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.

47.5 Working Hours

- (a) No work shall be carried out on the Site on locally recognized days of rest, or outside the Normal working hours, which shall be 9.00 AM to 5.00 PM on all days of the week., unless:
 - (i) otherwise stated in the Contract,
 - (ii) the Engineer gives consent, or
 - (iii) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer.
- (b) If and when the Contractor considers it necessary to carry out work at night or on public holidays so as to meet the Time for Completion and requests the Engineer's consent thereto, the Engineer shall not unreasonably withhold such consent.
- (c) This Sub-Clause shall not apply to any work, which is customarily carried out by rotary or double-shifts.

47.6 Facilities for Staff and Labor

- (a) Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification.
- (b) The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

47.7 Health and Safety

- (a) The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.
- (b) The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the performance of the Contract, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.
- (c) The Contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require.
- (d) The Contractor shall throughout the contract (including the Defect Liability Period):

- (i) conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labor (including all the Contractor's employees, all Sub-Contractors and Employer's and Engineer's' employees, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular;
- (ii) provide male or female condoms for all Site staff and labor as appropriate; and
- (iii) provide for STI and HIV/AIDS screening, diagnosis, counseling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labor.

The Contractor shall include in the program to be submitted for the execution of the Facilities under Sub-Clause 18.2 an alleviation program for Site staff and labor and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Sub-Clause and the related specification. For each component, the program shall detail the resources to be provided or utilized and any related sub-contracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and implementation of this program shall not exceed the Provisional Sum dedicated for this purpose

47.8 Funeral Arrangements

In the event of the death of any of the Contractor's personnel or accompanying members of their families, the Contractor shall be responsible for making the appropriate arrangements for their return or burial, unless otherwise specified in the SCC.

47.9 Records of Contractor's Personnel

The Contractor shall keep accurate records of the Contractor's personnel, including the number of each class of Contractor's Personnel on the Site and the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis in a form approved by the Engineer and shall be available for inspection by the Engineer. Until the Contractor has completed all work.

47.10 Supply of Foodstuffs

The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.

47.11 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.

47.12 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

47.13 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter or disposal by Contractor's Personnel.

47.14 Arms and Ammunition

The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.

47.15 Prohibition of All Forms of Forced or Compulsory Labour

The contractor shall not employ "forced or compulsory labor" in any form. "Forced or compulsory labor" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

47.16 Prohibition of Harmful Child Labor

The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. "Child" means a child below the statutory minimum age of 14 years.

48. MONITORING

Provision for regular monitoring will be commensurate as per the Environmental Management Plan and actions will be taken in case of non-compliance.

49. Change of Scope

49.1 Authority may, notwithstanding anything to the contrary in this Agreement, require provision of such addition/deletion to the works and services on or about the Project which are beyond the scope of the Project as contemplated by this Agreement (Change of Scope), Provided such change do not require expenditure exceeding/ reducing by 10% of project cost and do shall be made by Authority by an order (the "change of Scope order") issued in accordance with the procedure set forth in sub clause 49.2

49.2 Procedure for Change of Scope

- a. Authority shall whenever it desires provision of addition/deletion of works and services referred to in sub clause 49.1 above, issue to bidder a notice of Change of Scope (the "Change of Scope Notice") through Engineer In-charge.
- b. Upon receipt of Change of Scope Notice, the bidder shall, within a period of 15 (fifteen) days, provide to the Engineer-in-charge such information as is necessary and reasonable together with preliminary documentation in support of the following:
 - I. The impact which the Change of Scope is likely to have on the Project Completion Schedule if the work is required to be carried out before construction period and
 - II. The cost to the bidder of complying with such Change of Scope Notice on account of increases in quantities of items of work mentioned in the Bill of Quantities at the rate mentioned therein. In case the Bill of quantities does not carry certain items of work required under the Change of Scope, the bidder shall provide the analysis of rates-for carrying out such items of work.
- c. Engineer-in-charge shall review the information provided by the bidder, assess the change in quantities of items of work, verify the analysis of rates if required, determine the additional

cost to the bidder as a result of such Change of Scope and determine the extension/ reduction, if any, to the construction period provided that there will be no change in construction period if the change in the project cost is upto 2%, Provided that where the change in project cost is beyond 2%, then the proposed extension/ reduction to the construction period would taken into account the total change in the project cost (including 2% above).

- d. Authority shall issue the Change of Scope Order within a period of 15 (fifteen) days from the date of recommendation made by the Engineer In-charge in accordance with preceding sub clause (c) above.
- e. The Change of Scope Order shall be effective and binding upon receipt thereof by the bidder, Notwithstanding a Dispute regarding cost and time for implementation of such order, the bidder shall proceed with the performance of such order promptly following; receipt thereof. Any Dispute regarding the extension in the construction period recommended by the Engineer In-charge shall be resolved in accordance with the Dispute Resolution Procedure.

SECTION V C

CONTRACT FORMS

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1. Letter of Acceptance
2. Contract Agreement
3. Performance Security
4. Performance Security Declaration

1. Letter of Acceptance

Letter of Acceptance

[on letterhead paper of the Procuring Entity]

No.

Dated

To: ***[name and address of the Contractor]***

Subject: ***[Notification of Award for the Works]***

This is to notify you that your Bid dated ***[date]*** for execution of the
... ***[name of the contract and identification number, as given in the Contract Data]*** for the Accepted Contract Amount of the equivalent of
[amount in numbers and words and name of currency], as corrected
and modified in negotiations and in accordance with the Instructions to Bidders has
been accepted by ***[designation of the Procuring Entity]***..... The date of
commencement and completion of the Works shall be:
.....

You are requested to furnish the Performance Security/ Performance Security
Declaration within Days in the form given in the Contract Forms for the same
for an amount equivalent to Rupees within days of notification of
the award valid up to 60 days after the date of expiry of Defects Liability Period and
maintenance period, if applicable, and sign the Contract, failing which action as stated
in sub-section 2 of section 42 of the Rajasthan Transparency in Public Procurement
Act, 2012 and Instructions to Bidders shall be taken.

Authorized Signature:

Name and Title of Signatory: THE EXECUTIVE ENGINEER (HQ) Jaipur Development
Authority

Designation:

2. Contract Agreement.

Contract Agreement Works

THIS AGREEMENT made this day of2022, between Government of Rajasthan, represented by the Executive Engineer, JDA (Jaipur development Authority) Ram KishorVyasBhawan, Indira Circle, JawaharLal Nehru Marg, Jaipur-302004 (hereinafter “the Employer”) which expression shall, where the context so admits, be deemed to include his successors in office and assigns, of the one part and M/S _____(Contractor name)_____ (Contractor address) (hereinafter “the Contractor”), which expression shall, where the context so admits, be deemed to include his heirs, successors, executors and administrators, of the other part:

WHEREAS the Employer desires that the Works known as [name of the Contract] should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein, and for which the Contractor has submitted Performance Security for Rupees ----- in the form of -----(For Jaipur Development Authority)

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - a) the Letter of Acceptance;
 - b) RFP as uploaded in eproc.rajasthan.gov.in; sppp.rajasthan.gov.in
 - c) Any addendum, corrigendum issued.
 - d) the Bid of the Contractor as accepted along with the correspondence done on it, if any;
3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor Rupees_____ /- Rupees (word only) + GST as consideration for execution and completion of the Works and the remedying of defects therein, in the manner prescribed by the Contract.
5. All the terms and conditions of NIT _____, Jaipur will be part of this agreement.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of India on the day, month and year indicated above.

Signed by
Executive Engineer
Jaipur Development Authority

Signed by
Contractor
for and on behalf the Contractor

Witness, Name, Signature, Address
Signature, Address
Signed by

Witness, Name,
Signed by

3.Performance Security

**(Format of the Bank Guarantee Bond Against Earnest Money Deposit,
En cashable at branch of the bank in Jaipur City).**

The Secretary,

Jaipur Development Authority

Jaipur.

Whereas Jaipur Development Authority through Executive Engineer HQ, (hereinafter called 'The Jaipur Development Authority') has called for tenders for execution of work "**Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur**" estimated to cost Rs. (Rupees.....only) on (Date) or any extended date as per normal rules.

1. In consideration of Jaipur Development Authority having made such a stipulation in Rules and M/s(name of contractors) are desirous of depositing Earnest Money Rs. (Rupeesonly) in the form of Bank Guarantee as Earnest Money in order to participate in the tender for work abovementioned as per Rules and will be so permitted on production of a Bank Guarantee for Rs. (Rupees.....only) We.....(name and address fo Bank) having Registered office hereinafter referred to as the Bank at the request of M/s Contractor (s), do hereby undertake to pay to Secretary, Jaipur Development Authority an amount not exceeding Rs./- (Rupeesonly) on demand.
2. We(name and address of bank)....., do hereby undertake to pay Rs./- (Rupees Only) The amount due and payable under this guarantee without any demur or delay, merely on a demand from Secretary, Jaipur Development Authority any such demand made on the bank by the Jaipur Development Authority shall be conclusive and payable by the Bank under the guarantee. The Bank Guarantee shall be completely at the disposal of Secretary, Jaipur Development Authority and We(name and address of bank)....., bound ourselves with all directions given by Jaipur Development Authority regarding this Bank Guarantee However our Liability under this guarantee shall be restricted to an amount not exceeding Rs./- (RupeesOnly).
3. We the(Name and address of Bank), undertake to pay Jaipur Development Authority any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) any suit or proceeding pending before any Court or Tribunal or Arbitrator etc. Relating thereto our liability under these presents being absolute, unequivocal and unconditional.
4. We(Name and address of Bank), further agree with Jaipur Development Authority that the Jaipur Development Authority shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Jaipur Development

Authority against the said Contractor (s) and to forbear or enforce any of the terms and conditions relating to said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor (s) or for any forbearance, act or omission on the part of the Jaipur Development Authority or any indulgence by the Jaipur Development Authority or the said Contractor (s) or by any such matter or thing whatsoever which would but for this provision have effect of so relieving us.

5. The liability of us (Name and address of Bank), under this guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor (s).
6. We(Name and address of Bank), lastly undertake not to revoke this guarantee except with the consent of Jaipur Development Authority in writing.
7. This Bank Guarantee shall remain valid and in full effect, until it is decided to be discharged by the Jaipur Development Authority. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.....
8. It shall not be necessary for Jaipur Development Authority to proceed against the contractor before proceeding against the guarantee herein contained shall be enforceable against the Bank notwithstanding any security which Jaipur Development Authority may have obtained or obtain from the Contractor.
9. That on demand of JDA, this Bank Guarantee is in cashable at following branch in Jaipur City.

1. Name of Bank:

2. Name of the branch with branch code:

3. Address:

4. E-Mail Id:

5. Telephone No.

6. Fax No.:

If the last date of expiry of the Bank Guarantee happens to be a holiday of the Bank, the Bank Guarantee shall expire on the close of the next working day.

10. We(Name and address of Bank), undertake that the amount covered under the above Bank Guarantee shall be automatically be credited in the accounts of JDA in ICICI Bank, JDA Campus, Jaipur through IFSC Code No ICIC0006754, Bank Account No. 675401700518 on the date of expiry or its validity, unless the agencies get it re-validated well before its expiry date or produce NOC from JDA in written for its release.

11. All claims under the guarantee will be **payable at Jaipur**.

This guarantee will be returned to us as soon as the purpose for which it is issued is fulfilled' The BG Confirmation letter No is an integral part of the BG No.

Date _____ Signature of the Bank _____

Witness _____ Seal _____

[Signature, Name and Address]

[Note: To be furnished on appropriate non-judicial stamps.]

4. Performance Security Declaration (Applicable for Public Undertaking departments)

Form of Performance Security Declaration

Date: _____ ***[insert date (as day, month and year)]***

Contract Name and No.: _____ ***[insert name and number of Contract]***

To: _____ ***[insert Designation and complete address of Procuring Entity]***

We, the undersigned, declare that:

We understand that, according to your conditions, the Contract must be supported by a Performance Security Declaration as a guarantee to ensure fulfillment of our all performance obligations under the Contract for _____ ***[insert name of subject matter of procurement]***.

