

Ujjain Smart City Limited



Request for Proposal

for

**“Survey, design, engineering, procurement, construction,
installation, testing, commissioning, operation &
maintenance, and transfer of the Integrated Development &
Conservation of Maharishi Sandipani Ashram, Ujjain”**

NIT No. USCL/415

Tender ID: 2026_UAD_484565_1 Ujjain Date: 24/02/2026

**Ujjain Smart City Limited
Mela Office, Kothi Road,
Ujjain, Madhya Pradesh – 456010**

Ujjain Smart City Limited

Mela Office, Kothi Road,
Ujjain, Madhya Pradesh – 456010

Phone No. 0734 2520319; E-mail: ujjainsmartcity@mpurban.gov.in

Website: <https://ujjainsmartcity.com/en/about-uscl/>

NIT No. USCL/415 Tender ID: 2026_UAD_484565_1 Ujjain Date: 24/02/2026

Ujjain Smart City Limited (USCL) invites online bids from eligible bidders for “Survey, design, engineering, procurement, construction, installation, testing, commissioning, operation & maintenance, and transfer of the Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain” as per details given below:

SNo	Particulars	Details
1	Name of Work and Site	Survey, design, engineering, procurement, construction, installation, testing, commissioning, operation & maintenance, and transfer of the Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain
2	Cost of Tender Document / Bid submission Fee	Rs 50,000/- plus GST
3	Earnest Money Deposit (EMD) / Bid Security	Rs 50,00000 /- (Rupees Fifty Lakhs only)
4	Probable Amount of Contract (PAC)	Rs 136.12/- Cr. (Excluding GST) (Rupees. One Hundred Thirty-six Crore Twelve lakh only)
5	Purchase of Tender Date	24/02/2026
6	Pre-bid Meeting and Site Visit	09/03/2026 15:00 Hrs
7	Purchase of Tender End Date	25/03/2026 upto 17:00 hrs
8	Financial and Technical Bid Submission End Date (Online)	25/03/2026 upto 17:00 hrs
9	Technical Bid Submission End Date (Physical Only)	Not Applicable
10	Technical Bid opening	26/03/2026 on/after 11:00 hrs
11	Financial Bid opening	To be notified
12	Completion Period	18 (Eighteen) Months (Including intervening rainy seasons)
13	Validity period of Bids	120 Days after the Last date of Submission
14	Mode of selection of Contractor	Open Tender by e-tendering mode. QCBS (H1 bidder) to be selected.

Note: In case of any mismatch in key dates, key dates showing on e-portal shall be final. For more details, please refer to e-procurement website: www.mptenders.gov.in. Corrigendum or amendments, if any, shall be uploaded on this website only.

UJJAIN SMART CITY LIMITED (USCL)

MADHYA PRADESH

APPENDIX 2.10

TENDER DOCUMENT

Office of the	:	Ujjain Smart City Limited	
NIT Number and Date	:	USCL/415	
Date of NIT	:	24/02/2026	
Agreement Number and Date	:		
Name of Work	:	Survey, design, engineering, procurement, construction, installation, testing, commissioning, operation & maintenance, and transfer of the Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain	
Name of the Contractor	:		
Probable Amount of Contract	In Fig	:	Rs 136.12/- Cr. (excluding applicable GST)
	In words	:	Rupees One Hundred Thirty-six Crore Twelve lakh only
Contract Amount	In Fig	:	
	In words	:	
Stipulated Period of Completion	:	<i>18 (Eighteen) Months including intervening rainy season</i>	

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SECTION 1
Notice Inviting e-Tenders
Ujjain Smart City Limited

Online Single percentage rate 'Above / Below / At Par' and Lumpsum Item Rate Bids for the following works are invited from registered contractors and firms of repute fulfilling registration criteria:

S. No.	Name of Work	Probable Amount of Contract (In Rupees)	Earnest Money Deposit (EMD) (In Rupees)	Cost of Bid Document (In Rupees)	Period of completion (In Months)
1	Survey, design, engineering, procurement, construction, installation, testing, commissioning, operation & maintenance, and transfer of the Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain	Rs 136.12/- Cr.	Rs 50,00,000 /-	Rs. 50,000/-	18 (Eighteen) Months (Including intervening rainy season)

1. All details relating to the Bid Document(s) can be viewed and downloaded free of cost on the website.
2. Bid Document can be purchased after making online payment of portal fees through Credit/Debit/Cash Card/ internet banking. / NEFT/RTGS/ System generated Challan
3. At the time of submission of the bid the eligible bidder shall be required to:
 - a. **Pay the cost of bid document.**
 - b. **Deposit the Earnest Money**
 - c. **Submit a check list and**
 - d. **Submit an affidavit.****Details can be seen in the Bid Data Sheet. The above details are to be submitted online only.**
4. **Eligibility for Bidders:**
 - a. At the time of submission of the Bid the bidder should have valid registration with the Government of Madhya Pradesh, PWD in appropriate class. However, such bidders who are not registered with the Government of Madhya Pradesh and are eligible for registration can also submit their bids after having applied for registration with appropriate authority.
 - b. The bidder / One of the members of Joint Venture / Sub-contractor should have valid A Class Electrical Contractor License from Madhya Pradesh Government Electrical Licensing Board (Office of Chief Electrical Inspector, MP Govt.) at the time of signing of the Contract.
 - c. Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the earnest money deposit.
5. The Bid Document can be purchased only online as per brief NIT Other key dates may be seen in bid data sheet.
6. Amendments to NIT, if any, would be published on website only, and not in newspaper.

Executive Director
Ujjain Smart City Limited

Notice Inviting e- Tenders
Ujjain Smart City Limited
Office of the Executive Director, Ujjain Smart City Limited

N.I.T.NO. USCL/415

Dated. 24/02/2026

Online Single percentage rate 'Above / Below / At Par' and Lumpsum Item Rate Bids for the following works are invited from registered contractors and firms of repute fulfilling registration criteria:

S. No.	Name of Work	Probable Amount of Contract (In Rupees)	Earnest Money Deposit (EMD) (In Rupees)	Cost of Bid Document (In Rupees)	Period of completion (In Months)
1	Survey, design, engineering, procurement, construction, installation, testing, commissioning, operation & maintenance, and transfer of the Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain	Rs 136.12/- Cr.	Rs. 50,00,000/-	Rs. 50,000/-	18 (Eighteen) Months (Including intervening rainy season)

1. Document & other details shall be available on website <https://mptenders.gov.in>
2. The Bid Document can be purchased only online as per the schedule given in Brief NIT.
3. **Pre-Bid Meeting** is scheduled on **3:00 PM** as per the schedule given in Brief NIT **at USCL office Mela Karyalaya Ujjain.**
4. Amendments to NIT, if any, would be published on website only, and not in Newspaper.
5. The EMD shall be deposited online through portal via Electronic EMD (RTGS, NEFT).
6. Key Dates:

S.No.	Particulars	Details
1	Purchase of Tender End Date (Online)	as per the schedule given in Brief NIT
2	Pre- Bid Meeting	as per the schedule given in Brief NIT
3	Financial and Technical Bid Submission End Date (Online)	as per the schedule given in Brief NIT
4	Technical Bid opening (Online)	as per the schedule given in Brief NIT

Note: In case of any mismatch in key dates, key dates showing on e-portal shall be final. For more details, please refer to e-procurement website: www.mptenders.gov.in. Corrigendum or amendments, if any, shall be uploaded on this website only.

Executive Director
Ujjain Smart City Limited

SECTION 2 INSTRUCTIONS TO BIDDERS (ITB)

A. GENERAL

PROJECT OBJECTIVE AND KEY COMPONENTS

1. SCOPE OF BID

1.1. The detailed description of work, hereinafter 'work', is given in the **Annexure E** of this document. The **main** Scope of work includes **Survey, design, engineering, procurement, construction, installation, testing, commissioning, operation & maintenance, and transfer of the Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain**

2. GENERAL QUALITY OF WORK:

2.1. The work shall have to be executed in accordance with the drawings (prepared by USCL/ Consultant and approved by the competent authority), technical specifications specified in the Bid Data Sheet/Contract Data, and shall have to meet high standards of workmanship, safety and security of workmen and works.

3. PROCEDURE FOR PARTICIPATION IN E-TENDERING

The procedure for participation in e-tendering is given in the Bid Data Sheet. as well as in Annexure F.

4. ONE BID PER BIDDER

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

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

5. COST OF BIDDING:

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

6. SITE VISIT AND EXAMINATION OF WORKS:

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

B. BID DOCUMENTS

7. CONTENT OF BID DOCUMENTS:

The Bid Document comprises of the following documents:

1. NIT with all amendments.
2. Instructions to Bidders, Bid Data Sheet with all Annexure
3. Conditions of Contract:
 - I. Part I General Conditions of contract and the Contract Data with all Annexure, and
 - II. Part II Special Condition of Contract.

4. Specifications
5. Drawings / Suggestive Graft is given in Annexure E
6. Priced bill of quantities
7. Technical and Financial bid
8. Letter of Acceptance
9. Agreement, and
10. Any other document(s), as specified

8. EXAMINE

The bidder is expected to examine carefully all instructions, conditions of contract, the Contract data, forms, terms and specifications, bill of quantities, forms and drawings in the bid document, Bidder shall be solely responsible for his failure to do so.

9. PRE-BID MEETING (WHERE APPLICABLE)

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

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

10. AMENDMENT OF BID DOCUMENTS:

- 10.1. Before the deadline for submission of bids, the Employer may amend or modify the bid document by publication of the same on the website.
- 10.2. All amendments shall form part of the Bid Document.
- 10.3. The Employer may, at its discretion, extend the last date for submission of bids by publication of the same on the website.

C. PREPARATION OF BID

11. BID PREPARATION

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

12. DOCUMENTS COMPRISING THE BID:

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

Part 1- This shall be known as online Envelop A and would apply for all bids. Online envelop A shall contain the following as per details given in the bid data sheet:

- i) Registration number or proof of application for registration and organizational details in the format given in the bid data sheet.
- ii) Payment of the cost of Bid Document.

- iii) PAN Number
- iv) GST Number
- v) Earnest Money: and
- vi) Duly notarised Affidavit On Non Judicial stamp of **Rs. 100** as per Annexure -B.

The above details are to be submitted online only.

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

Part 3- This shall be known as online **Envelope C** and would apply to all bids. Envelop C shall contain financial offer in the prescribed format enclosed with the Bid Data Sheet and shall only be submitted online.