We accept that we will automatically be suspended from being eligible for bidding in any contract with you for the period of time of _____ ***[Procuring Entity to indicate here the period of time for which the Procuring Entity will declare a Bidder ineligible to be awarded a Contract if the performance Security Declaration is to be executed]*** starting on the date that we receive a notification from you, the _____ ***[Designation of the Procuring Entity]*** that our Performance Security Declaration is executed, if we are in breach of any of our performance obligation under the conditions of the Contract,

We understand this Performance Security Declaration shall expire after 60 days of completion of our all obligations under the Contract including Defect Liability, warranty/ Guarantee, etc. in accordance with the conditions of the Contract.

Signed: _____

[insert signature of person whose name and capacity are shown]

In the capacity of: _____

[insert legal capacity of person signing the Performance Security Declaration]

Name: _____

[insert complete name of person signing the Declaration]

Duly authorized to sign the Contract for and on behalf of: _____

[insert complete name and address of the Bidder]

Dated on _____ day of _____, _____ ***[insert date of signing]***

Corporate Seal _____

SECTION VII DRAWINGS

Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur

(Indicative Quantities for Reference purpose only)

For Civil Work

S.N.	ITEM	UNIT	QUANTITY
	MASONRY WORKS		
	External Masonry		
1	Providing and fixing Exposed Random Rubble stone masonry (Teja Stone from Natata, Saiwal, Jaipur/ Siwar Pink sandstone) for superstructure above plinth level one storey height above 30 Cm. thick wall in CM:1: 3 As per Detail and drawing to be provided by JDA.		
	375mm thk. Amphitheatre, Ghat, External Ramps & Steps	Cum	329.87
	FLOORING WORKS		
2	Providing and fixing First quality with uniform texture Stone On floor 15-18 mm thick over 30mm (Av.) thick base of CM 1:4 (1 cement : 4 coarse sand) jointing with white cement mortar 1:2 (1 white cement : 2 marble dust) & In Skirting shall be fixed to the wall surface using 1:3 cement sand mortar with a top layer of white cement and to wood ply surfaces using wood to stone adhesive with pigment to match the shade of the granite slab including grinding, rubbing and polishing and moulding as per design and drawing complete.		
	Flamed/Leathered Finish Garda stone from Buddhpura, Kota-Chittor Road Steps of Amphitheatre., Ghat & outer Areas	Sqm	650.00
3	Providing and fixing Ist quality MAT finished ceramic tile size 300x300mm confirming to IS : 13753 coloured tile expect white, grey, ivory, fume red brown in walls, floors, steps, pillars etc. laid on a bed of neat cement slurry /chemicla including nicely finished joints using water proof joint filler power (Untile or Roffe make) and finishing with flush pointing in white cement mixed with pigment to match the shade of tile complete		
	Tiles in Water body with chemical	Sqm	520.00
4	Providing and laying factory made coloured chamfered edge Cement Concrete paver blocks of required strength, thickness and size/shape, made by table vibratory method using PU mould, laid in required colour and pattern over 50mm thick compacted bed of stone dust, compacting and proper embedding/laying of inter locking paver blocks into the bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand including locking edges with M 15 cement concrete in footpath, light traffic parking etc. complete as per direction of Engineer-in-Charge. laying of paver including all excavation, filling, PCC (1:4:8), sand below paver and paver (80mm) laying.		
	Mandana stone 30 mm thick	Sqm	4922.00
5	Supply and fixing Cobble stone 200-230 mm thick for stone road pavement, all the sides machine cut in rectangular shape in size not less than 30cm x 45cm to be used as stone paving with under layer 1:4 cement mortar & fixed in pattern as approved by Engineer with keeping standard joints 10mm to 15mm as specified same will be filled with mix of mosaic material in grey cement & finished joint at 3mm below the top of stone road pavement with standard & special tool for joint including cleaning & curing of surface complete in all respect as per direction of Engineer Incharge.		
	Stone Cobbles 100x100x100mm On road surrendered for Mosque	Sqm	711.00
	DOORS		

6	Providing and fixing of Pre-used wooden (ship-wood) Single or double rebate Frames and External grade board solid core single or double leaf flush door shutters ISI 2202-67 marked, 40 mm thick shutter with Decorative Teak veneer both side with melamine polish, using Phenol formaldehyde resin, in glue both sides with approved steel fittings complete as per Annexure 'A' IS 2202 (Part I & II) 1999/1983, with required Hardware accessories, complete in all manner As per Detail to be provided by Dept.		
	Flush Doors (Both side Veneer Finish with Melamine polish)) + Pre-used Wooden Frame (Ship-wood) Electric rooms 2 Nos	Sqm	8.00
	PLASTER		
7	Plaster on new surface on wall in cement sand mortar 1:4 including raking of joints etc. complete fine finish		
	20 mm thick Electrical rooms and external areas	Sqm	250.90
	POINTING WORK		
8	Pointing on stone masonry in cement sand mortar 1:3 (1-Cement:3-Sand), finished and complete in all respect.		
	Exposed Stone Masonry Walls (Amphitheatre, Ghat, External Ramps & Steps)	Sqm	359.81
	COPING WORK		
9	Supplying and fixing in cement sand mortar 1:4 sand or other approved stone dassa or coping of thickness 75 to 100 mm (fine dressed) As per Detail to be provided by JDA		
	Coping at Stone Toe Wall and water body wall (50mm thk.)	Sqm	99.375
	PAINTING WORKS		
	External Paint		
10	Finishing walls with textured exterior paint of required shade as per approved colour complete as per manufacturers specifications including primer coat and protecting coat Trowel Finish av. thickness 2000 to 2500 microns.	Sqm	250.00
	M.S Work		
11	Providing and fixing MS Railing using MS Pipe/ Bar / Flat/ etc. with holdfast and fittings complete as per design and drawing including cutting welding and fabrication with priming coat of red oxide and enamel paint		
	M.S powder coated railing as per requirement and design approved by JDA	Mtr	205.00
12	MS Gate using Structural steelin single section fixed without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete above plinth level up to 4.5 mtr. height in R.S. joist flats, tees, angles and channels		
	Main Entrance gate as per design	Sqm	36.00
13	. Providing ,Fabricating, Assembling and erection of pre stressed Tensile Membrane Fabric Structure in desired Profile as per drawing, With SATTLER Type II,or Equivalent having Minimum Tensile Strength (Warp/Weft)5000/4300 dN/50mm & Tear Strength (Warp/Weft) of 600/550N,High concentrated cross link PVDF Top coating (Weld able)and bottom side wieldable PVDF Coated polyster fabric having minimum		

	weight of 900 g/sqm as per particular specification with a particular specification with a 15 years Warranty etc. Over steel frames with all fittings and fixtures such as galvanised MS Membrane/End Plate, Shackles, Rigging Screws, Tumbuckles, Swedge, Fork, Keder rods & galvanised MS Strands/Cables with Stainless Steel end terminals complete as per Drawing /Detail & as per technical specification and as per the insructions of Engineer-in-charge. (Rate includes cost of fabric, Shop Drawing, pattering, forming, Cutting, Fabrication, hot wield stich of fabric, Transported to the site, assembling and installation with GI Cables, Hardware, Aluminium flat, EPDM gasket and required accessories.) (Note: Actual Surface area of fabric shall only be measured for payment. Galvanized Strands/cables, Galvanized MS membrane plate & Aluminium flat only shall be paid separately under respective item.) Providing & Supplying erecting and placing in position MS Built-Up Section/Tubular Structure in the profile shape as per drawings with special plate connector, pinion joints, Plates, Hollow sections etc, with cleaning the surface and including Prepartion of detailed Architectural Fabrication and erection drawings of structural steel work from design drawings issued by Engineer-in-Charge and incorporation of Engineer-in-Charges's Comments on same.		
	Tensile Structure to cover o.t.s. area at rear side of Building	Sqm	424.00
	TURNSTILE ENTRY GATE		
14	SITC of Tripod Turnstile, Bi-Directional, Stainless Steel AISI 304, Drop Arm, Motorised, 100 % Duty Cycle, Anti Tail gaiting with sensors, Pass Speed 35 Person/Minute, Drop Arm, Arm Length 550mm to give passage width of 550~600mm, LED Directional Display, aximum power consumption 35 watt, Protection level IP 54, Working Temperature -25 to +70 degree Celsius. -	Nos	3.00
	Wooden and glass entry gate for visitor's entry		
	FURNITURE WORKS		
	Fixed Furniture as per requirement		
15	Overall Dimensions: Sitting platform size - 1800 mm length X 600mm width; 4-Cast Iron Leg Frames size - 900mm Height X 750mm Width X 100mm thickness; Sitting height is 450 mm. Seasoned Wooden Batten Sitting platform Painted brown while the legs are in green colour Manufactured As/Design and to prevent damage during handling, transportation & erection Treated with special anticorrosive, water proof coating so as to make the surface glossy and water resistant.		
	Benches	Nos	25.00
	WATER PROOFING WORKS		
16	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: i) Ist course of applying cement slurry @ 4.4 Kg/sum mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. Ii) IInd course of 20mm cement plaster 1:3 (1 cement: 3 coarse sand) mixed with water. proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface.. iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 Kg per sqm. of area. iv) IVth course of 400 micron thick PVC sheet .(Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)		
A	Waterbody	Sqm	520.00

B	Courts	Sqm	800.00
	PLINTH PROTECTION		
17	Providing and fixing First quality with uniform texture Stone On floor 15-18 mm thick over 30mm (Av.) thick base of CM 1:4 (1 cement : 4 coarse sand) jointing with white cement mortar 1:2 (1 white cement : 2 marble dust) & In Skirting shall be fixed to the wall surface using 1:3 cement sand mortar with a top layer of white cement and to wood ply surfaces using wood to stone adhesive with pigment to match the shade of the granite slab including grinding, rubbing and polishing and moulding as per design and drawing complete over 150mm thk. P.C.C. (1:4:8) and Kerbstone with required excavation & earth filling.		
	Plinth Protection at Courtyards	Sqm	50.00
	GOOD EARTH FILLING		
18	Supply and stacking Good soil of earth at site complete including loading, unloading and transportation etc.lead up to 10 Km. Disposed Earth to be leveled and neatly dressed :		
	Good Earth filling (Cinder fill) Amphitheatre, Ghat, Courts, External Ramps & Steps)	Cum	3881.00
19	Providing and laying in position ready mixed concrete (RMC) of M-30 grade for reinforced cement concrete work, using cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering, finishing and reinforcement, including cost of admixtures in recommended proportions as per IS : 9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Note: Minimum cement content is @ 420 kg/cum. (No extra payment for using extra cement as per requirement of mix design.)		
	Under ground Water Tank & Pump Room Construction		
A	R.C.C. Under ground Water Tank (M30 grade) with waterproofing , U.G.W.T.-1 (Fire) (9.5x2.185x2.7), U.G.W.T.-2 (Fire) (9.5x2.185x2.7), U.G.W.T.-3 (Raw) (4.6x2.3x2.7),	Nos	3.00
B	R.C.C. Pump Room Construction (M30 grade) with waterproofing , Pump Room (6.29x4.6x2.7)	Nos	1.00
	MISCELLANEOUS ITEMS		
20	Boundary wall construction with grills as per design approved by JDA.	Mtr	500.00
21	Exposed Random Rubble stone masonry (Teja Stone from Natata, Saiwal, Jaipur/ Siwar Pink sandstone)for superstructure above plinth level one storey height above 30 Cm. thick wall As per Detail to be provided by JDA		
	Toe walls for railings and others as per requirement	Cum	18.45
22	Specified timber /bamboo shall be sawn/cut in the direction of the grains. Sawing / cutting shall be truly straight and square. The timber / bamboo shall be planed smooth and accurate to the full dimensions, rebates, roundings, and mouldings as shown in the drawings made, before assembly.	Sqm	98.25

	Patching or plugging of any kind shall not be permitted except as provided. This shall consist of wooden strips or laths 35 x 10 mm section unless otherwise specified planed and nailed together at every alternate crossing. The strips shall cross each other at right angle and shall be spaced 35 mm apart, so as to form 35 × 35 mm square opening or as shown in the drawing. These shall be fixed with nails to the frame. To cover the ends of strips, 50 × 12 mm beading shall be fixed to the frame with screws. The finished work with a tolerance of ± 1 mm may be accepted.		
23	Other Miscellaneous works as per requirement		