13. LANGUAGE:

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

14. TECHNICAL PROPOSAL:

- 14.1. Only, in case of bids with pre-qualification conditions defined in the Bid Data Sheet, the Technical Proposal shall comprise of formats and requirements given in the Bid Data Sheet.
- 14.2. All the documents/ information enclosed with the Technical Proposal should be self-attested and certified by the bidder. The Bidder shall be liable for forfeiture of his earnest money deposit, if any document/information is found false/fake/untrue before acceptance of bid. If it is found after acceptance of the bid, the bid sanctioning authority may at his discretion forfeit his performance security / guarantee, security deposit, enlistment deposit and take any other suitable action.

15. FINANCIAL BID:

- 15.1. The bidder shall have to quote rates in format referred in Bid Data Sheet, in overall percentage, and not item wise, if the bid is in absolute amount, overall percentage would be arrived at in relation to the probable amount of contract given in NIT. The overall percentage rate would apply for all items of work.
- 15.2. Percentage shall be quoted in figures as well as in words. If any difference in figures and words is found, lower of the two shall be taken as valid and correct.
- 15.3. The bidder shall have to quote rates inclusive of all duties, taxes, royalties and other levies except Goods & Services Tax (GST). The amount of applicable GST will be paid separately to the contractor with each bill at the time of payment; and the Employer shall not be liable for any duties, taxes (Except GST) royalties and levies.
- 15.4. The material along with the units and rates, which shall be issued, if any, by the department to the contractor, is mentioned in the Bid Data Sheet.

16. PERIOD OF VALIDITY OF BIDS:

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

17. EARNEST MONEY DEPOSIT (EMD)

- 17.1. The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD), in the amount specified in the Bid Data Sheet.
- 17.2. EMD/ Bid Security shall be submitted only online using options available in the tender portal within the specified time limit. Bidders are advised to process it well in advance. No claim shall be entertained due to delay in online transactions via payment gateway/banking portal."
- 17.3. Bid not accompanied by EMD shall be liable for rejection as non-responsive.
- 17.4. EMD of all bidders except L1 will be returned within ten working days of the decision on the bid.
- 17.5. EMD of the successful Bidder will be discharged when the Bidder has signed the Agreement after furnishing the required Performance security.
- 17.6. Failure to sign the contract by the selected bidder, within the specified period, for whatsoever reason, shall result in forfeiture of the earnest money.

D. SUBMISSION OF BID

18. BID SUBMISSION

The Bidder is required to submit digitally signed Bid ie. Envelop A, B & C Online only. No physical submission of the Bid will be accepted except in exceptional case under clause 19.7."

E. OPENING AND EVALUATION OF BID

19. PROCEDURE:

- 19.1. Envelope "A" shall be opened first online at the time and date notified and its contents shall be checked. In cases where Envelope "A" does not contain all requisite documents, such bid shall be treated as non-responsive, and Envelope B and / or C of such bid shall not be opened.
- 19.2. Wherever Envelope 'B' (Technical Bid) is required to be submitted, the same shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Envelope 'B' Envelope 'C' (financial bid) of bidders who are not qualified in Technical Bid (Envelop 'B') shall not be opened.
- 19.3. Envelope 'C' (Financial Bid) shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Envelope 'C'
- 19.4. After opening Envelope 'C' all responsive bids shall be compared to determine the lowest evaluated bid.
- 19.5. The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all the bids at any time prior to contract award, without incurring any liability. In all such cases reasons shall be recorded.
- 19.6. The employer reserves the right of accepting the bid for the whole work or for a distinct part of it.
- 19.7. "In exceptional case, if physical submission of certain documents is found essential, then expressed prior permission must be obtained in writing by the tender issuing authority from an authority, as authorized by the State Government. In such a case, such documents are required are to be submitted physically at the place and date specified in the Bid Data Sheet. In case of any mismatch in the documents submitted in the physical form and that uploaded or ie online, or if the contractor fails to submit the document physically, the bid shall be liable for rejection as non- responsive.

20. CONFIDENTIALITY:

- 20.1. Information relating to examination, evaluation, comparison and recommendation of contract award shall not be disclosed to bidders or any other person not officially concerned with such process until final decision on the bid.
- 20.2. Any Attempt by a bidder to influence the employer in the evaluation of the bids or contract award decisions may result in the rejection of his bid.

F. AWARD OF CONTRACT

21. AWARD OF CONTRACT:

The Employer shall notify the successful bidder by issuing a 'Letter of Acceptance' (LOA) that his bid has been accepted. The original copy of Affidavit will have to be submitted by the successful bidder at the time of signing of contract.

22. PERFORMANCE SECURITY

22.1. Prior to signing of the contract, the bidder to whom LOA has been issued shall have to furnish performance security of the amount in the form and for the duration, etc. as specified in the Bid Data Sheet.

22.2. Additional performance security, if applicable, is mentioned in the Bid data sheet and shall be in the form and for the duration, etc. similar to Performance Security.

23. SIGNING OF CONTRACT AGREEMENT:

23.1. The successful bidder shall have to furnish Performance Security and Additional Performance Security, if any, and sign the contract agreement within 15 days of issue of LOA

23.2. The signing of contract agreement shall be reckoned as intimation to commencement of work. No separate work order shall be issued by the employer to the contractor for commencement of work.

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

24. CORRUPT PRACTICES:

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

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

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

- a. '**Corrupt Practice**' means the offering, giving, receiving or soliciting directly or indirectly, anything of value to influence improperly the actions of another party.
- b. '**Fraudulent Practice**' means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a fanatical or other benefit or to avoid an obligation:
- c. '**Coercive Practice**' means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party,
- d. 'Collusive practice' means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

(END OF ITB)

BID DATA SHEET

GENERAL		
SR.NO.	PARTICULARS	DATA
1	Office inviting tender	UJJAIN SMART CITY LIMITED
2	NIT No.	N.I.T.NO. USCL / 415
3	Date of NIT	24/02/2026
4	Bid document download available from date & time	24 /02/2026
5	Website link	https://mptenders.gov.in
SECTION 1 - NIT		
CLAUSE REFERENCE	PARTICULARS	DATA
2	Portal fees	As notified in e-tendering website
3	Cost of bid document	Rs 50,000/- + portals processing fees etc.
	Cost of bid document payable at	As notified in e-tendering website
	Cost of bid document in favour of	As notified in e-tendering website (Bidders shall be directed to the payment gateway through the portal)
4	Affidavit format	As per ANNEXURE B
5	Pre-Qualifications required	Yes -
	If yes, details	As per ANNEXURE C
6	Special Eligibility	Yes
	If Yes, details	As per ANNEXURE D
7	Key dates	As per ANNEXURE A
SECTION 2 - IT B		
CLAUSE REFERENCE	PARTICULARS	DATA
1.	Name of 'work'	Survey, design, engineering, procurement, construction, installation, testing, commissioning, operation & maintenance, and transfer of the Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain
2.	Specifications	As per ANNEXURE -E
3.	Procedure for participation in e-tendering	As per ANNEXURE -F
4.	Whether joint venture is allowed	Yes Maximum 3 members
	If yes, requirement for joint venture	As per ANNEXURE - G
	Pre bid meeting to be held	Yes
	If Yes, Date, Time & Place	As per NIT Place: Mela Office, Kothi Road, Ujjain, Madhya Pradesh - 456010

CLAUSE REFERENCE	PARTICULARS	DATA
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12	Envelop A containing: i. Registration number or proof of application for registration and organizational details as per Annexure H ii. Cost of Bid Document iii. EMD iv. An affidavit duly notarized as per Annexure - B	Online submission Only
	Envelope-B Technical Proposal	ANNEXURE - I and ANNEXURE -I (Format I-1 to I-5)
	Envelope-C Financial Bid	Annexure - J (SHOULD BE SUBMITTED ONLINE)
	Materials to be issued by the department	ANNEXURE - K
	Period of Validity of Bid	120 Days
15	Financial Bids	Single percentage rate 'Above / Below / At Par' and Lumpsum Item Rate Bids
17	Earnest Money Deposit	Rs. 50,00,000/-
	Forms of Earnest Money deposit	e-EMD (RTGS / NEFT)
	EMD valid for a period of	120 Days beyond the final validity period of bids from the last date of submission of bids.
19	Opening and evaluation of bid: Procedure	As per Annexure - 001 (Attached at end of Bid Data Sheet)
21	Letter of Acceptance (LoA)	ANNEXURE L
22	Amount of Performance Security	Performance Security at the rate of <u>three (3) percent</u> of the contract value shall be required In case of any discrepancy in provisions on performance security, the latest guidelines issued by Finance Department/PWD/UADD of Govt. MP shall be applicable.
	Additional Performance Security, if any	In case the quote of the Successful Bidder is more than 10% below the PAC amount, then additional performance security shall be required to be submitted by the successful bidder. the latest circular issued by PWD of MP Govt. shall be applicable. (MPPWD Order No. F-53/02/2011/YO/19/525, DATED- 14/02/2025) (as attached) The Additional Performance Security shall not be treated as part of Performance Security and shall be released on completion of project. In case of any discrepancy in provisions on performance security or additional performance security, the latest guidelines issued by Finance Department/PWD/UADD of Govt. MP shall be applicable.

	<p style="text-align: center;">मध्यप्रदेश शासन लोक निर्माण विभाग मंत्रालय</p> <p>क्रमांक-एफ-53/02/2011/यो/19 भोपाल, दिनांक</p> <p style="text-align: center;">// आदेश //</p> <p>मध्यप्रदेश शासन, लोक निर्माण विभाग द्वारा जारी आदेश क्रमांक-एफ-53/02/2011/यो/19/2022 भोपाल, दिनांक 10 अगस्त 2022 में अतिरिक्त परफॉर्मेंस गारंटी की राशि की गणना के लिए उल्लेखित गणतीय विधा के विन्दु क्रमांक 3(अ) एवं 3(ब) में निम्नानुसार संशोधन उपरांत प्रतिस्थापित किया जाता है:-</p> <p>3.1 निविदा में 10 प्रतिशत कम दर प्राप्त होने पर कोई अतिरिक्त परफॉर्मेंस गारंटी की राशि नहीं लिया जाना है।</p> <p>3.2 निविदा में 10 से 20 प्रतिशत तक कम दर आने पर निविदा दर 10 प्रतिशत से बढ़कर जितने प्रतिशत कम होगी PAC राशि का उतना प्रतिशत अतिरिक्त परफॉर्मेंस गारंटी की राशि निम्नानुसार होगी:-</p> <p>उदाहरण- यदि निविदा की अनुमानित लागत (PAC) Rs. 100.00 लाख है, तथा सफलतम निविदाकार की दर 14 प्रतिशत Below SOR हो तो अतिरिक्त परफॉर्मेंस गारंटी की गणना निम्नानुसार होगी:- एफ.डी.आर. के रूप में प्रस्तुत की जाने वाली अतिरिक्त परफॉर्मेंस गारंटी की राशि:- Probable Amount of Contract (PAC) X Rates Below SOR Beyond 10%=100 (14%-10%)= Rs. 4.00 लाख</p> <p>3.3 निविदा में 20 प्रतिशत से अधिक कम दर (RATES BELOW SOR BEYOND 20%) आने पर निविदा दर आने पर गणना निम्नानुसार होगी:-</p> <p>उदाहरण- यदि निविदा की अनुमानित लागत (PAC) Rs. 100.00 लाख है तथा, सफलतम निविदाकार की दर 24 प्रतिशत Below SOR हो तो अतिरिक्त परफॉर्मेंस गारंटी की गणना निम्नानुसार होगी:- एफ.डी.आर. के रूप में प्रस्तुत की जाने वाली अतिरिक्त परफॉर्मेंस गारंटी की राशि:- A+B</p> <p>A. Probable Amount of Contract X1 x Rates Below SOR Beyond 10% upto 20% = 100x1x (10%) = Rs. 10.00 लाख</p> <p>B. Probable Amount of Contract X Rates Below SOR Beyond 20% = 100x2x (4%) = Rs. 8.00 लाख अर्थात् कुल अतिरिक्त परफॉर्मेंस गारंटी की राशि- (A+B)= Rs. 18.00 लाख</p> <p>परिचय -Letter-2025-1</p> <p style="text-align: center;">/ 2 /</p> <p>3.4 ऐसे अनुबंध में जिनमें 10 प्रतिशत कम दर की सीमा से अधिक कम दरों पर अनुबंध निष्पादित किये जाने उन अनुबंधित कार्यों के पूर्ण होने के उपरांत उनके अंतिम देयको का भुगतान संबंधित अधीक्षण यंत्री के निरीक्षण उपरांत संतोषजनक पाये जाने पर तदनुसार अधीक्षण यंत्री द्वारा अनुमति प्रदान किये जाने के पश्चात ही किए जावे।</p> <p>3.5 उपरोक्त के अतिरिक्त कार्य स्थल पर स्थापित बैच मिक्स प्लांट, रेडीमिक्स कांक्रिट (RMC) प्लांट का अधीक्षण यंत्री के द्वारा निरीक्षण किये जाने के उपरांत ही कार्य प्रारंभ किया जावे।</p> <p>3.6 राशि रूपये 2.00 से 10.00 करोड़ तक के कार्यों के लिये स्थल पर स्थापित लेबोरेट्री का निरीक्षण अधीक्षण यंत्री के द्वारा तथा राशि रूपये 10.00 करोड़ से अधिक के कार्यों के लिये स्थापित लेबोरेट्री का निरीक्षण मुख्य अभियंता द्वारा किये जाने के उपरांत ही कार्य प्रारंभ किया जावे। अतिरिक्त परफॉर्मेंस गारंटी की एफ.डी.आर. कार्यपूर्णता के उपरांत ही विमुक्त की जा सकेगी।</p> <p style="text-align: right;">(ए. आर. सिंह) उप सचिव म0प्र0 शासन, लोक निर्माण विभाग भोपाल, दिनांक 14/02/2025</p> <p>पृ. क्रमांक-एफ-53/02/2011/यो/19/525 प्रतिलिपि:-</p> <ol style="list-style-type: none"> 1. प्रमुख अभियंता, (सड़क/पुल) लोक निर्माण विभाग भोपाल। 2. प्रबंध संचालक, म.प्र. सड़क विकास निगम भोपाल। 3. प्रमुख अभियंता (भवन) लोक निर्माण विभाग भोपाल। 4. प्रबंध संचालक, म.प्र. भवन विकास निगम भोपाल। 5. विशेष सहायक, माननीय मंत्री जी लोक निर्माण विभाग भोपाल। 6. समस्त मुख्य अभियंता, (सड़क/पुल) लोक निर्माण विभाग। 7. समस्त मुख्य अभियंता, (भवन) लोक निर्माण विभाग। 8. समस्त अधीक्षण यंत्री, लोक निर्माण विभाग मध्य प्रदेश। 9. समस्त कार्यपालन यंत्री लोक निर्माण विभाग मध्य प्रदेश। 10. कार्यपालन यंत्री, (भवन) लोक निर्माण विभाग मध्य प्रदेश। <p>की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।</p> <p style="text-align: right;">उप सचिव म0प्र0 शासन, लोक निर्माण विभाग</p>
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Performance security in the format	ANNEXURE M
Performance security in favour of	Executive Director, USCL
Performance security valid up to	Valid till issue of Physical Completion Certificate plus Defect Liability Period plus, three months
Additional Performance security valid up to	Valid till issue of Physical Completion Certificate plus, three months

Annexure - 001

EVALUATION FRAMEWORK

Stage 1: Eligibility - General

1. The Bidder may be a **Sole Bidder** or a **Consortium/joint venture** of maximum **three (3)** members.
2. In case of a Consortium:
 - o The **Lead Member** shall have minimum **51%** participation.
 - o All members shall be jointly and severally liable.
3. The Bidder/each Consortium member must not be:
 - o Blacklisted by any Central/State Government agency or PSU.
 - o Involved in fraud, misrepresentation, or conflict of interest.
4. Mandatory **Site Visit** must be undertaken prior to bid submission.
5. Bids must comply with all requirements set out in the RFP, including submission of EMD.

Stage 2: Eligibility - Technical

Eligibility / Qualification Criteria

1.1. Pre-Qualification Criteria

S.No.	Basic Requirement	Specific requirement	Supporting Documents
PQ- 1	Legal Entity	The Bidder can be a Proprietorship firm, Partnership firm, Limited Liability Partnership or Public/Private Limited Company as per the provisions of the prevailing laws or Acts made and should be operational from minimum 5 Year.	Copy of certificate of Incorporation/ Registration under Companies Act 1956 or The Companies Act 2013/ LLP Act 2008 (for Indian companies)/Registrar of Firms. Name change certificate if any.
PQ- 2	Legal Entity	The bidder should have a valid PAN (Permanent Account Number) with Income Tax authority in India.	Copy of the PAN Card signed by Authorized Signatory of the Bidder
PQ- 3	Legal Entity	The bidder should have in its name	Copy of GST Registration

		GST Registration number in India.	Certificate signed by Authorized Signatory of the Bidder.
PQ-4	Turnover	The Bidder should have an average annual turnover of minimum 50% value of probable amount of contract (PAC) over the last three (3) audited Financial Years. Ending on 31 March 2025	Audited and Certified Balance Sheet and Profit/Loss Account for the last 3 (Three) Financial Years and Certificate from the Statutory Auditor/CA on turnover details from the “ business areas ” over the last 3 financial years (2022-23, 2023-24 & 2024-25) with UDIN No.
PQ-5	Net Worth	The Bidder should have positive net worth in each of the last three (3) audited financial year.	Certificate from the Statutory Auditor/CA for the positive Net worth with UDIN No
PQ-6	Blacklisting	The Bidder should not be active blacklisted/Debarred by any Central /State Government/ PSU entity in India or similar agencies globally for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices. If the bidder has been blacklisted/debarred at any point of time and its validity is not mentioned in the blacklist/debarred letter, then it will be considered as next 3 years from the date of issue.	Self-declaration Letter by each Company / Firm / Agency
PQ-7	Experience	The Bidder should have successfully completed/Ongoing – 1-three “similar works” each costing not less than the amount equal to 20% of the probable amount of contract during the last 5 years; or 2-two “similar works” each costing not less than the amount equal to 30% of the probable amount of contract during the last	a. Work Order/ Agreement /LOA /LOI & Client Completion Certificate. OR b. Work Order/LOA/ LOI/ Agreement & Certificate from Statutory Auditor/ Phase Completion Certificate should clearly depict the date, scope of work and the value of project executed.

		<p>5 years; or</p> <p>3-one “similar work” of aggregate cost not less than the amount equal to 50% of the probable amount of contract during the last 5 years;</p> <p>In case of Joint Venture (JV)/ Consortium</p> <p>6. The Bidder may be a Sole Bidder or a Joint Venture / Consortium of maximum three (3) members.</p> <p>7. In case of a Joint Venture / Consortium:</p> <ul style="list-style-type: none"> o The Lead Member shall have minimum 51% participation. o Each member shall be jointly and severally liable. <p>8. The Bidder/each JV/Consortium member must not be:</p> <ul style="list-style-type: none"> o Blacklisted by any Central/State Government agency or PSU. o Involved in fraud, misrepresentation, or conflict of interest. <p>Bids must comply with all requirements set out in the RFP, including submission of EMD.</p> <p>Similar Work: - Any Government/ULB/PSU/Smart City/ Development Authority / Private Trust/Organization Project involving integrated development of public, cultural, tourism, spiritual, or heritage precincts, which includes following components:</p> <p>Civil/architectural construction and Stone artwork and MEP and Façade illumination and visual interpretation/experience centre or</p>	<p style="text-align: center;">OR</p> <p>c. Work order/ Agreement/ LOA/ LOI & Phase Completion Certificate from the client indicating the amount of payment made against that Phase.</p> <p>Note: 1.</p> <p>In the case of b & c (ongoing project), the value of payment received shall be greater than or equal to the amount mentioned in the eligibility criteria.</p> <p>The Work Order/ Agreement /LOA/LOI/ Completion Certificate/ Phase Completion Certificate should clearly depict the date, scope of work and the value of project executed.</p> <p>MOU with specialist sub-contractor to be submitted along with technical bid.</p>
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		<p>AV (Audio video) and AR/VR with exhibit systems.</p> <p>or;</p> <p>Upgradation of Civil/architectural construction and Stone artwork and MEP and Façade illumination and visual interpretation/experience centre or AV (Audio video) and AR/VR with exhibit systems.</p> <p>Additional Clarifications</p> <ol style="list-style-type: none"> 1. Projects executed on EPC/Turnkey/Design-Build/DBO basis shall be accepted. 2. Only projects executed for Government/ULB/PSU/Smart City/Development Authority / Private Trust/Organization shall be considered. 3. Heritage or AV or Voice over experience components may be delivered through a specialist sub-contractor under the Bidder. 	
PQ-8	Special Eligibility Criteria	<p>The Bidder shall demonstrate proven capability in conservation, either in-house or through formal association or through a nominated sub-contractor:</p> <ul style="list-style-type: none"> • At least one (1) completed project involving conservation of heritage buildings anywhere in India. • At least one (1) completed project involving AV experience components for heritage/ historical/ public realm/ cultural/religious spaces anywhere in India. <p>Both experience may be delivered through specialist sub-contractors under the Bidder.</p>	<p>Completion Certificate should be provided of the Specialist Sub-Contractors.</p> <p>MOU with specialist sub-contractor to be submitted along with technical bid. Successful contractor will not be allowed to change subcontractor during execution.</p>

N.B. – USCL reserves the right to check / validate the authenticity of the information provided in the Pre-Qualification and Technical Evaluation criteria and the requisite support must be provided by the Bidder.