For MEP Works

S.No	Description	Unit	Qty.
	EXTERNAL LIGHTING		
1	P&F of IP66 protected LED Street Light Luminaire on existing bracket. Fixture made of powder coated single piece pressure die cast aluminum with heat dissipation fins on housing with UV stabilized PC/Toughened Glass cover (from 45W onwards) and should be secondary lens on each LED. The System level Luminaire efficacy ≥ 100 with High Power LEDs of CREE/ NICHIA/ OSRAM/ PHILIPS/ SEOUL make is to be used .The LED Driver shall be BIS certified and Input Voltage AC 110 to 270 V AC with Input Frequency $50\text{Hz} \pm 3\%$ Power Factor > 0.95 Driver Efficiency $> 85\%$, THD(I) $< 10\%$ Humidity 10% to 90% RH Working Temp -20C to SOC . Life Expectancy Equal or more than 50000 burning hrs with Minimum 70% initial lumens maintained, Rendering Index $> 75\%$.Surge protection shall be min ~ 5 KV internal and min 10 KV external. Manufactures Word Mark/Name Engraved/Embossed on die cast housing to allow traceability/authenticity till life of fixture. Fixtures shall be CEcomplianced.		
1.1	LED Street Light fixture 90 Watt	Each	40
2	Supply and erection of hot dipped galvanised steel swaged tubular pole conforming to IS: 2713-1980 (part I to II) with galvanised base plate in position including excavation of the pit and filling the same with C.C. of M-20 grade (1:1.5:3) from base plate to 50cm above ground level, with the help of steel frame not less than 40 cm dia up to 114.3mm outer dia and 50 cm beyond 114.3mm outer dia around the pole. Duly finished with cement plaster, earthing terminals , cable entry, GI cable sleeve complete as required. The pole shall be galvanised using ISI mark seamless tube for structural purpose of following height & designation.		
2.1	8.5 Mtr. (410 SP - 17)	Each	40
3	Add for supply and fixing of hot dipped galvanised Overhang of following size over the existing poles		
3.1	76.1 mm OD x 3.25 mm thickness	Mtr.	40
4	Providing & Fixing thermoplastic Polycarbonate cable junction boxes with IP66 rating of protection & knock out for cable entry/out of following sizes including clamps for holding the box, including cost of DIN rail for MCB mounting, 10 Sqmm 4 pole connectors for cables terminals, threaded cable glands made of polyamide material etc. complete in all respect. All as per pre approved by Engineer in charge.		
4.1	300mm X 200mm X125mm	Mtr.	40
5	Providing & Fixing of IK 07 IP 66 protected high power LED flood light system with Pressure diecast aluminium housing LM6/ ADC12 material , toughened glass diffuser with suitable lenses on LED to achieve various beam angles, 240 volt, 50Hz, of high power LED lamps . Integrated driver must be potted & has a unique BIS R number shall be high efficiency having efficiency more than 85 % and in compliance to BIS certified and T.C. certificate. The System level Luminaire efficacy $\geq 120 \text{ lm/ wt}$ with High Power LEDs is to be used . LED driver Input Voltage AC 120 to 270 V AC with High voltage Cutoff $\geq 300 \text{ V AC}$ and Auto resetting Safety . Input Frequency $50\text{Hz} \pm 3\%$, Power Factor > 0.95 ,driver Efficiency $> 85\%$, THD(I) $< 10\%$, driver current $< 1000\text{mA}$ shown in LM79 report. driver should be Phase to phase protection of 440 V for 4 Hrs. Electrical Connector Must be provided, Surge Protection Min $\geq 4\text{KV}$ internal and 10KV external, System life of 30000 Burning hours with		

	70% of Initial Lumens maintained, color Rendering Index >70 and CCT 5700K ±355K. Driver current <1000mA shown in LM79 report. Manufactures Word Mark / Name Engraved /Embossing /Screen printing on die cast housing to allow trace ability/authenticity. Fixture shall be IS 10322 Compliant. OEM Must have its own in house NABL lab setup for all testing facilities for LED fixtures. (LM79/LM80) Certificate/ report with liable warranty of product/accessories from OEM shall be submitted. All as per pre approved by Engineer in charge.		
5.1	High Power LED Flood Light 300W	Mtr.	10
6	Providing & Fixing of ISO certified company made IK10 IP65 protected Top/Bottom mounted LED Post top Light system. Fixture made of powder coated die cast aluminium housing with UV stabilized PC diffuser. The System level Luminous efficacy ≥ 90 Lumen/W. SMD LEDs is to be used, System CRI>70, CCT: 3000/4000/6500 K. The integral electronic driver must be potted & has a unique BIS R number must be potted & has a unique BIS R number constant current and Internal/external surge protection device of min. 4KV(L-N) and efficiency > 85%, PF>0.9, THD<20% and input Voltage range of 90- 270V AC at 50Hz. System life of 30000 Burning hours with 70% of Initial Lumens maintained Light output in Cool white or Warm White Colour as per engineers choice. driver current <1000mA shown in LM79 report. Fixture must be in compliance with BIS Standards and T.C . Certificate complete in all respect. OEM Must have its own in house NABL lab setup for all testing facilities for LED fixtures. (LM79/LM80) Certificate/ report with liable warranty of product/accessories from OEM shall be submitted. All as per pre approved by Engineer in charge.		
6.1	30 W LED Post Top Fixture	Mtr.	10
6.2	40W LED Post Top Fixture	Mtr.	6
	TRANSFORMER,DG & HT WORK		
2	P & Laying XLPE insulated IS:7098/II/85 of Group1 and approved make H.T.cable for working voltage 11 K.V.Earthed direct in ground including excavation of 30cmx100cm size trench, 25cm layer of river sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc.as required of size.		
2.1	3 core 185.0 Sq.mm	Mtr.	5,000
2	Providing & making heat shrinkable type indoor/outdoor/straight through terminations/joint kit of Group1 and approved make suitable for XLPE insulated 11 KV cable, with required components, preparation of cable ends,testing etc. as required of following sizes .		
2.1	3 core 120/150/185 Sq.mm INDOOR TYPE	EACH	5
2.2	3 core 120/150/185 Sq.mm OUTDOOR TYPE	EACH	8
3	SITC of star rated Copper wound distribution Transformer of following rating 11/0.433KV Delta- Star Connected, Vector Group Dyn 11, as per BEE star level- 2 & BISapproved with losses as defined as per IS 1180 part I 2014. including standard accessories like conservator, silica gel breather, radiator, fins, HT cable box & LT cableboxes, Off -LTC(+5% to - 10% @ 2.5%) winding temperature rise of 50/55 degree C, 151 marked drain valve, Dial type Temperature gauge, first fill of oil, Epoxy based paint, including carrying of pre-commission Testing & Charging of Transformer. (Transformer Should be CTLTested, w/o any extra cost)		
3.1	1250 KVA	Each	1

4	Supply & Installation of D.P. Structure With AIR BREAK SWITCH having following specifications:		
	DP :double pole structure on 2 no ISMB 150 x 100 mm, 10 mtr high using 7 no MS channel each of size 100 mm x 50 mm x 2500 mm complete in all respect with nuts, springs washers, clamps as required.		
	GO:Off load type gang operated 3-pole vertical flute type switch suitable for 11KV ; 400A ,3-ø, central post rotating double break isolator complete with MS hardware , copper moving & fixed contact ,assembly of 9 nos pin insulator ,GI pipe of suitable length for operation.		
	DO: 3nos Vertical / Horizontal mounted 11kv horn gap fuse set /drop out 11kv barrel fuses mounted on 6no pin insulators		
	LA: 3 piece non linear resistor type. lighting arrestor of approved make suitable for 3 wire, 11kv Overhead line with rated voltage of 9kv rms & nominal discharge current rating of 5 ka & complete with galvanized clamping arrangement GI bolts, nuts, washer etc as required.		
4.1	JUMPERS: 3 no 11kv acsr conductors mounted on pin type insularors as required. 6.GENERAL:The go shall be operated by hand operated liver properly earthed with provision for locking mounted at 3'	Set	2
5	SITC of 11 KV, 400/630 A, 20kA / 3 sec, Out door, Extensible / Non Extensible type Ring main unit (RMU) in suitable RCC foundation with 2 no. Load break switch & 1 no. VCB / SF6 circuit breaker with over load, Earth fault, short circuit relay, copper bus bar, ring core protection & metering CT, earthing switch, mechanical ON / OFF / Earth indication, Voltage presence indicator, Digital Multi function meter, Shunt trip coil, Anti reflex operating handle, right angle boots etc. as required.	Set	4
6	Supply, Installation, Testing & Commissioning of HT metering cubical panel as approved By DISCOMs fabricated out of 14 SWG CRCA sheet steel in two compartment & MS angle of size 60mmX6mm having provision for Following: (i)Provision for fixing Trivector Meter (To be supplied by DISCOMs) (ii)Provision for fixing of combined CT PT Set (To be supplied by DISCOMs), (iii)TT Block, (iv) 6mm Bakelite sheet on all sides, (V) 3/6 core copper cable for interconnections etc. as required.	Each	1
7	Providing and laying in position cement concrete including curing, compaction etc. complete in specified grade excluding the cost of centering and shuttering - All work up to plinth level.		
7.1	M15 grade Nominal Mix 1: 2: 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40mm nominal size)	Cum	11.00
8	Random Rubble stone masonry for with hard stone in foundation and plinth in Cement Sand mortar above 30 CM thick wall in:		
8.1	Dry Masonry.	Cum.	5.00
8.2	Cement Mortar 1:6 (1-Cement : 6-Sand).	Cum.	5.00
9	M10 grade Nominal Mix 1: 3: 6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Cum.	5.00
10	M15 grade Nominal Mix 1: 2: 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40mm nominal size).	Cum.	5.00
11	Plaster on new surface on wall in cement sand mortar 1:3 including racking of joints etc. complete fine finish :		

11.1	25 mm thick	Sqm.	5.00
11.2	20mm thick	Sqm	5.00
11.3	12mm thick	Sqm	5.00
12	Finishing wall with water proofing cement paint of approved brand and manufacture and or required shade to give an even shade including all scaffolding:		
12.1	New work (Two or more coats applied @ 3.84 kg/10 sqm).	Sqm	20.00
13	Supplying and fixing welded mesh/ expanded metal mesh in frame work , flat iron beading with angle iron posts 50x50x6mm placed at every 3 Mtr. apart 30cm in ground embedded in cement concrete 1:3:6 (30x30x45cm) corner and every tenth post to be strutted with (50 x 50 x 6cm) angle iron provided and fixed and fitted with posts including earth work in excavation etc. complete.		
13.1	Welding mesh 25mm x 25mm x 2.1mm	Sqm.	10.00
14	SITC of Silent DG Set (As per latest CPCBemission norms) complete with 1500 RPM Diesel Engine of suitable BHP & AC Brush less SPDP Alternator mounted on a common base Frame & coupled through a flexible coupling or close coupled. Alternator shall be self regulated with standard Alternator Protection(Over voltage, over speed & under voltage, under speed warning & shutdown). Engine shall have residential silencer (isolated from main DG chamber), up to 3 M exhaust piping (with insulation & cladding), electronic governor, Manual & electric Start ,Batteries, Engine instruments panel, AVM and with Weatherproof, powder coated Accoustic enclosure for DG set for sound attenuation fabricated from 1.6 mmCRCAsheet steel (structure) with side wall fabricated from 1.6 mm CRCAsheet & filled with 100mm thick glass wool (96Kg/m3)/Foam. as per IS 8183 the doors of 100 mm thick and fabricated from 1.6mm CRCA sheet packed with accoustic material, All doors/ opening are sealed with neoprene/EPDN gaskets.		
	The enclosure has built in fuel tank, with protection and tripping of DGset against temperature of more than 50 degree centigrade. All controls for operation of DG set are from outside the enclosure with DG control panel having Microprocessor based Genset monitoring & control system, MCCB/ACB of suitable rating, Ammeter, Voltmeter, PF meter, frequency meter, KWH meter, Ind.lamps etc. mounted inside enclosure , visible and accessible from outside. The enclosure should be suitable for following capacity DG sets and alternator. Noise level shall be less than 75 dBA at a distance of 1 Mtrs. duly certified by authorised agency etc. complete in all respect of following capacity:		
	Radiator cooled and Turbo charged /AC		
14.1	500 KVA at 0.8 pf 415V 50Hz 3-ø	Each	2
15	SITC of Auto main failure (AMF) Panel fabricated from CRCA sheet steel 2 mmThick , Powder coated finish , Engine Start & Stop commands, control Relays , Ammeter & Voltmeter with selector switches, Control & 2 nos 4 pole Power Contactors with 2 no. of required size 4 pole MCCB, Timers, Electronic Hooter ,Visual & Alarm indication for faults, UPS, operator interface panel complete in all respect suitable for following capacity DG sets. OEM Must have BIS certificate and & shall have submit NABL / CPRI / ERDA lab type test reports before execution as required complete in all respect. All as per pre approved by Engineer in charge.		
	PLC Based:		
15.1	500 KVA	Each	2