Technical Proposal should clearly mention required details ID with reference Tender ID no.

1.2. Technical Evaluation Framework

The Bidder's technical proposal submitted in the technical bid shall be evaluated as per the evaluation criteria in the following table. The Bidders are required to submit all required documentation supporting the evaluation criteria specified (e.g., detailed Project citations and completion certificates, client contact information for verification, profiles of Project resources etc.) as required for technical evaluation.

Important Qualification criteria for technical evaluation and progression to commercial evaluation stage.

The following sections explain how the Bidders shall be evaluated on each of the evaluation criteria.

SN	Evaluation Criteria	Total Marks
A.	Commercial & Professional Strength of the Bidder	20
B.	Experience of the Bidder	35
C.	Approach, Methodology & Presentation	30
D.	Key Personals	15
Total Technical Score		100

1.3. Technical-Qualification Criteria

TQ-1.0 Commercial & Financial Strength of Bidder – 20 Marks

S.No.	Technical Evaluation Criteria	Marks	Supporting Documents
TQ-1.1	Average Annual Turnover during last 3 financial years >50 % value of PAC and ≤60% value of PAC: 8 Marks	20	Audited Balance Sheet and CA Certificate

> 60 % value of PAC and ≤80% value of PAC: 12 Marks		
> 80 % value of PAC and ≤ 100% value of PAC: 16 Marks		
> 100 % value of PAC: 20 Marks		

TQ-2.0 Experience of Bidder – 35 Marks

S.No.	Technical Evaluation Criteria	Marks	Supporting Documents
TQ-2.1	<p>Completed/Ongoing –</p> <p>1-three “similar works” each costing not less than the amount equal to 20% of the probable amount of contract during the last 5 years;</p> <p>or</p> <p>2-two “similar works” each costing not less than the amount equal to 30% of the probable amount of contract during the last 5 years;</p> <p>or</p> <p>3-one “similar work” of aggregate cost not less than the amount equal to 50% of the probable amount of contract during the last 5 years.</p> <p>For project mentioned in point (1/2/3)- 25 Marks,</p> <p>Additional 10 marks for additional Similar project (Additional project should not be less than 20% value of PAC in last 5 year from the date of NIT publication.</p> <p>Similar experience means: Any Government/ULB / PSU/Smart City/ Development Authority / Private Trust/Organization Project involving involving integrated development of public, cultural, tourism, spiritual, or heritage precincts, which includes following components:</p> <p>Civil/architectural construction and Stone artwork and MEP and Façade illumination and visual interpretation/experience centre or AV (Audio video) and AR/VR with exhibit systems or;</p> <p>Upgradation of Civil/architectural construction</p>	35	<p>Work Order/ Agreement /LOA /LOI & Client Completion Certificate.</p> <p>OR</p> <p>Work Order/LOA/ LOI/ Agreement & Certificate from Statutory Auditor/ CA indicating the value of payment received against the work order.</p> <p>OR</p> <p>Work order/ Agreement/ LOA/ LOI & Phase Completion Certificate from the client indicating the amount of payment made against that Phase.</p> <p>Note: 1.</p> <p>In the case of ongoing project the value of payment received shall be greater than or equal to the amount mentioned in the eligibility criteria.</p> <p>The Work Order/ Agreement/ LOA/LOI/ Completion Certificate/ Phase Completion Certificate should</p>

	and Stone artwork and MEP and Façade illumination and visual interpretation/experience centre or AV (Audio video) and AR/VR with exhibit systems		clearly depict the date, scope of work and the value of project & amount received.
TQ-2.2	The Bidder should have achieved an average billing equivalent to at least Thirty Percent (30%) of the Project Cost (PAC) i.e in any continuous period of six (6) consecutive months during the last five (5) financial years from the date of NIT publication, in a single similar project.	5	CA Certified Certificate with UDIN showing month-wise billing AND Client Certified Payment Certificate

TQ-3.0 Approach, Methodology & Presentation – 30 Marks

S.No.	Technical Evaluation Criteria	Marks	Supporting Documents
TQ-3.1	Master planning & architectural approach	10	<p><u>Technical Proposal and Presentation</u></p> <p>1-The bidders are required to make presentation before the evaluation committee. All bidders meeting the basic eligibility criteria shall be called for the presentation on the notified date and time.</p> <p>2-Not to be attached in bid submission documents.</p> <p>3-Bidders are directed to make the presentation in same order as mentioned in technical evaluation criteria.</p>
TQ-3.2	Heritage conservation methodology	4	
TQ-3.3	Content creation	5	
TQ-3.4	Crowd management & Simhastha-readiness plan	3	
TQ-3.5	Landscape & environmental strategy	3	
TQ-3.6	Digital/AV/interpretation design	5	

TQ-4.0 Key Personnel – 15 Marks

S.No.	Technical Evaluation Criteria (<i>Qualification requirement as per Annexure I (Format: I-3)</i>)	Marks	Supporting Documents
TQ-4.1	Project Director	5	CV and Qualification Documents
TQ-4.2	Conservation Architect	1	

TQ-4.3	Structure Engineer	1	
TQ-4.4	MEP Engineer (Mechanical, Electrical, Plumbing)	1	
TQ-4.5	Content Writer	3	
TQ-4.6	Landscape Architect	1	
TQ-4.7	Interpretation/AV Experience Designer	3	

Total Technical Marks = 100

(A Bidder must score ≥ 70 marks to qualify for financial evaluation.)

1.4. Financial Evaluation

- The lowest financial bid (L1) shall be given 100 marks.
- Other bidders will be scored proportionately as:
 $F = (L1 / \text{Bidder's Financial Quote}) \times 100$

1.5. Final QCBS Score

Final Score = $(0.70 \times T) + (0.30 \times F)$

Final combined scores will be calculated upto 2 decimal points. The bidders shall be ranked H1, H2, H3, etc. The bidder with the **highest Final Score** (H1) shall be declared the Selected Bidder. If more than one bidder secures the same marks and gets H1 rank, then the bidder with higher technical marks will be given the work award. In this, the decision of the department will be final and binding.

Annexure – A
(See clause 1, 7 of Section 1-NIT)

KEY DATES

Please Refer Brief NIT

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

|| AFFIDAVIT ||
(To be contained in Envelope A)
(On Non Judicial stamp of Rs. 100)¹

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

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

I/We am/ are fully responsible for the correctness of following self- certified information / digitally signed documents and certificates.

1. That the self - certified information given in the bid document is fully true and authentic.
2. That :
 1. ~~Term deposit receipt deposited as earnest money, demand draft for cost of bid document and other relevant documents provided by the Bank are authentic.~~²
 1. Information regarding financial qualification and annual turnover submitted online is correct.
 2. Information regarding various technical qualifications submitted online is correct.
3. No. close relative of the undersigned and our firm/company is working in the department.

Or

Following close relatives are working in the department:

Name _____ - Post _____ present Posting _____

Signature with seal of the Deponent (bidder)

I/We, _____ above deponent do hereby certify that the facts mentioned in above paras 1 to 4 are correct to the best of my knowledge and belief. . In the event of any information is to be found to be incorrect / untrue or found violated, then without giving any prior notice, our bid shall be liable for rejection or termination of contract, with prejudice to any other rights of Remedy including the forfeiture of the bid security / Performance security.

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

Signature with seal of the Deponent (bidder)

The original copy of **Affidavit** will have to be submitted by the successful **bidder** at the time of **signing** of contract

¹ Deleted Order issued by Chief Engineer MP PWD vide order No क्रमांक401/सा/विविध/002/2014 /2012भोपाल,दिनांक 08-01-2015

² Deleted as EMD is paid online.

Annexure—C

(Sec clause 5 of Section 1-NIT)

PRE- QUALIFICATIONS CRITERIA

As mentioned in Annexure 001 Stage 2: PQ

Eligibility – Technical Eligibility / Qualification Criteria

Annexure —D
(See clause 6 of Section 1-NIT)

SPECIAL ELIGIBILITY CRITERIA

As mentioned in Annexure 001 Stage 2: PQ

Eligibility – Technical Eligibility / Qualification Criteria

Annexure —E
(See clause 2 of Section 2 —ITB & clause 10 of GCC)

SCOPE OF WORKS & SPECIFICATIONS

Survey, design, engineering, procurement, construction, installation, testing, commissioning, operation & maintenance, and transfer of the Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain

[A] Scope of Works

1. Scope of Work for Survey–Design–Build–Operate–Maintain–Transfer Contract

1.1. Project Overview

The selected bidder (“Contractor”) shall be responsible for the *Survey, design, engineering, procurement, construction, installation, testing, commissioning, operation & maintenance, and transfer of the Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain*, to be executed in accordance with:

- The Conceptual Framework provided in the “Sandipani Concept Document”
- The “Preliminary Project Report (PPR) for Maharishi Sandipani Ashram”
- Applicable heritage guidelines, environmental regulations, and statutory approvals
- Requirements for readiness prior to **Simhastha 2028**, with project completion by **October 2027**

1.2. Detailed Scope of Work

A. Survey & Investigation

1.2.1. Topographical and Site Survey

The Contractor shall conduct a detailed topographical survey covering the complete project area (approx. **5.00 Ha**), identifying:

- Existing structures, utilities, contours, water bodies, trees, pathways
- Levels, slopes, embankments, site access, and adjoining rights-of-way
- High-resolution drone and GIS mapping (orthomosaic)

1.2.2. Utility Mapping

Mapping of all existing underground/overhead services including:

- Sewer, water supply, storm drains
- Electrical/HT-LT lines, lighting poles, communication networks
- Safety/security installations

1.2.3. Geotechnical Investigations

Comprehensive soil investigation including:

- Boreholes, plate load tests, soil resistivity

- Determination of geotechnical properties of black cotton soil
- Recommendations for foundation design, earthworks, embankments

1.2.4. Heritage Documentation

Detailed photographic, architectural and condition documentation of:

- Ankapata inscriptions
- Gomti Kund
- Existing Ashram structures
- Original stonework, murals, painted surfaces, lime-plaster elements

1.2.5. Environmental and Hydrological Assessments

- Baseline environment profile
- Tree census & ecological mapping
- Kund water-level profile, stormwater behaviour analysis
- Environmental Management Plan (EMP)

B. Design & Engineering

1.2.6. Master Planning

Prepare a comprehensive site master plan aligned to the defined Six (6) Experience Zones:

1. Zone-1: Visitor Entry & Facilitation Zone
2. Zone-2: Interpretive Introduction Zone
3. Zone-3: Lifestyle & Daily Cycle Experience Zone
4. Zone-4: Education Traditions Gallery Zone
5. Zone-5: Contemporary Gurukul/Residency Zone
6. Zone-6: Krishna Virat Swarup Sculpture Zone

Above zones are indicative, may subject to change during detailed planning/engineering or stakeholders' consultation.

1.2.7. Architectural Design

- Adoption of vernacular Malwa architectural elements
- Use of exposed brick, mud-lime plaster, basalt stone, terracotta tiles, timber/bamboo structures
- Courtyard-based layouts, shaded verandahs, jaali screens
- Climate-resilient and heritage-sensitive design

1.2.8. Structural Design

- Structural systems compatible with black cotton soil
- Monolithic/earth-friendly construction where feasible
- Structural safety certification as per NBC & relevant IS codes

1.2.9. MEP, ICT, and Utilities Design

- Rationalised plumbing
- Rationalised electrical/lighting systems
- Façade lighting, CCTV, PA systems, AV infrastructure
- Solar rooftop generation wherever feasible
- Water supply, sanitation, STP, stormwater, fire safety
- ICT backbone for visitor management systems

1.2.10. Landscape & Environmental Design

- Native and non-invasive plant species
- Sacred groves, shaded avenues, water-sensitive design features
- Hardscape (basalt stone, terracotta, cobblestone)
- Seating, signage, lighting, tactile paths

1.2.11. Crowd Management Design

- Simhastha-ready capacity: 50,000 visitors/day
- Semi-covered queue corridors
- Controlled entry/exit systems
- Special-day management plans

1.2.12. Digital Interpretation & Experience Design

- AR/VR galleries
- Immersive storytelling
- Dynamic light & sound installations at Gomti Kund
- Multi-language digital content

1.2.13. Preparation of GFC Drawings & Approvals

- Detailed drawings (architectural, structural, MEPF)
- Updated BOQ, phasing plan
- Regulatory approvals from relevant authorities
- Heritage conservation methodology

C. Stakeholder Consultation on Master Plan & Thematic Framework

The Contractor shall prepare a draft comprehensive Master Plan of the project covering all the project components, including zoning, circulation, built components, landscape strategy, and thematic narratives of various project components. The said draft Master Plan and themes shall be presented to all concerned stakeholders, including line departments, Dharmik Nyas evam Dharmasva Vibhag, Sandipani Ashram Administration, cultural institutions, and other agencies, as facilitated and coordinated by Ujjain Smart City Limited (USCL). The Contractor shall duly record the comments, observations, and suggestions received during such consultations and incorporate the same in the revised and final Master Plan. The final Master Plan shall be submitted to USCL for approval, and no work related to detailed design shall commence without such approval. No additional cost or time claim shall be admissible on account of stakeholder consultations or incorporation of suggestions.

D. Construction & Execution

1.2.14. Site Preparation

- Barricading, signage, safety systems
- Demolition of unsafe structures
- Protection of trees, heritage assets

1.2.15. Civil & Architectural Works

Includes (but not limited to):

1. Entry Plaza, Ticketing, Facilitation Block
2. Interpretive Zones (2–4) with galleries, exhibits & AV rooms
3. Dormitory/Residency Block (~80 beds)
4. Monumental Krishna Virat Swarup installation
5. Pilgrim Amenities: toilets, water kiosks, shelters
6. Cultural Plaza/Mandap
7. Pathways & circulation routes
8. Semi-covered queue management system

1.2.16. Heritage Conservation Works

- Gomti Kund rehabilitation: desilting, basalt ghats, safety rails, lighting
- Protection of stone inscriptions under a climate-controlled shelter
- Conservation of Ashram structures using lime mortar, natural pigments
- Preservation of murals, stone engravings

1.2.17. Engineering Services & Utilities

- Electrical, plumbing, drainage, STP, solar, fire systems
- ICT: CCTV, PA, Wi-Fi, command room
- Stormwater management & rainwater harvesting

1.2.18. Landscaping

- Planting of native species
- Garden courts, seating, shade structures
- Water features, fountains
- Interpretive signage and lighting

E. Wind Engineering Studies and Independent Structural Vetting:

For all monumental sculptures, portals, or figurative installations meeting any of the following criteria:

- (a) statue-only height (head-to-feet, excluding pedestal) greater than 20 metres, or
- (b) slenderness ratio (overall height to minimum base dimension) exceeding 4.0, or

- (c) presence of cantilevered or projecting elements (such as arms, weapons, ornaments, flags, or similar features) with projection greater than 3.0 metres, the Contractor shall, at his own cost, undertake wind tunnel testing and/or equivalent advanced aerodynamic studies to evaluate wind pressures, dynamic effects, vortex shedding, oscillations, and overall stability.

Such studies shall be carried out at a recognized wind engineering laboratory or technical institution of national or international repute, including IITs, NITs, or other institutes approved by Ujjain Smart City Limited (USCL). The results of the wind tunnel testing shall be duly incorporated into the final structural design, including provisions for stiffening systems, tuned mass dampers (where required), anchorage, segmentation of cladding, and foundation design.

In addition, all structural designs, calculations, and drawings relating to the above sculptures and associated foundations shall be independently vetted by IIT, NIT, or a leading technical institute, as approved by USCL. The Contractor shall submit the wind tunnel test report, structural vetting certificate, and compliance statement prior to issuance of Good for Construction (GFC) drawings. No construction or fabrication shall commence without written approval of USCL. No additional payment or time claim shall be admissible on account of such testing, vetting, or design modifications.

F. Miniature Models for Sculptures – Approval & Compliance

The Contractor shall, at his own cost, prepare and submit miniature scale models (physical and/or 3D printed models) of all sculptures, monumental installations, and major artistic elements proposed under the Project for review and approval of Ujjain Smart City Limited (USCL) and/or its designated Cultural & Heritage Committee. For large and monumental sculptures, the Contractor shall mandatorily submit two stages of miniature models: (i) an initial concept-stage model depicting form, proportions, posture, and thematic intent; and (ii) a refined model incorporating all comments, suggestions, and directions issued by USCL/Committee, including details of material treatment, surface finish, textures, and lighting integration. The final full-scale sculpture, including its finishing, patina, colour, and detailing, shall strictly conform to the approved second-stage miniature model. No fabrication or installation work shall commence without such approvals. No additional payment or claim whatsoever shall be admissible on account of preparation, revision, or modification of miniature models or incorporation of comments at any stage.

G. Approval of Content for AV, Digital Displays, Dioramas & Audio Elements

All background research, scripts, narratives, storyboards, texts, visual content, digital media, dioramas, signages, projection material, animations, and any form of audio or visual display, including voiceover scripts, language versions, voice samples, and selection of voice artists, prepared by the Contractor or its associates, shall be submitted for review and approval of USCL and its designated Cultural & Heritage Committee prior to finalisation and deployment. The Contractor shall incorporate all comments, modifications, and directions issued by USCL/Committee in the final content. No content shall be installed, broadcast, displayed, or made operational without written approval. No additional payment or claim shall be entertained on account of content revision, re-recording, re-editing, or re-development arising from such review process.

H. Testing, Commissioning & Handover

1.2.19. Testing & Commissioning

- Testing of all MEPF systems
- Testing of AV shows, ICT, solar plant

- Landscape establishment review
- Simulation of visitor flow and crowd movement

1.2.20. Training & Documentation

- Training of operating personnel
- O&M manuals, as-built drawings, equipment registers
- Heritage conservation protocols

1.2.21. Soft Launch & Final Handover

- Trial runs (45 days)
- Compliance certification
- Defect liability protocol
- Final transfer to Authority

I. Pre-Dispatch Third-Party Inspection of Major Equipment

The Contractor shall, at his own cost, arrange pre-dispatch third-party inspection (TPI) of all major equipment and systems including, but not limited to, AV and projection systems, lighting fixtures, façade lighting equipment, electrical panels, DG sets, pumps, STP equipment, ICT systems, surveillance equipment, and any other critical plant or equipment identified by USCL. The third-party inspection agency shall be independent and approved by USCL, and the inspection shall be carried out in the presence of representatives of USCL and/or the Project Development & Management Consultant (PDMC). Dispatch of equipment shall be permitted only after submission and acceptance of the pre-dispatch inspection certificate and test reports by USCL.

J. Operations & Maintenance (5 Years)

1.2.22. Facility O&M

- Daily maintenance of buildings, utilities, and site
- Cleaning, waste management, landscape upkeep
- Upkeep of AV galleries, AR/VR installation
- Maintenance of heritage structures

1.2.23. Revenue & Visitor Management

As per approved O&M model:

- Ticketing, guided tours, AV show tickets
- Rentals from shops, events
- Visitor flow & crowd control during Simhastha

1.2.24. Performance Standards

- Minimum system uptime: 98%
- Landscape survival rate: $\geq 90\%$
- Cleanliness rating: $\geq 4.5/5$

- Annual O&M KPIs as per Authority requirements

[B] MAJOR TECHNICAL SPECIFICATIONS & STANDARDS

A. TECHNICAL SPECIFICATIONS

Integrated Development & Conservation of Maharishi Sandipani Ashram, Ujjain

(For Construction, Heritage Works, MEP, ICT, Landscaping & AV Systems)

A 1: General Requirements

1.1 Scope of Specifications

These specifications cover materials, workmanship, testing, quality control, and execution standards for all works forming part of the Survey–Design–Build–Operate–Maintain–Transfer (SDBOMT) contract for the Integrated Development and Conservation of Maharishi Sandipani Ashram, Ujjain. General requirements are:

- Compliance with NBC 2016, IS Codes, CPWD/MP-PWD/UADD specifications
- All works per approved GFC drawings
- Mandatory material approval via datasheets, samples, mock-ups
- NABL testing for materials
- All temporary works to follow safety regulations

1.2 Standards & Codes

All works must comply with the applicable BIS & reference international standards; the list of standards given at Part [C] of this section.