16	Providing, Fixing, Jointing Testing & Commissioning of Medium duty MS B class pipes conforming to IS 3589 / 1239 part-I for DG Exhaust applications including cutting, welding etc & fittings like elbows, flanges, tapers, reducer, gaskets etc. fixing the pipe on the wall/ceiling with suitable clamps, hanger and nuts bolts . including the cost of thermal insulation with 50 mm thick layers of LRB rock wool as per IS : 8183-1993 (64 kg/m3 density) & 26 SWG aluminium sheet claddings etc complete as required complete in all respect. OEM Must have BIS certificate and & shall have submit NABL/ OEM lab appropriate type test reports before execution as required complete in all respect. All as per pre approved by Engineer in charge.		
16.1	200 mm dia	Mtr	20
17	Maintenance free Gel Earthing with Pipe in pipe / Pipe in strip technology filled with anti corrosive conductive compound (CPRI Tested) below the ground in 150 - 200 mm dia. earth pit & surrounding filled with required mineral filling compound (MFC should have hygroscopic property to retain the moisture for long time to create low resistance zone) and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete testing of earth resistance as required. of following sizes.		
	With Pipe in Pipe Technology (Inner pipe dia. / Outer pipe dia.) 80 - 100 micron GI Coating		
17.1	GI pipe 2000 mm long, 50 / 25mm, Terminal 40mm X 6 mm GI Strip	Set	10
18	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required.		
18.1	25mm x 3mm G.I. (Hot Dipped) Strip	Mtr.	200
	MISCELLANEOUS WORK AND SAFETY WORKS		
1	SITC of self contained drinking water cooler with energy efficient hermetic sealed type compressor, non cFC refrigerant suitable for operation on 230v/1pH/50Hz ac supply, Full stainless steel [S304] body and tank, stainless steel water tray, minimum two nos faucets and suitable drainage system complete in all respect with 300mm height MS fabricated and painted platform. complete in all respect of the following capacity		
1.1	cooling capacity 150 Ltr./Hr. and storage capacity 150 Ltrs	Each	3
1.2	cooling capacity 80 Ltr./Hr. and storage capacity 120 Ltrs	Each	1
2	SITC of RO water system with Filtration stage = Particulate filter-Membrane life enhancer filter - sediment filter - Pre carbon filter -RO Membrane filter - Post carbon filter, Input power Rating - 230 v AC , 50 HZ, Percentage of Rejection TDS - 90% or better having following features (a) Double purification by RO with ESS or latest technology with TDS indicator.(b) Spin welded RO Membrane Housing to prevent tempering. (c) Push fit components for leak proof performance (d) Fully automatic operation with auto start and auto off. (e) SS/ABS construction for corrosion free lifespan. (f) Equally suitable for water from all bore wells, overhead storage tanks, water tankers and even municipal taps.(g) RO Membrane Flushing - Auto Flush @ Every Start, Every Stop and every One Hour of working for one minute. complete in all respect with following capacity		
2.1	Purification capacity- 50 LPH, Duty Cycle 270-500 liters/dav	Each	1
2.2	Purification capacity- 25 LPH, Duty Cycle 170-250 liters/day	Each	1
3	S & F of Electrical insulating rubber matts confirming to IS: 15652 / 2006		

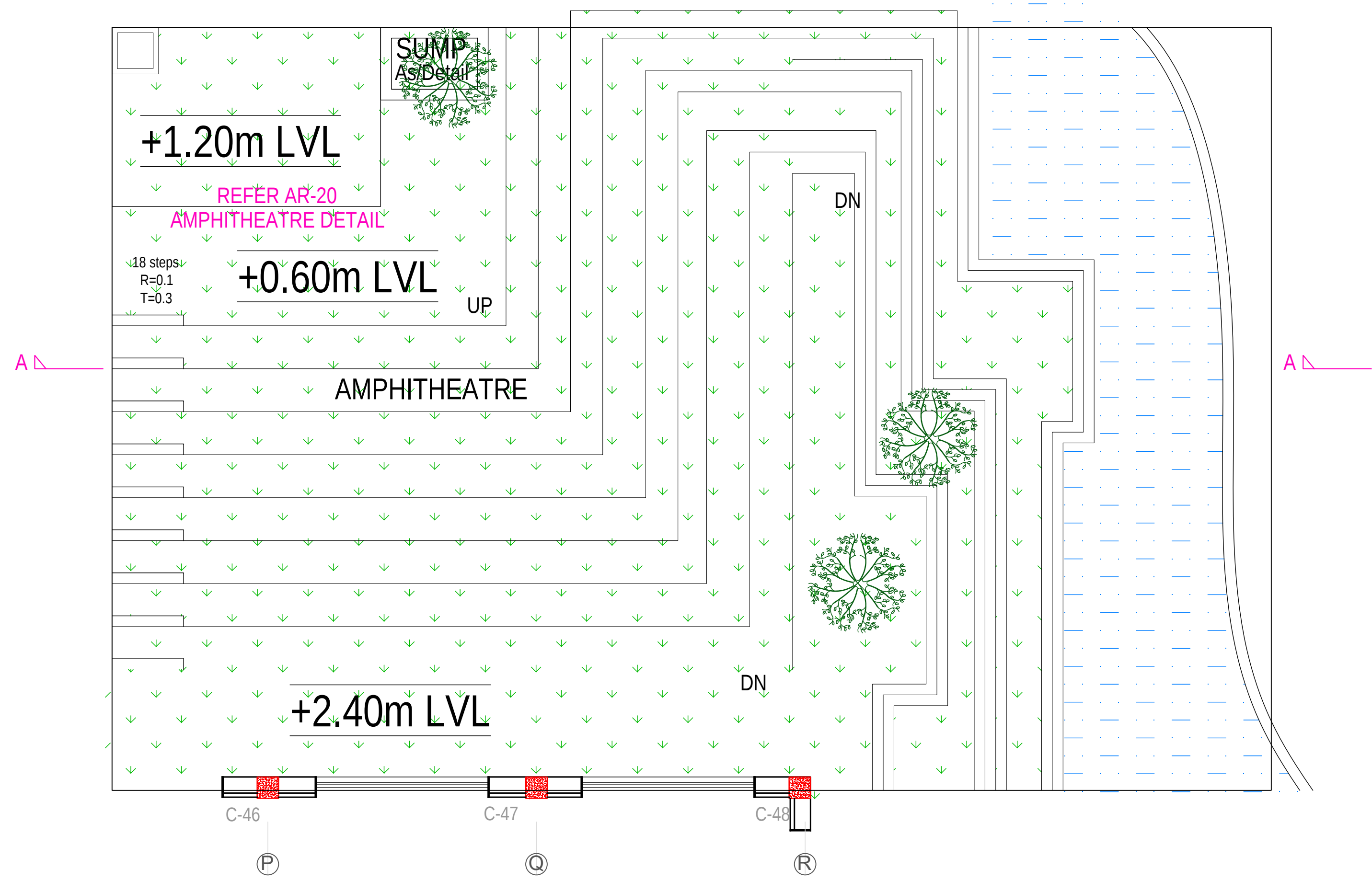
	with one side anti skid abberation marks and pasting the mat with synthetic rubber adhesive as required.		
3.1	3.3 KV, 2 mm thick with proof voltage 10 KV / 3 min. and Break Down Voltage 30 KV	Mtr	10
3.2	11 KV, 2.5 mm thick with proof voltage 22 KV / 3 min. and Break Down Voltage 45 KV	Mtr	10
4	P & F of Early streamer Emission type lightning arrester on GI mast with air terminal configured as spheroid which is comprised of separate electrically isolated 4 panels surrounding an earthed central finial, the terminal shall be tested by CPRI for impulse current of 45 kA (8 / 20 Sec) with 5 positive & 5 negative impulse, the arrester having following protection radius at level 1		
4.1	15 - 32 Mtr.	Each	2
5	S & Laying of down conductor of 70 Sq.mm single core insulated flexible copper cable with accessories as required.	Mtr.	70
6	P & F testing joint, made out of 20mm x 3mm G.I. Strip, 125 mm long, with 4 no.G.I. bolts, nuts, checknuts, spring washer etc. complete as required.	Mtr.	15
	Supply Installation testing & Commissioning of ISO certified manufacturer made Dewatering Submersible Motor Pump set, motor should be IE2 class as per IEC 60034-2-1: 2007, IEC 60034-30: 2008, & IS12615:2011. with SS Impellor, body, shaft, mechanical seal etc. as required. Pump shall have following HP Rating, phase, Head, minimum Discharge respectively complete in all respect. Appropriate type test certificate / OEM test report shall be submitted. All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .		
	3.0 HP, 3-Ø, (5 - 20)Mtr, (810 - 126) LPM	Mtr.	3
	IP BASED SURVEILLANCE SYSTEM		
1	Supply of 2 Megapixel Fixed Lens Camera IR Dome Type: 1/2.8" Progressive Scan CMOS, 1920 × 1080 at 25fps, 2.8mm Fixed lens, 0.028 Lux at F1.2, ICR, ONVIF, support H.265, H.264, MJPEG, 120db WDR, 3D Digital Noise Reduction, Three individually configurable stream, 12 VDC & PoE, IR range: 40m, Support on-board storage up to 128 GB (SD card not included), IP67, IK10, Edge Analytics- Line crossing detection, Intrusion detection, Motion detection, Scene change detection, video tampering, UL, CE, FCC certified.	Nos	127
2	Supply of 2 Megapixel Fixed Lens Camera IR Bullet Type: 1/2.8" Progressive Scan CMOS, 1920 × 1080 at 25fps, 2.8 mm Fixed lens, 0.01 Lux at F1.2, 0 Lux with IR, ICR, ONVIF (PROFILE S, PROFILE G), support H.265, H.264, MJPEG, 120db WDR, 3D Digital Noise Reduction, Three individually configurable stream, 12 VDC & PoE, IR range: 40m, Support on-board storage up to 128 GB (SD card not included), IP67, Edge Analytics- Line crossing detection, Intrusion detection, Motion detection, Scene change detection, Video tampering, UL, CE, FCC certified.	Nos	45
3	NVR 32 Channel: Connect Up to 32 IP Cameras, Dual OS, Up to 8 Megapixels Resolution, HDMI output with 4k output and VGA output with 2MP Output , Support H.265,H.264, MJPEG, Incoming Bandwidth 256 Mbps, 4 SATA Hard Disks, ANR Technology, 4 SATA interfaces for 4 HDDs and capacity of each HDD upto 6TB, 2 USB at least 1 × USB with 3.0, Serial interface:1 RS-485, 1 RS-232, Alarm I/O 16/4, 2 RJ-45 10 /100/1000 Mbps self-adaptive Ethernet interface, Multiple network monitoring: Web viewer, CE, FCC, UL certified.	Nos	4