1.3 Drawings & GFC Requirements

All construction shall be executed strictly as per:

- Good for Construction (GFC) drawings approved by the Engineer-in-charge
- Approved shop drawings where applicable
- Field changes only after written approval

1.4 Contractor Responsibilities

- Site safety, barricading, insurance
- Deployment of qualified engineers
- Quality assurance as per QAP submitted
- Material testing at NABL labs
- Adherence to environmental and heritage protocols

1.5 Materials Approval

All materials shall be approved through:

- Submission of datasheets
- Mock-ups where required
- Third-party test certificates

A 2: Site Development Works

2.1 Earthwork & Grading

Materials

- Approved earth, free from debris
- Moisture content as per IS 2720

Execution

- Excavation in all soils to required levels
- Compaction to 95% Standard Proctor Density
- Layer thickness: max 200 mm

Testing

- Field density test: 1 test per 500 sqm

2.2 Paved Walkways

Materials

- 75 mm paver blocks (M40 grade) OR sandstone slabs (25–40 mm)
- RCC base: M20, 100 mm thick
- Joint sand: crushed stone dust

Execution

- Sub-base: 150 mm WBM/GSB
- Edge restraint: precast concrete curb

2.3 RCC Drains & Curbs

- RCC M25 precast drains with covers
- Curbstones: M30 grade, 300×150 mm

2.4 Pergolas & Shaded Paths

- Steel (IS 2062) or RCC M25
- Treatment: epoxy + PU topcoat
- Creeper wires in stainless steel

2.5 Plantation & Landscaping

Plant Palette (Native)

- Neem, Peepal, Kadamb, Jamun, Amaltas, Champa, Aam
- Shrubs: hibiscus, cassia, duranta

Execution

- Pit size: 600×600×600 mm
- Soil mix: red soil + manure + sand (2:1:1)
- Drip irrigation network

A 3: Civil & Architectural Works

3.1 RCC Structures

- Concrete Grade: M25/M30
- Steel: Fe500D, TMT
- Formwork: waterproof plywood
- Curing: 7 days (normal), 3 days (with curing compound)

Structural Design Requirements

- Seismic Zone III compliance
- Black cotton soil mitigation using Under-reamed piles OR raft foundation as per DBR

3.2 Masonry

Exposed Brickwork

- Burnt clay bricks (Class 7.5)
- Mortar: 1:4 cement-sand or lime-surkhi where specified
- Flemish/rat-trap bond

Basalt Stone Masonry

- Hand-cut blocks
- Thickness: 230–300 mm

3.3 Roofing

- Timber trusses (seasoned hardwood)
- Terracotta tiles over waterproof membrane
- Lime terracing for flat roofs

3.4 Flooring

- Basalt stone (20–30 mm)
- Sandstone/cobblestone (80–100 mm)
- Kota stone (interior service areas)

3.5 Doors & Windows

- Timber frames (teak/champ)
- Hardware: brass/SS heritage finish
- Jaali screens: brick/terracotta

3.6 Finishes

- Lime plaster (2–3 coats)
- Natural earth pigments
- Low-VOC interior paints

A 4: Heritage Conservation Works

4.1 Gomti Kund Conservation

Desilting

- Manual + pump-aided
- No mechanical dredging allowed

Stone Ghats

- Basalt stones, hand-dressed
- Lime-surkhi mortar joints

Water Systems

- Filtration + circulation pumps

- Underwater lights (warm white)

4.2 Protection of Numbered Stone Inscriptions

- Cleaning via micro-abrasive method
- Chemical consolidants (silane/siloxane)
- Climate-controlled pavilion installation

4.3 Ashram Heritage Structures

- Timber repair using reversible methods
- Lime plaster restoration
- Mural protection using conservation-grade materials

A 5: MEP Systems

5.1 Electrical Works

- Cabling: FRLS, IS 7098 compliant
- Lighting: LED, 2700–3000K for heritage zones
- Pole lights: IP66, IK08
- Switchgear: ABB/Schneider/L&T equivalent

5.2 Plumbing Works

- UPVC/SWR pipes (SCH 80)
- HDPE pipes PN 6–10
- Fixtures: water-saving type

5.3 Fire Safety

- Smoke detectors, heat detectors
- Extinguishers (CO₂, ABC)
- Hydrants where required

5.4 HVAC Systems

- VRV/VRF units in galleries
- AHUs with 30% fresh air
- Filtration MERV 8 or higher

A 6: ICT, Surveillance & AV Systems

6.1 CCTV

- IP cameras, 4MP minimum
- NVR-based storage (30 days retention)
- Fiber backbone

6.2 PA System

- IP-based speakers
- Zonal control

6.3 Wi-Fi

- Dual-band outdoor APs
- Hotspot management software

6.4 AV Experience Systems

Projectors

- Laser phosphor, 10,000+ lumens

VR/AR

- Headsets (6 DOF)
- Content server integration

Interactive Kiosks

- Touch-enabled (minimum 43")
- Anti-glare toughened glass

A 7: Light & Sound Show Specifications

7.1 Lighting

- DMX-controlled system
- Underwater IP68 fixtures
- Gobo projectors for thematic effects

7.2 Audio

- 5.1 or 7.1 Surround
- Outdoor weatherproof speakers

7.3 Control Room

- Media server with show-control software
- Redundant power backup

A 8: Corridor, Ghat & Thematic Elements

8.1 Corridor Artwork

- Relief motifs
- Weatherproof finishes
- Stone/metal elements

8.2 Monumental Installations

- 20 ft and 60 ft height installations
- RCC/steel core with GFRC cladding
- Wind load compliance as per IS 875

8.3 Bridge Construction

- 4 m wide pedestrian bridge
- RCC/steel composite deck

8.4 Ghat Development

- Basalt stone
- Handrails (SS304/316)

8.5 Specifications for Sculptures

8.5.1. DETAILED SPECIFICATIONS – METAL SCULPTURES

(Materials may include Bronze, Brass, Stainless Steel, Mild Steel, Weathering Steel)

1.1 Materials

(a) Primary Structural Material

- Stainless Steel SS304/SS316 (recommended for outdoor use)
- Thickness:
 - Skin: 3–6 mm
 - Internal frames: 6–12 mm box sections
- For corten/“weathering steel”: Comply with ASTM A588.

(b) Bronze Casting (if traditional)

- Copper content $\geq 85\%$
- Lead $\leq 5\%$
- Wall thickness: 6–10 mm
- Method: Lost wax casting

(c) Mild Steel (for substructure only)

- IS 2062 E250/E350
- Thickness: as per structural design & wind load requirement

1.2 Fabrication Requirements

- All welds TIG/MIG as per AWS D1.1 standards
- Grinding and finishing seamless unless intentionally textured
- Internal stiffeners based on wind load design (IS 875 Part 3)
- No visible welding on external façade
- Internal anticorrosive primer: Zinc-rich epoxy, 70–90 microns
- External coating:
 - PU topcoat (two coats, 40–50 microns each)
 - OR clear lacquer for bronze

1.3 Surface Finishing

Choose depending on artistic intent:

- Brushed finish
- Mirror finish
- Antique bronze patina
- Weathered or oxidized finish
- Protective Nano-coating (5-year warranty)

1.4 Structural Stability

- Structural support calculated as per wind speed 47 m/s (Ujjain region)
- RCC pedestal with anchor bolts (M20, SS316)
- Minimum pedestal depth: 600 mm below NGL, or as per design
- Base plate minimum thickness: 16–20 mm

1.5 Testing Requirements

- Non-destructive testing (NDT) of welds – 5% of joints minimum
- Coating thickness test (DFT meter)
- Load test on anchor system
- Stability certification by licensed structural engineer

8.5.2. DETAILED SPECIFICATIONS - COMPOSITE MATERIAL SCULPTURES (FRP/GFRC/GRC)

These are widely used for **large installations (20 ft–120 ft)** due to light weight and easy shaping.

2.1 Materials

(a) FRP (Fiber Reinforced Polymer)

- Resin: Isophthalic / Vinyl Ester resin (outdoor grade)
- Glass fibre: 450–600 GSM chopped strand mat
- Skin thickness: 5–12 mm (skin thickness will be as approved by EIC)
- Fire-retardant grade: FR Class II or higher

(b) GFRC (Glass Fiber Reinforced Concrete) / GRC

- Cement:Sand ratio = 1:1 to 1:1.3
- Glass fibre alkali-resistant (AR glass, 4.5–5% content)
- Typical thickness: 12–20 mm
- Backing: welded GI mesh

(c) Internal Frame (Mandatory for large sculptures)

- Metallic armature using 8mm MS bars coated with epoxy paint as the spine of the sculpture
- MS/SS square pipes (40×40×3 mm or higher)
- Bracing as per wind load design
- Corrosion resistance: hot-dip galvanised (80–100 microns)

2.2 Fabrication Requirements

- 3D modelling + CNC foam cutting for master mould
- Gelcoat (UV-stabilized) minimum 0.4–0.6 mm
- FRP lamination in multiple layers
- GFRC cast in sprayed or premix method
- Joints reinforced with internal overlap of minimum 100 mm
- Sculpture assembled onsite using concealed SS bolts

2.3 Surface Finishing

- Polyurethane (PU) paint – minimum 2 coats, exterior grade
- UV resistance: minimum 5-year warranty
- Metallic finishes (bronze, copper, gold leaf) optional
- Anti-graffiti coating on final layer

2.4 Structural & Safety Requirements

- Foundation/RCC pedestal designed for wind loads as per IS 875
- Anchorage using SS316 bolts (minimum M16)
- Internal ladder or access for maintenance (for >30 ft sculptures)
- Lightning arrestor for sculptures above 12 m

2.5 Testing & Quality Control

- Resin-to-glass ratio testing
- Flexural strength test for GFRC
- Adhesion test of coatings
- Prototype sample (1:10 scale) approval

8.5.3. DETAILED SPECIFICATIONS – STONE SCULPTURES (Basalt / Sandstone / Granite / Marble)

Used for traditional, spiritual, or cultural artwork requiring durability.