4	NVR 16 Channel: Connect Up to 16 IP Cameras, Dual OS, Up to 8 Megapixels Resolution, HDMI output with 4k output and VGA output with 2MP Output , Support H.265,H.264, MJPEG, Incoming Bandwidth 160 Mbps, 4 SATA Hard Disks, ANR Technology, 2 SATA interfaces for 2 HDDs and capacity of each HDD upto 6TB, 2 USB at least 1 × USB with 3.0, Serial interface:1 RS-485, 1 RS-232, Alarm I/O 16/4, 2 RJ-45 10 /100/1000 Mbps self-adaptive Ethernet interface, Multiple network monitoring: Web viewer, CE, FCC, UL certified.	Nos	3
5	NVR 8 Channel: Connect Up to 8 IP Cameras, Dual OS, Up to 8 Megapixels Resolution, HDMI output with 4k output and VGA output with 2MP Output , Support H.265,H.264, MJPEG, Incoming Bandwidth 80 Mbps, 2 SATA Hard Disks, ANR Technology,1 SATA interfaces for 1 HDDs and capacity of each HDD upto 6TB, 2 USB at least 1 × USB with 3.0, Alarm I/O 4/1, 1 RJ-45 10 /100/1000 Mbps self-adaptive Ethernet interface, Multiple network monitoring: Web viewer, CE, FCC, UL certified.	Nos	3
6	24 Port Network Switch Gigabit POE: 24 × Gigabit PoE ports, 1 × Gigabit RJ45 port, and 1 × Gigabit SFP fiber optical port, IEEE 802.3at/af standard.	Nos	5
7	16 Port Network Switch Gigabit POE: 16 × Gigabit PoE ports, 1 × gigabit RJ45 port, and 1 × gigabit SFP fiber optical port, IEEE 802.3at/af standard	Nos	3
8	8 Port Network Switch Gigabit POE: 8 × Gigabit PoE ports, 1 × Gigabit RJ45 port, and 1 × Gigabit SFP fiber optical port, IEEE 802.3at/af standard.	Nos	1
9	4 Port Network Switch Gigabit POE: 4 × Gigabit PoE ports, and 1 × gigabit RJ45 port, IEEE 802.3at/af standard.	Nos	1
10	Supply of CAT 6 Connector	Nos.	344
11	Supply of Hard Disc 4 TB	Nos.	10
12	Supply of Server Rack 9 U	Nos.	2
13	Supply of Server Rack 4 U	Nos.	5
14	Supply of Server Rack 2 U	Nos.	1
15	Supply of Extension Cord	Nos.	11
16	Supply of Wireless Mouse	Nos.	11
17	Supply of Led monitor 32" complete as required.	Nos.	11
18	Supply of HDMI Cable (5 MTR) in existing conduit complete as required.	Nos.	11
19	Supply of Cat-6 cable in existing conduit complete as required.	Mtr.	8600
20	Splitters (as per requirement)		
21	S&F following sizes (dia.) of ISI marked MMS (IS:9537 P - III) vergin material PVC conduit as per PWD specification for electrical Works along with its accessories (IS: 3419) as required in recess including cutting the wall, covering conduit and making good the same as required. All relative and latest acceptance tests reports by any NABL accredited lab for the conduit shall be submitted before execution & All as per pre approved by Engineer in charge.		
	25 mm	Mtr.	6450
22	Installation Charges	Job	1
	SOLAR PHOTOVOLTAIC POWER PLANT		
1	Supply, Installation, Testing and Commissioning of ongrid Solar Photovoltaic Power Plant conforming to MNRE specifications as amended,consisting of	KWp	100

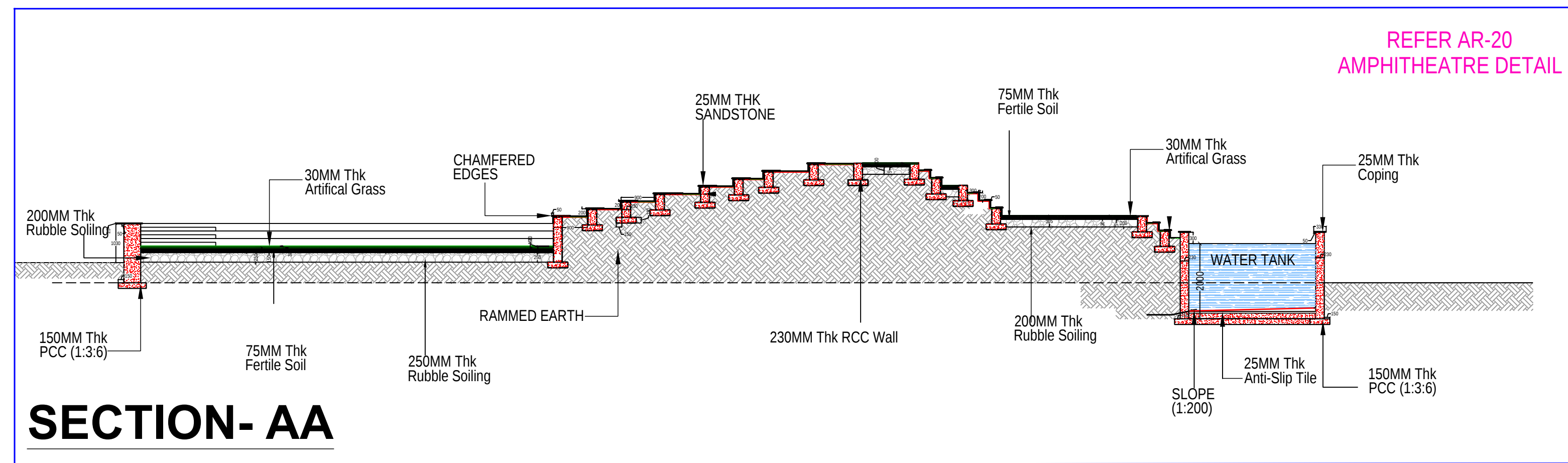
	Mono/Poly Crystal linesiliconsolarcells, netmetering facility, necessary protections, earthing, mounted on Aluminium/ GI structure of suitable strength with following components complete as required:- A) Solar Photovoltaic Module of capacity 330Wporabove, manufactured in India, conforming to IS14286/ IEC61215, IS/IEC61730-Part-1, IS/IEC61730- Part-2. Solar Photovoltaic Module conversion efficiency shall not be less than16.5%. PV modules use din solar power plants/systems must be warranted for their output peak watt capacity, which should not be less than 90% at theend of 10 years and 80% at theend of 25 years. B) Power Conditioning Unit(PCU) of 350-800VDC Input voltage range and 400VAC, threephase, 4wire,50Hz+/-2.5Hz, output voltage suitable to generate AC Power with efficiency not less than 97%, total harmonic distortion lesst han3% and suitable for ambient temperature from 0to50 degree C. The PCU shall adjust the voltage and frequency level to suit the Grid Voltage Frequency. C) Data Monitoring System complete with accessories. D) Fixing of Array junction box &Main junction box with IP65 protection and termination arrangement for incoming and outgoing cable along with glands, lugsand other accessories etc. as required. E) Lightning and surge voltage protection. F) Connections & Interconnections by supplying & fixing required size XLPE insulated copper conductor 1.1kV grade armoured power and control cables between solar modules, main power cable to grid supply PCU unit along with supplying & fixing of necessary channel/ conduit lugs and other accessories etc. as required.		
	AUTOMATIC FIRE ALARM NETWORK		
1	SITC of UL 10th edition / EN54 VDS approved IP40 Analog addressable Multi criteria (two optical/Smoke sensor to reduce false alarm) type Photo smoke detector with mounting base & LED etc including the cost of all accessories,connecting wires,fixing arrangement, Labour, T&P etc. as required complete in all respect. All as per pre approved by Engineer in charge.		
1.1	with inbuilt isolator or with isolator base	Each	555
2	SITC of IP40 Analouge Addressable type Heat Detectors (Thermal Detectors): GRADE-I with solid state design with sensing element combination of fixed type and rate of rise of temperature mounting base & LED shall have UL 10th edition / EN54 VDS approved certification etc including the cost of all accessories,connecting wires,fixing arrangement, Labour, T&P etc. as required complete in all respect. All as per pre approved by Engineer in charge.		
2.1	with inbuilt isolator or with isolator base	Each	4
3	Supply, Installation, Testing and Commissioning of IP52 Addressable (MCP) Manual Break Glass/ flap Unit (Double action) shall have UL/EN54 certification shall be constructed of Lexan with clearly visible operating instructions provided on the cover. The word FIRE should appear on the front of the stations in raised letters, including the cost of all accessories,connecting wires,fixing arrangement, Labour, T&P etc. as required complete in all respect. All as per pre approved by Engineer in charge.		
3.1	with inbuilt isolator or with isolator module	Each	11
4	SITC of Response Indicator for addressable type detectors as required complete in all respect. All as per pre approved by Engineer in charge.	Each	36
5	SITC of Fault isolation module to electrically isolate different sections of detector loops.	Each	9
6	SITC of Hooter suitable for addressable type fire alarm system with storb light with minimum 85 db audible etc. as required.	Each	11
7	Supply , installation testing and commisioning of folowing modules suitable for Addressable fire Alarm Control panel taken		

7.1	Monitor module for monitoring of flow switches of hydrent / sprinklers	Each	3
7.2	Control relay modules for tripping of AHU / pressurise fans and ventilators	Each	3
7.3	Control modules for floor wise activation of hooters	Each	5
8	Supply, Installation, Testing and Commissioning of Microprocessor based intelligent, Analogue addressable fire alarm panel with CPU redundancy & min 640 character/ 6" touch screen display , shall have UL 10th edition / EN54 VDS approved certification, modular, expandable networkable loop Fire Alarm Control Panel with each loop capacity of min 125 detectors per loop with total of 250 detectors & devices with Loop length up to 1.5 KM. Minimum 5000 history event facility . Panel shall be Compatible for Seamless integration with PA system and both system should be of the same make. The panel shall have 230 + 5 % volts power supply, Automatic battery charger 24V, sealed lead acid maintenance free batteries sufficient for 24 hours normal working and then be capable of operating the system for 30 minutes during emergency condition. Loop interface cards, communication module, inbuilt networking port (both RS485 & Ethernet), Serial port for printer, two supervisory inputs, two position key switch and USB port for programming. including the cost of all accessories, connecting wires, fixing arrangement, Labour, T&P etc. as required complete in all respect. All as per pre approved by Engineer in charge.		
8.1	2 - Loop Panel	Each	1
9	Add Extra for per Loop expansion beyond Two Loop	P.Loop	3
	CABLING AREA		
9	P/Laying P.V.C. / XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with Copper conductor of IS:1554 P-I / IS :7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, II class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.		
9.1	1.5 Sq.mm		
9.2	2 core	Mtr.	196.0
9.3	8 core	Mtr.	20
10	Supply , Drawing and Testing of 4 pair, 24 AWG UTP Cat 6 Cable as per latest amendments of TIA /EIA 568 B.2-1 Specifications in existing MS/PVC Conduits including making connections to Information outlets and Patch Panels with ferruling at both ends for identification with necessary tools for punching, stripping, crimping and testing required	Mtr.	15
11	S&F following sizes (dia.) of ISI marked medium duty PVC conduit along with accessories in surface / recessed using saddles, clamps, fastener as required including cutting the wall, covering conduit and making good the same as required.		
11.1	25 mm	Mtr	15
	RAIN WATER HARVESTING PIT WORK		
1	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 sum on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed:		
1.1	All kinds of soil	Cum	325.60

2	Providing and laying in position cement concrete including curing, compaction etc. complete in specified grade excluding the cost of centering and shuttering - All work up to plinth level.		
2.1	M15 grade Nominal Mix (with graded stone aggregate 20mm nominal size).	Cum	4.50
3	Providing and laying in position specified grade of cement concrete for all RCC structural elements upto plinth level including curing, compaction, finishing with rendering in cement sand mortar 1:3 (1 cement: 3 coarse sand) and making good the joints and cost of plastizers(if required) excluding the cost of centering, shuttering and reinforcement.		
3.1	M20 grade Nominal Mix / Design Mix	Cum	20.34
4	Centering and Shuttering with plywood or steel sheets including strutting, propping bracing both ways and removal of formwork for foundation , footings, strap beam, raft , bases of columns etc.	Sqm.	155.50
5	Providing and fabricating reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding (including cost of binding wire) all complete up to floor five level.		
5.1	Thermo-mechanically Treated bars (Conforming of relevent IS code)	Kg.	2332.50
6	Supplying and fixing Ferro- cement cover with C.I. frame for chambers & man holes of size.		
6.1	Rectangular shape 600 x 450 mm, to withstand 3 MT center point load & minimum unfractured load of 1 MT. (Light duty).	Each	2
	BORING, AIR VENT PIPE FILTER MEDIA ETC.		
1	Construction of tubewell up to 100m depth and above to accomodate housing and assembly pipe in all types of alluvium strata by rotay drilling method with "code of practice for construction and testing of tubewells (IS:2800 (Part-II) : 1991 and IS:2800 (Part-II) :1979 both amended up to date) with supply of bail plug if necessary.The work will not include cost of housing pipe and strainer pipe assembly cost, gravel and development work. Work would be deemed completed only after obtaining sound free water during pumping.		
1.1	200 mm nominal bore	Rm	50
2	Supply of <i>ERW M.S. black casing pipe</i> ISI marked (IS:4270/1992) of grade Fe410 of following sizes at site of work.		
2.1	200 mm nominal bore	Rm	46
3	Supply and lowering vent air pipe 63mm dia rigid PVC pipe(IS 4985) mark class II (4kg per cm2) with required all necessary fittings including perforation of 3 to 5 mm size all around the pipe at a distance of 180 to 220mm in zig zag fashion and making air vent at top complete as per direction of Engineer incharge.	Rm	20
4	Supply & laying of clean, clear sharp river sand of size 1 to 2mm coarse, without deduction of voids.	Cum	9.92
5	Supply & lying River-gravels of following sizes in recharge shaft, filter pit after screening & washing from kachha shift without deduction of voids		
5.1	Size 9 to 12 mm	Cum	9.92
5.2	Size 3 to 5 mm	Cum	9.92



AMPHITHEATRE, GHAT & WATERBODY PART PLAN



NOTE:
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R E V I S I O N S			
REMARKS	NO.	DATE	ZONE

DISTRIBUTION OF PRINTS:			
ISSUED TO CLIENT			
Nos.	01		
DATE	04-08-22		
ISSUED TO			
Nos.			
DATE			

PROJECT:

PROPOSED
GANDHI DARSHAN MUSEUM
JAIPUR (RAJ.)

DRG NO:

AMA-GDM- AR-20 & 21

TITLE:

AMPHITHEATRE AND
GHAT DETAIL

M.E.P. CONSULTANT:

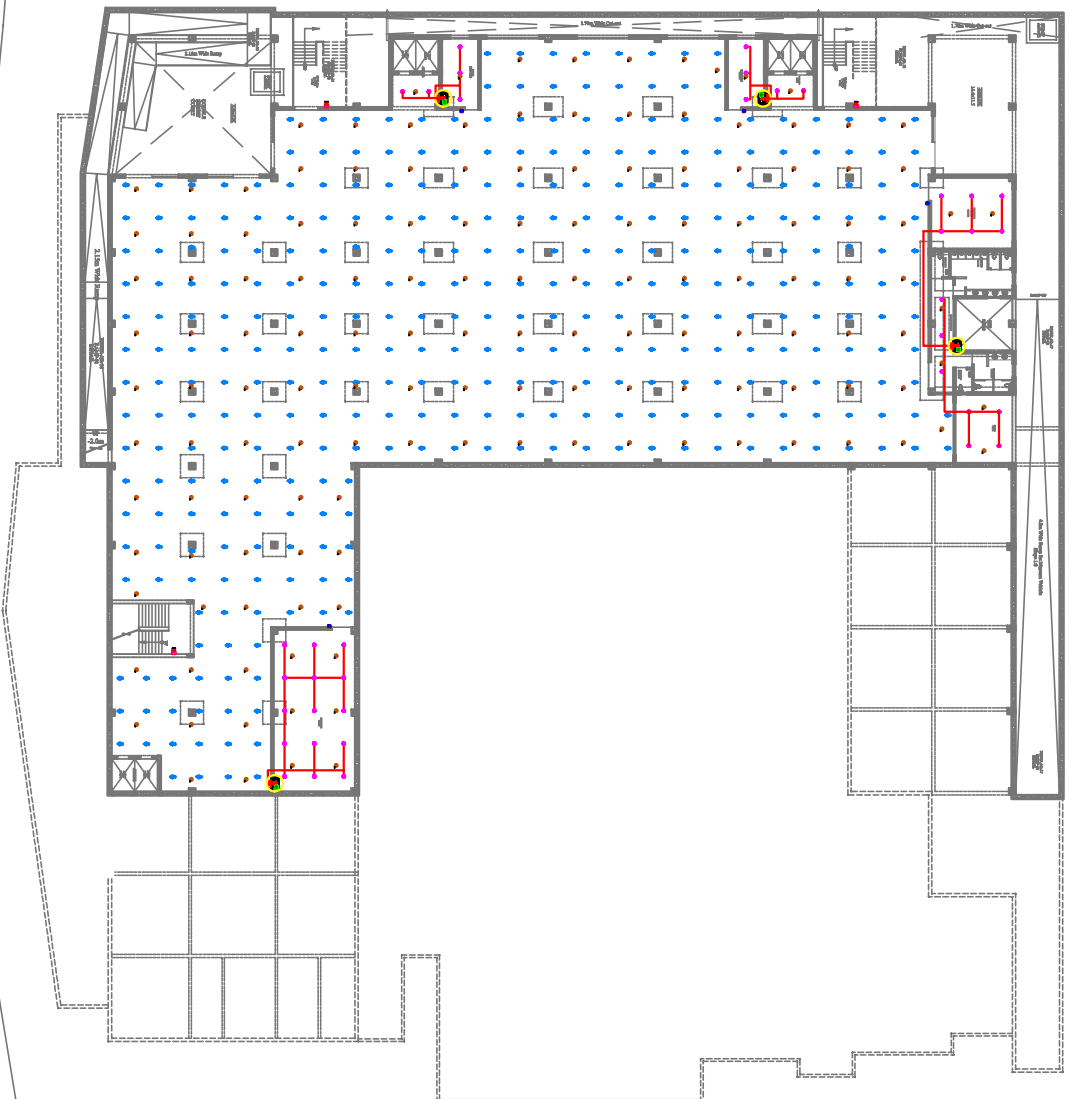
STRUCTURAL CONSULTANT:

SG STRUCTURES
A-36,1ST FLOOR, SUNDER SINGH BANDARI NAGAR,
SWEJ FARM, NEW SANGANER ROAD, JAIPUR-302019
E-mail: sg.structures@gmail.com
Tel: 09772202219,0141-2297076

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ARCHITECT
71, NEHRU PARK, JODHPUR-342003
Tel: (0291) 2430789 / 2431789
E-mails: amridul.architect@gmail.com

DEALT: HITESH
SCALE: FIT TO SCALE
DATE: 04-08-22

NORTH:



BASEMENT FLOOR PLAN
-7.50 MLVL

LEGENDS:

Mounting Height	No.	I.D	Symbol	Description
CEILING	147	SD		SMOKE DETECTOR
+90°	04	ISS		INFRARED SENSOR
+42°	03	MC2		MANUAL CALL POINT
+90°	03	BD		BEACON POINT

LEGENDS:		
Meaning in	Qty.	Description
	346	136G. IRBY TOWER MODEL 177B PNEULECTOR 10 MATE- VINEX ASFA PROTECTION IN 2.08 TO 10 PNEUM. SPINDLER
	38	PNEUM. SPINDLER
		SPINDLER TYPE 12B
		
	04	PNE. HOSE CABINET

PROJECT:

**PROPOSED
GANDHI DARSHAN MUSEUM
JAIPUR (RAJ.)**

DRG NO:

MEP/AMA/GDM/B.F./SPR.-01

TITLE:

**BASEMENT FLOOR
CONCEPTUAL SPRINKLER
& FIRE ALARM PLAN**

M.E.P. CONSULTANT:

SERVICES CONSULTANT:
VIPUL CONSULTING,

**F 9 / 440 , Keshav Marg Chitrakut Scheme, Jaipur
PH:91-0-93146-10438 ,0141-2440946 Mail:vinuls599@yahoo.com**

DRN BY:-

CKD BY:-	
----------	--

SANJAY

APPD:-

DATE:-

STRUCTURAL CONSULTANT:

SG STRUCTURES

Dr. J. S. Singh
A-36, 1st Floor, Sunder Singh Bandaru Nagar,
Swet Farm, New Sanganer Road, Jaipur-302019

E-mail: sg_structures@gmail.com
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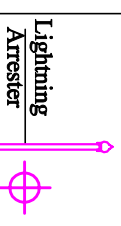
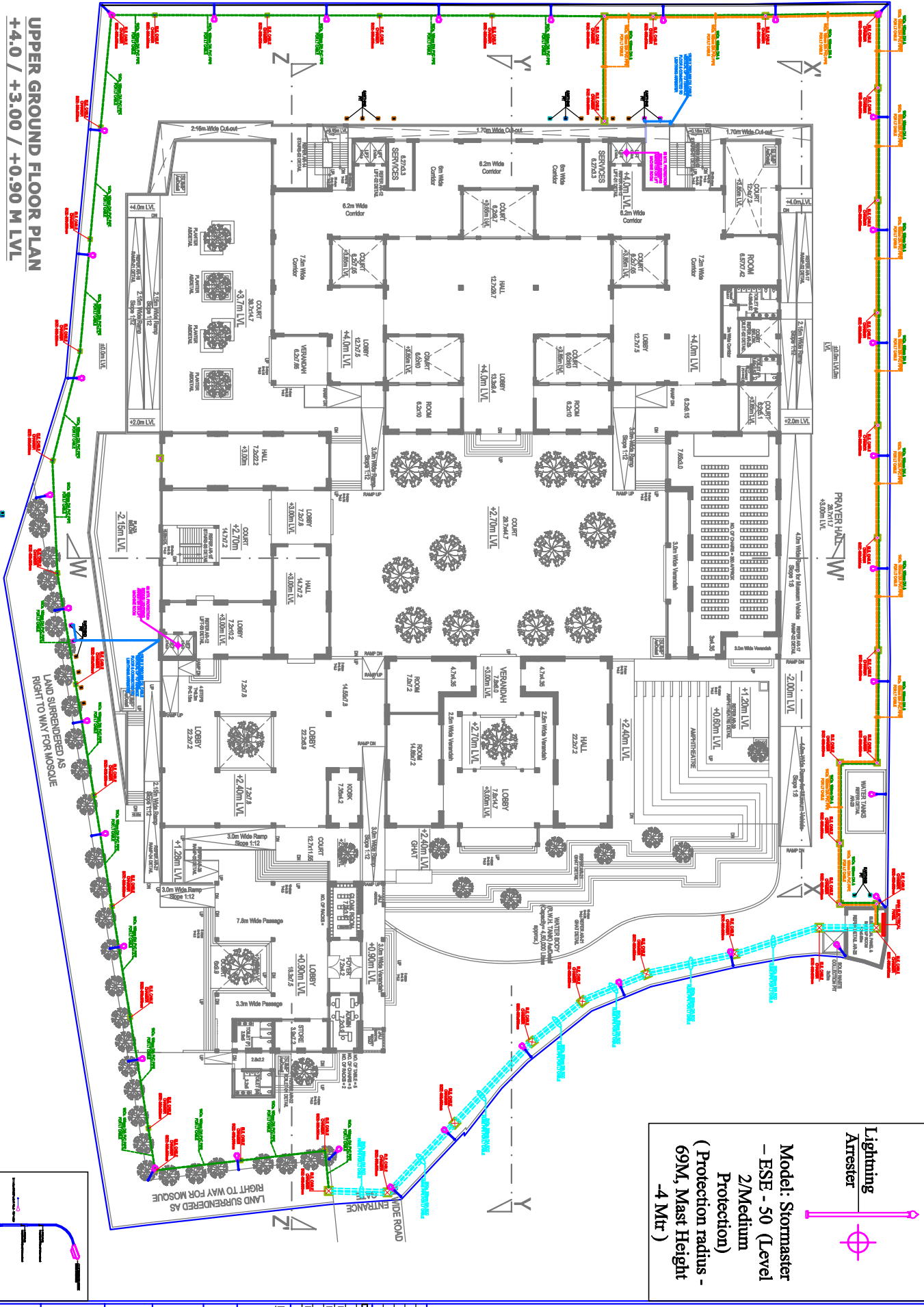
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SCALE: FIT TO SCALE