3.1 Materials

(a) Basalt (local / Malwa region)

- Compressive strength ≥ 200 MPa
- Water absorption $\leq 1\%$

(b) Granite

- Compressive strength ≥ 150
- Suitable for polished and carved finishes

(c) Sandstone

- Compressive strength $\geq 55-60$ MPa
- Preferred for textured carving
- Weather-resistant varieties only

(d) Marble

- Compressive strength ≥ 70 MPa
- Interior or sheltered zones only

3.2 Carving Specifications

- Hand-carved or CNC-assisted initial shaping
- Final detailing by trained sculptors
- Minimum stone thickness: 200 mm (for free-standing elements)
- No cracks, veins, or hidden defects

3.3 Surface Finish Options

- Natural finish
- Bush-hammered
- Honed or polished (for granite/marble)
- Hand-chiselled traditional finish
- Protective breathable coating (silane/siloxane)

3.4 Structural Stability

- Mortise-tenon or dowel-based connections
- SS304 dowels (minimum 12 mm dia)
- RCC base block M25
- Anti-slip textured finish for stepped surfaces

3.5 Testing & Certification

- Stone strength test (lab certificate)
- Water absorption test
- Salt crystallization test for outdoor sandstone
- Sample piece approval before bulk work

8.5.4. COMMON REQUIREMENTS FOR ALL SCULPTURES

4.1 Wind Load Design

- Designed as per IS 875 (Part 3)
- Wind speed for Ujjain region: 47 m/s (170 km/h)

- Structural stability certification mandatory

4.2 Foundation & Pedestal

- RCC M30
- Minimum base dimensions (indicative):
 - Up to 10 ft sculpture → 600×600 mm
 - 10–30 ft sculpture → 1200×1200 mm
 - 30–60 ft sculpture → 2400×2400 mm
 - 60 ft monumental → structural design required

4.3 Anchoring System

- SS316 anchor bolts (M16–M30 depending on height)
- Chemical anchor or anchor plates
- Minimum pull-out capacity ≥ 1.5 times design load

4.4 Protection & Coatings

- UV-resistant paint/coating
- Anti-corrosion primer
- Anti-graffiti nano sealant

4.5 Maintenance Requirements

- Cleaning: monthly dry wipe
- Annual inspection of:
 - bolts
 - joints
 - coatings
 - structural frame

4.6 Documentation

- 3D CAD/Revit model
- Structural drawings
- Material datasheets
- Warranty certificates for coatings
- Installation method statement

8.5.5. SPECIFIC NOTES FOR SANDIPANI PROJECT (Context Customization)

These specifications specifically align with:

- The 20 ft thematic installations
- The 60 ft monumental sculpture
- The 120 ft portal structure
- The corridor artwork & motifs

Custom Requirements:

1. Motifs inspired by Gurukul traditions, Krishna Leela, and ancient learning philosophies.
2. Materials must harmonize with basalt ghats, terracotta, lime plaster, and the temple precinct landscape.
3. Night-time illumination must be integrated in the sculpture design (LED niche lighting, concealed wiring).
4. Public safety: Edges must be smooth; no protrusions at pedestrian height.

5. Weathering performance: All sculptures must have minimum 10-year outdoor warranty on coatings.

A 9: Sustainable Measures

9.1 STP (MBBR)

- 100 KLD capacity
- Treated water reuse for landscaping

9.2 Solar Plant

- 75 kWp rooftop
- MNRE-approved panels

9.3 Solid Waste Management

- Organic waste composter
- Segregation center bins

A 10: Operations & Maintenance (10 Years)

10.1 Electrical Systems

- Uptime 98%
- Monthly maintenance logs

10.2 Landscaping

- Survival rate > 90%
- Quarterly plant health audit

10.3 Cleaning

- Daily sweeping/washing
- Weekly deep cleaning

10.4 AV & ICT

- Uptime > 95%
- Software updates every 6 months

10.5 Reporting

- Monthly O&M report
- Annual audit

[C] APPLICABLE BIS & REFERENCE INTERNATIONAL STANDARDS

A. GENERAL & OVERARCHING STANDARDS

Indian Standards (BIS)

- NBC 2016 – National Building Code of India (All Parts)
- SP 7 – National Building Code Explanatory Handbook
- SP 20 – Handbook on Masonry Design & Construction
- SP 27 – Common Defects in Buildings
- CPWD General Specifications (latest)

International References

- ISO 9001 – Quality Management Systems

- ISO 14001 – Environmental Management Systems
- ISO 45001 – Occupational Health & Safety

B. SURVEY, GEOTECHNICAL & EARTHWORKS

BIS Standards

- IS 2720 (Parts 1–43) – Tests on Soil
- IS 1892 – Subsurface Investigation
- IS 3764 – Excavation Work
- IS 1200 (Part 1) – Earthwork Measurement

International References

- ASTM D2487 – Soil Classification
- ASTM D1557 – Compaction (Modified Proctor)

C. CIVIL & STRUCTURAL WORKS

Concrete & RCC

- IS 456 – Plain & Reinforced Concrete
- IS 10262 – Concrete Mix Design
- IS 516 – Tests on Concrete
- IS 9103 – Admixtures
- IS 1786 – TMT Steel (Fe 500D)

Structural Design & Safety

- IS 875 (Parts 1–5) – Loads (Dead, Live, Wind, Seismic)
- IS 1893 (Part 1) – Earthquake Resistant Design
- IS 13920 – Ductile Detailing
- IS 800 – Steel Structures
- IS 807 – Cranes & Lifting (for erection of sculptures)

International References

- ACI 318 – Structural Concrete
- AISC 360 – Steel Structures
- EN 1991 / Eurocode 1 – Wind & Imposed Loads
- EN 1998 / Eurocode 8 – Seismic Design

D. ARCHITECTURAL WORKS & FINISHES

BIS Standards

- IS 2212 – Brickwork
- IS 3495 – Tests on Burnt Clay Bricks
- IS 712 – Lime for Construction
- IS 1661 – Cement Paint
- IS 3614 – Fire Doors
- IS 4021 – Timber Doors & Windows
- IS 1237 – Cement Concrete Flooring Tiles

International References

- ASTM C90 – Masonry Units
- BS 8000 – Workmanship on Building Sites

E. HERITAGE CONSERVATION & STONE WORKS

Indian / National References

- INTACH Conservation Guidelines

- ASI Conservation Manuals & Circulars
- SP 20 (Special Reference for Lime & Masonry)
Stone & Masonry (BIS)
- IS 1121 – Tests on Natural Building Stones
- IS 1124 – Water Absorption of Stone
- IS 1597 – Stone Masonry Code
- IS 3620 – Sandstone (Ashlar/Slabs)
- IS 3316 – Granite Stone
- International References
- ICOMOS Charters (Venice Charter, Burra Charter)
- EN 771 – Masonry Units
- ASTM C97 / C99 – Stone Properties
- RILEM Guidelines – Historic Masonry Conservation

F. MEP, PLUMBING, DRAINAGE & FIRE SAFETY

Plumbing & Water

- IS 2065 – Water Supply in Buildings
- IS 1172 – Water Demand
- IS 4985 – UPVC Pipes
- IS 12786 – HDPE Pipes
- Drainage & Sewerage
- IS 1742 – Drainage
- CPHEEO Manual on Sewerage & Sewage Treatment
- Fire Safety
- NBC 2016 – Part 4 (Fire & Life Safety)
- IS 2190 – Fire Extinguishers
- IS 15105 – Fire Detection & Alarm Systems
- International References
- NFPA 13 / 72 / 101 – Fire Protection & Life Safety
- ASHRAE (for HVAC in galleries)

G. ELECTRIFICATION, LIGHTING & ILLUMINATION

BIS Standards

- IS 732 – Electrical Wiring
- IS 3043 – Earthing
- IS 1646 – Fire Safety of Electrical Installations
- IS 10322 – Luminaires
- IS 16107 – LED Modules
- IS 16106 – LED Drivers
- IS 1944 – Lighting of Public Thoroughfares
- International References
- IEC 60598 – Luminaires
- IEC 60364 – Electrical Installations
- IESNA Lighting Handbook – Illumination Design
- CIE Standards – Colour Temperature & Glare

H. FACADE LIGHTING, PROJECTION MAPPING & LIGHT & SOUND SHOW

Lighting & Controls

- IS 16102 – LED Control Gear
 - IS 10322 – Outdoor Luminaires
- International References
- DMX-512 / RDM Protocols – Lighting Control
 - IEC 62386 (DALI) – Digital Lighting Control
 - CIE 150 / 171 – Architectural Lighting
 - IES RP-33 – Lighting for Exterior Environments

I. AV, DIGITAL SYSTEMS & ICT

Indian / National

- TEC & MeitY Guidelines for ICT Infrastructure
 - CERT-In Cybersecurity Guidelines
- International References
- ISO/IEC 27001 – Information Security
 - ISO/IEC 11801 – Structured Cabling
 - IEEE 802.3 / 802.11 – Ethernet & Wi-Fi
 - AES Standards – Audio Systems
 - SMPTE – Projection & Media Systems

J. SCULPTURES, ARTWORK & MONUMENTAL INSTALLATIONS

Structural & Material (BIS)

- IS 875 (Part 3) – Wind Loads
 - IS 1893 – Seismic Design
 - IS 800 – Steel Structures
 - IS 2062 – Structural Steel
 - IS 9103 – Admixtures (for RCC cores)
- Stone Sculptures
- IS 1121, IS 1597, IS 3316
- Metal & Alloy Sculptures
- IS 6911 – Stainless Steel Sheets
 - IS 513 – Steel Sheets
 - IS 1079 – Mild Steel Sheets
- Composite (FRP/GFRC)
- IS 12777 – Fibre Reinforced Plastics
 - IS 1727 – Fibre Glass Reinforced Plastics
- International References
- ASTM A240 – Stainless Steel
 - ASTM A588 – Weathering Steel
 - ACI 549 – GFRC
 - EN 1176 / EN 13198 – Structural Safety of Installations
 - AWS D1.1 – Welding
 - ISO 12944 – Corrosion Protection

K. SUSTAINABILITY & ENVIRONMENT

Indian

- ECBC – Energy Conservation Building Code
- CPCB Guidelines
- MoEF&CC Environmental Norms
International
- ISO 50001 – Energy Management
- LEED / GRIHA (reference benchmarks)

L. QUALITY ASSURANCE & TESTING, DOCUMENTATION

BIS

- IS 3025 – Electrical Testing
- IS 516 – Concrete Testing
- IS 1608 – Tensile Testing of Steel
International
- ASTM E84 – Fire Performance
- ISO 9712 – NDT
- ISO 14644 – Controlled Environments (AV rooms)
- ISO 9001 – Quality Management Systems
- ISO 14001 – Environmental Management Systems (reference)
- ISO 21121 – Risk management for collections

Note:

The standards listed above are indicative and for guidance.