DATE:

NORTH:



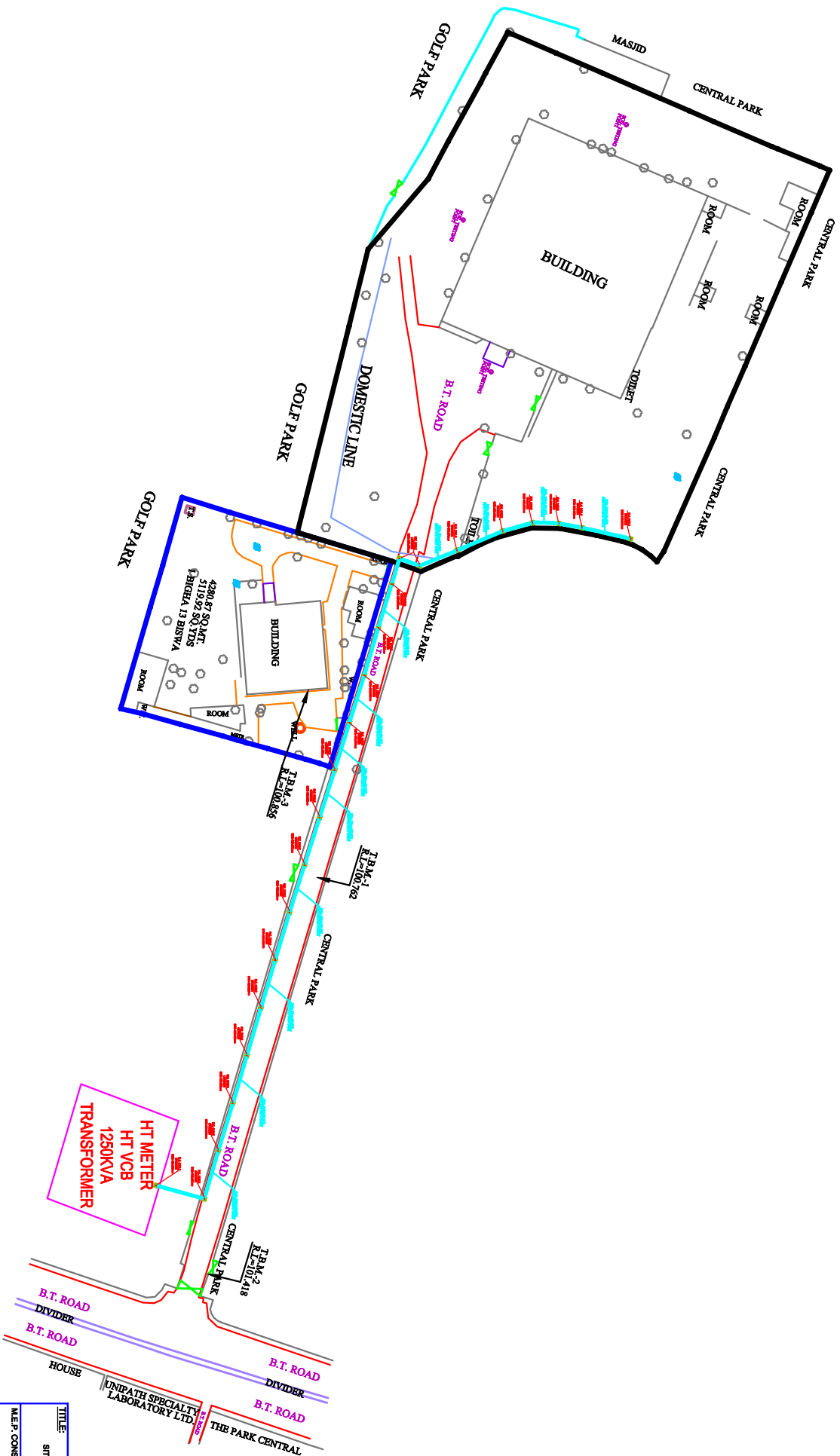


Model: Stormaster
- ESE - 50 (Level
2/Medium
Protection)
(Protection radius -
69M, Mast Height
- 4 Mtr)

SCALE
1:1000

NO.	REVISIONS	DATE	ZONE
1	ISSUED TO CLIENT	01/01/2021	
2	ISSUED TO CLIENT	01/01/2021	
3	ISSUED TO CLIENT	01/01/2021	
4	ISSUED TO CLIENT	01/01/2021	
5	ISSUED TO CLIENT	01/01/2021	
6	ISSUED TO CLIENT	01/01/2021	
7	ISSUED TO CLIENT	01/01/2021	
8	ISSUED TO CLIENT	01/01/2021	
9	ISSUED TO CLIENT	01/01/2021	
10	ISSUED TO CLIENT	01/01/2021	

PROJECT: PROPOSED GANDHI DARSHAN MUSEUM JAIPUR (GDM-JA)	DWG NO: AMA-GDM-AR-04	TITLE: UPPER GROUND FLOOR SITE & PIRE ROUTE & LIGHTING LOCATION PLAN	MEP CONSULTANT: VITUL AGARWAL	STRUCTURAL CONSULTANT: SG STRUCTURES	A.MR.DITUL
ARCHITECT: 71, NEHRU PARK, JODHPUR-342003 Tel: (0291) 2430789 / 2431789 Email: amr.ditul@gmail.com	DEALT: VITUL AGARWAL	APPD: VITUL AGARWAL	SCALE: FIT TO SCALE	DATE: 06-08-2022	NORTH:



LEGEND:-

DOMESTIC LINE POLE	TEMPLE	W.B.M. ROAD	TRANSFORMER	TIN SHADE	T. WELL	STONE WALL	33 K.V. LINE POLE
B.T. ROAD	C.C. ROAD	WATER TANK	HUT	LAMP POLE	PARK	RAILWAY LINE	SEWER VENTILATOR
BENCHMARK	MOSQUE	DRAIN	KATCHA RASTI	MANHOLE	GASS LINE	HILL	STONE/PILLAR
BUILDING	CENTER LINE	CHABUTRA	ENCLOSURE	NALLA	PORCH	11 K.V. LINE POLE	H.T. POLE
SUBMITTED TO	CLIENT:-	VILLAGE/TEHSIL	TITLE	AREA	SCALE	STAMP/ SIGN	CONSULTANT

JAIPUR DEVELOPMENT AUTHORITY

VILLAGE-
TEHSIL-
DIST-

TOPOGRAPHIC SURVEY AND
KHASARA SUPERIMPOSED

AUGUST /2021

1:1000

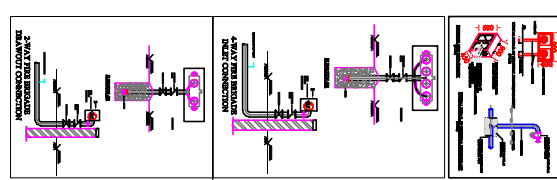
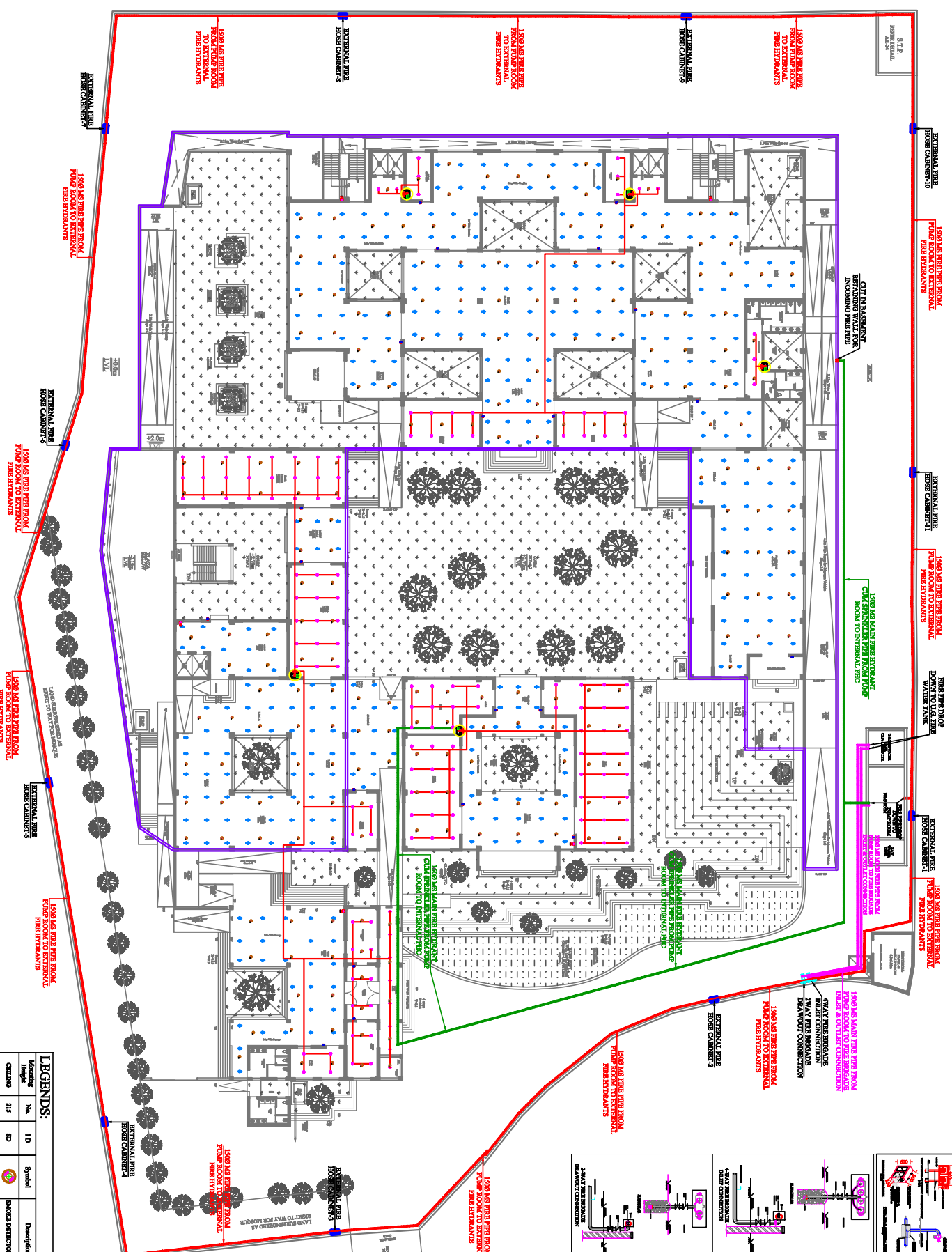
NORTH

SS

SLABH TECHNICAL SERVICES
PRIVATE LIMITED
463, ARUN NAGAR (NORTH)
SECTOR-13, INDUSTRIAL AREA
GATEWAY, JAIPUR-302012
PH: 91-9606180412, 2801122
WWW.SLABHTECHNICALSERVICES.COM

TITLE:
SITE EXTERNAL PIPE
ROUTE PLAN

M.E.P. CONSULTANT:
31/10/2021



LEGEND		
SYMBOL	QTY.	DESCRIPTION
	11	EXTERNAL FIRE HOSE CABINET
		1500 SLS FINE PNEUM PUMP ROOM TO EXTERNAL FIRE HYDRANTS
		1500 SLS MAIN FIRE PIPE FROM PUMP ROOM TO FIRE BRIGADE INLET & OUTLET CONNECTION
		1500 SLS MAIN FIRE HYDRANT CIRM SPRINKLER PIPE FROM PUMP ROOM TO INTERNAL FHC

LEGENDS:

Mounting Ht.	Qty.	Symbol	Description
CEILING	358		1/2" DIA. POWER MODULE TYPE FIRE EXTINGUISHER MOTOR - VFD M1 15
CEILING	148		ARMED - SINK ARMED PROTECTION IN 10' OR TO 10'
CEILING			PENDANT SPARKLER
			SPRINKLER PIPE LANE
CEILING			
06			FIRE HOSE CABINET

PROJECT:
PROPOSED
GANDHI DARSHAN MUSEUM
JALPUR (RAJ.)

MEP/AMA/GDM/U.G.F./SPR.-03

UPPER GROUND FLOOR
CONCEPTUAL SPRINKLER,
FIRE ALARM & EXTERNAL
FIRE HYDRANT PLAN

SERVICES CONSULTANT:
VIPUL CONSULTING,
F 9 / 440 , Keshav Marg Chitrakut Scheme,Jaipur
PH:0141-261-1043, 0141-2440946. Mail: vpul@vipul.co.in

PAWAN	SANJAY
APPD:- VIPUL AGARWAL	DATE:- 03-08-2022

STRUCTURAL CONSULTANT:

SG STUDIOS

 **SG STRUCTURES**
A-36, 1ST FLOOR, SUNDER SINGH BANDARI NAGAR
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E-mail: sg_structures@gmail.com
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**A.MRIDUL
ARCHITECT**

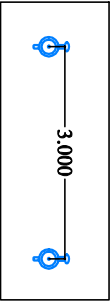
71, NEHRU PARK, JODHPUR-342003
Tel: (0291) 2430789 / 2431789
E-mails: amrindul.architect@gmail.com

DEALT: HITESH
SCALE: FIT TO SCALE
DATE: _____

NORTH: 

LEGENDS:				
Mounting Heights	No.	ID	Symbol	Description
CENDING	215	SD		SIGNAL DETECTOR
+0°	21	RES		RESPONSE INDICATOR
+45°	05	MCP		MANUAL CALL POINT
+90°	05	BD		BROTHER POINT

LEGEND	
SYMBOL	DESCRIPTION
	1500 MS MAIN FIRE HYDRANT CUM SPRINKLER PIPE FROM PUMP ROOM TO INTERNAL FHC



LEGENDS:

Material	Qty.	Symbol	Description
CEILING	387		15KG DRY POWDER MODULAR TYPES SPRINKLER HEADS 15 MM X 1/2" UNF
CEILING	150		PERMANENT SPRINKLER
CEILING			SPRINKLER PIPE LINE
	04		FIRE HOSE CABINET

PROJECT:

PROPOSED
GANDHI DARSHAN MUSEUM
JAPUR (RAJ)

DRG NO:

MEP/AMA/GDM/L.G.F./SPR.-02

TITLE:

LOWER GROUND FLOOR
CONCEPTUAL SPRINKLER, FIRE
ALARM & CEILING SUSPENDED
FIRE PIPE ROUTE PLAN

M.E.P. CONSULTANT:

SERVICES CONSULTANT:
VIPUL CONSULTING
F 9 / 440 , Keshav Mang Chintant Scheme, Japur
Ph:91-029156-1068 0141-2469546 Mail:vpul@vipul.co.in

DRN BY:-

CKD BY:-

PAWAN

SANJAY

APPD:-

DATE:-

VIPUL AGARWAL 03-08-2022

STRUCTURAL CONSULTANT:

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Tel: 09772202159/0141-2297076

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Tel: (0291) 2430789 / 2431789

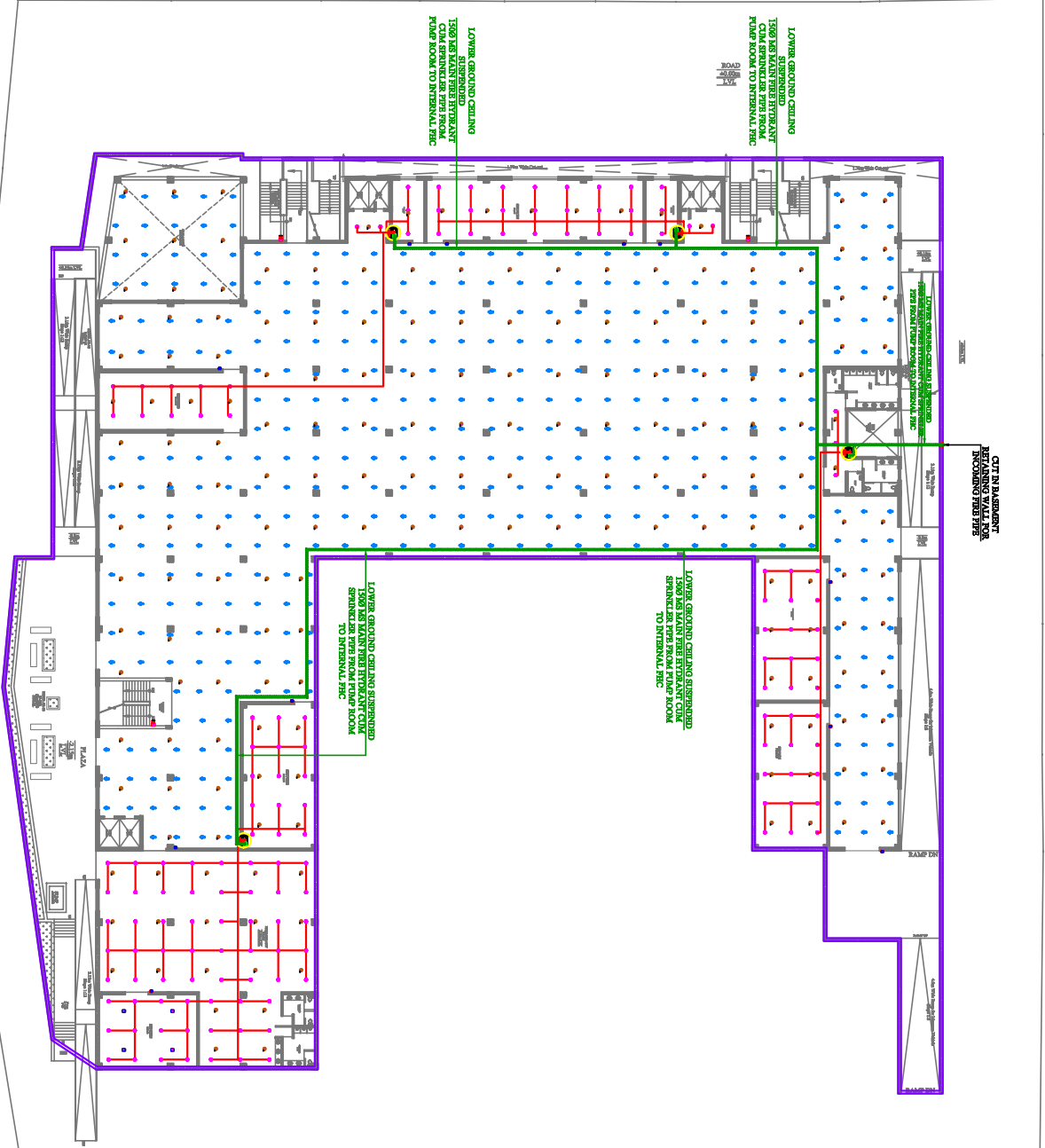
E-mail: amridul.architect@gmail.com

DEALT: HITESH

SCALE: FIT TO SCALE

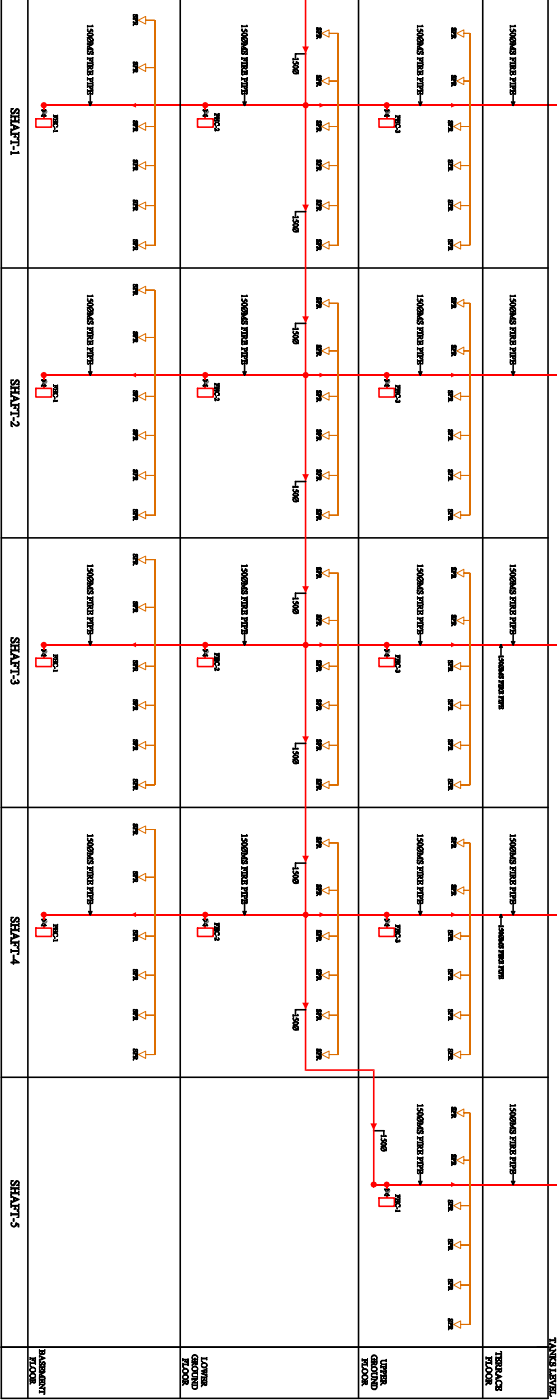
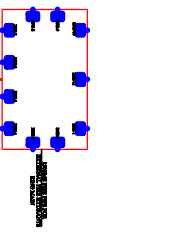
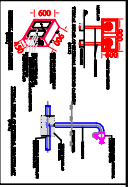
DATE:

NORTH:



LOWER GROUND FLOOR
-2.0 MVL

Item	Quantity	Unit	Remarks
1	1	EA	1.000000
2	1	EA	2.000000
3	1	EA	3.000000
4	1	EA	4.000000
5	1	EA	5.000000
6	1	EA	6.000000
7	1	EA	7.000000
8	1	EA	8.000000
9	1	EA	9.000000
10	1	EA	10.000000
11	1	EA	11.000000
12	1	EA	12.000000
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59	1	EA	59.000000
60	1	EA	60.000000
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88	1	EA	88.000000
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90	1	EA	90.000000
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96	1	EA	96.000000
97	1	EA	97.000000
98	1	EA	98.000000
99	1	EA	99.000000
100	1	EA	100.000000



VOLUME II

FINANCIAL BID

Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur

Validate

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Item Rate BoQ**Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR****Name of Work: Outer Development works in Gandhi Darshan Museum at Central Park, Jaipur****Contract No: EE (HQ)/12/2022-23**

Name of the Bidder/ Bidding Firm / Company :						
PRICE SCHEDULE						
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
Sl. No.	Item Description	Quantity	Units	BASIC RATE to be Quoted Bidder Rs. P	TOTAL AMOUNT Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	6	7
1	Outer development and other allied works of Gandhi Darshan Museum at Central Park, Jaipur on EPC basis complete including civil, development, MEP and furnishing works etc as per detailed specifications complete as per tender drawings, terms and conditions mentioned in bid document. The work includes: (A) Civil Works: Civil, development, services, outer furnishing works including masonry, flooring, doors, plaster, painting, drainage work, rain water harvesting structure, providing and fixing/placing furniture items etc required to make the building operational as per scope of work complete as per direction of Engineer-in- charge. (B) Electrification work Electrification works including external lighting, transformer, DG and HT work, miscellaneous and safety work, IP based surveillance system, solar photovoltaic power plant, automatic fire alarm system work, miscellaneous works i.e JVVNL supervision and connection etc and others if any required to make the building operational as per scope of work complete as per direction of Engineer-in- charge. Note : All duties, taxes and other levies payable by the Bidder under the contract and for any other cause, shall be included in the rates and prices, and the total Bid Price submitted by the Bidder.	1.000	EACH		0.00	INR Zero Only
Total in Figures					0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only				