The Contractor may propose equivalent or superior standards, subject to review and approval of PDMC and USCL.

In case of conflict, the most stringent requirement shall apply.

Annexure —F
(See clause 3 of section 2-ITB)

PROCEDURE FOR PARTICIPATION IN E-TENDERING

1. Bidder should do Online Enrolment in this Portal using the option Click Here to Enroll available in the Home Page. Then the Digital Signature enrolment has to be done with the e-token, after logging into the portal. The e-token may be obtained from one of the authorized Certifying Authorities such as MudhraCA/ GNFC/IDRBT/ Mtnl Trust line / SafeScript/TCS.
2. Bidder then logs into the portal giving user id / password chosen during enrolment.
3. The e-token that is registered should be used by the bidder and should not be misused by others.
4. DSC once mapped to an account cannot be remapped to any other account. It can only be Inactivated.
5. The Bidders can update well in advance, the documents such as certificates, purchase order details etc., under My Documents option and these can be selected as per tender requirements and then attached along with bid documents during bid submission. This will ensure lesser upload of bid documents.
6. After downloading / getting the tender schedules, the Bidder should go through them carefully and then submit the documents as per the tender document, otherwise, the bid will be rejected.
7. The BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for that tender. Bidders are allowed to enter the Bidder Name and Values only.
8. If there are any clarifications, this may be obtained online through the eProcurement Portal, or through the contact details given in the tender document. Bidder should take into account of the corrigendum published before submitting the bids online.
9. Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender schedule and they should be in PDF/XLS/RAR/DWF formats. If there is more than one document, they can be clubbed together.
10. Bidder should arrange for the EMD as specified in the tender. The original should be posted/couriered/given in person to the Tender Inviting Authority, within the bid submission date and time for the tender.
11. The bidder reads the terms and conditions and accepts the same to proceed further to submit the bids
12. The bidder has to submit the tender document(s) online well in advance before the prescribed time to avoid any delay or problem during the bid submission process.
13. There is no limit on the size of the file uploaded at the server end. However, the upload is decided on the Memory available at the Client System as well as the Network bandwidth available at the client side at that point of time. In order to reduce the file size, bidders are suggested to scan the documents in 75-100 DPI so that the clarity is maintained and also the size of file also gets reduced. This will help in quick uploading even at very low bandwidth speeds.

14. It is important to note that, the bidder has to Click on the Freeze Bid Button, to ensure that he/she completes the Bid Submission Process. Bids Which are not Frozen are considered as Incomplete/Invalid bids and are not considered for evaluation purposes.
15. ~~In case of Offline payments, the details of the Earnest Money Deposit (EMD) document submitted physically to the Department and the scanned copies furnished at the time of bid submission online should be the same otherwise the Tender will be summarily rejected~~
16. The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
17. The bidder may submit the bid documents online mode only, through this portal. Offline documents will not be handled through this system.
18. At the time of freezing the bid, the eProcurement system will give a successful bid up-dation message after uploading all the bid documents submitted and then a bid summary will be shown with the bid no, date & time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed using the e-token of the bidder and then submitted.
19. After the bid submission, the bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening event.
20. Successful bid submission from the system means, the bids as uploaded by the bidder is received and stored in the system. System does not certify for its correctness.
21. The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected
22. The time that is displayed from the server clock at the top of the tender Portal, will be valid for all actions of requesting bid submission, bid opening etc., in the e- Procurement portal. The Time followed in this portal is as per Indian Standard Time (IST) which is GMT+5:30. The bidders should adhere to this time during bid submission.
23. All the data being entered by the bidders would be encrypted at the client end, and the software uses PKI encryption techniques to ensure the secrecy of the data. The data entered will not be viewable by unauthorized persons during bid submission and not viewable by any one until the time of bid opening. Overall, the submitted bid documents become readable only after the tender opening by the authorized individual.
24. During transmission of bid document, the confidentiality of the bids is maintained since the data is transferred over secured Socket Layer (SSL) with 256 bit encryption technology. Data encryption of sensitive fields is also done.
25. The bidders are requested to submit the bids through online eProcurements system to the TIA well before the bid submission end date and time (as per Server System Clock).

Annexure — G
(See clause 4 of Section 2 -ITB)

JOINT VENTURE (J.V.)

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

1. Number of partners in a Joint Venture shall not exceed 3 (three). The partners shall comply with the following requirements:
 - a. One of the partners shall be nominated as being Lead Partner, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners.
 - b. The bid and, in case of successful bid, the Agreement, shall be signed so as to be legally binding on all partners.
 - c. The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the contract, including payment, shall be done exclusively with the partner in charge.
 - d. All the partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization mentioned under [c] above, as well as in the bid and in the Agreement [in case of successful bid.
 - e. Bidder shall submit the joint venture agreement indicating precisely the role and responsibilities of all the members of JV in respect of planning, design, construction equipment, key personnel, work execution, and financing of the project. All members of JV should have active participation in execution during the currency of the contract. This should not be varied/modified subsequently without prior approval of the employer.
 - f. a copy of the Joint Venture Agreement entered into by the partners shall be submitted with the bid.
 - g. The joint venture agreement shall be registered at the time of agreement, so as to be legally valid and binding on all partners.
2. All the partners should meet out the minimum qualifying criteria required for the bid and collectively must meet the criteria specified in full. Failure to comply with this requirement will result in rejection of the joint venture's bid.
3. The performance security of joint venture shall be in the name of the partner Lead partner/joint venture.
4. Attach the power of attorney of the partners authorizing the Bid signatory(ies) on behalf of the joint venture
5. An individual Bidder cannot at the same time be member of a Joint Venture applying for this Bid. Further, a member of a particular Bidder Joint Venture cannot be member of any other Bidder Joint Venture applying for this bid

6. A copy of the Joint Venture agreement entered into by the partners made on Rs 500/- Non-judicial stamp duly notarized shall be submitted with the bid. However at the time of agreement bidder shall get the joint venture agreement registered, so as to be legally valid and binding on all partners.

7. Furnish details of participation proposed in the joint venture as below:

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

8. The partners of J.V. should satisfy the qualification criteria as below,

- a. The Lead Partner must have the share of 51% in the J.V.
- b. The other partner(s) must have a share of minimum 25% in the J.V.
- c. The lead partner and the other partners must also meet 51% and 26% of all qualification criteria respectively except for the requirement of work experience described in Annexure 'C'. However, all the partners combined must satisfy the full 100% qualification criteria jointly. For this purpose, the qualification of individual partners shall be added (for Average annual turnover, Net worth).

9. For the meeting the minimum qualification criteria of experience of similar nature work,

- (i) Out of 3 similar works of value more than 20% of PAC, at least 2 works must be done by lead partner and one work to be done by other partner.

Or

- (ii) Out of 2 similar works of value more than 30% of PAC, at least 1(one) work must be done by lead partner and 1 (one) work to be done by another partner.

Or

- (iii) In case of one similar work of value more than 50% of PAC the lead partner must satisfy the criteria. However, the other partner must satisfy the criteria of least one work of 20% of PAC.

Annexure-H

(See clause 12 of Section 2 —ITB & clause 4 of GCC)

**ORGANIZATIONAL DETAILS
(To be contained in Envelope- A)**

S.No.	Particulars	Details
1	Registration number issued by Centralized Registration System of Govt. of M.P. or Proof of application for registration.	'(If applicable, scanned copy of proof of application for registration to be uploaded)
1a	MSME Registration	No. ___Date___(Scanned copy of Registration to be uploaded)
2	Valid Registration of bidder in appropriate class through Centralized Registration of Govt. of MP	Registration No. ___Date___(Scanned copy of Registration to be uploaded)
3	Name of Organization/ Individual/ Proprietary Firm/Partnership Firm	
4	Entity of Organization Individual/ Proprietary Firm/ Partnership Firm (Registered under Partnership Act)/Limited Company (Registered under the Companies Act—1956/2013)/ Corporation / Joint Venture	
5	Address of Communication	
6	Telephone Number with STD Code	
7	Fax Number with STD Code	
8	Mobile Number	
9	E-mail Address for all communications	
	Details of Authorized Representative	
10	Name	
11	Designation	
12	Postal Address	
13	Telephone Number with STD Code	
14	Fax Number with STD Code	
15	Mobile Number	
16	E-mail Address	
17	PAN Number	
18	GST Number	

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

Signature of Bidder with Seal

Date: _____

Annexure —I
See clause 14 of Section 2 -ITB)

Envelope — B, Technical Proposal
Technical Proposal shall comprise the following documents:

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

Note:

1. *Technical Proposal should be uploaded duly page numbered and indexed.*
2. *Technical Proposal uploaded otherwise will not be considered.*

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

The bidder should have:

A. Financial & Physical

i. Experience of having successfully executed as prime contractor:

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

(For Joint Ventures)

For the meeting the minimum qualification criteria of experience of similar nature work,

Out of 3 similar works of value more than 20% of PAC, at least 2 works must be done by lead partner and one work to be done by other partner.

Or

Out of 2 similar works of value more than 30% of PAC, at least 1(one) work must be done by lead partner and 1 (one) work to be done by other partner.

Or

In case of one similar work of value more than 50% of PAC the lead partner must satisfy the criteria. However, the other partner must satisfy the criteria of least one work of 20% of PAC.

iii) The lead partner and the other partner must also meet 51% and 26% of the all-qualification criteria respectively except for the requirement of work experience described in Annexure-I-1(A). However, both the partners must satisfy the full {100%} qualification criteria jointly. For this purpose, the qualification of individual partners shall be added {For Annual Average Turn Over and for Bid Capacity Only}.

To be filled in by the contractor:

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

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

Existing commitments— (Value of 'C' for Bid Capacity formula)						
Agreement Number & Year	Name of Work	Date of Work Order	Date of Completion	Amount of Contract	Amount of balance work	Employer's Name and Address

B.— Physical Requirement:

Execution of similar items of work in any one financial year during the last 3 financial years should not be less than the minimum physical Requirement fixed for the work.

S.No.	Particulars	Actual Quantity Executed (To be filled in by the contractor)		
		Year - 1	Year - 2	Year - 3
	Physical qualification required	Yes		
1				

Note:

1. Certificate duly signed by the employer shall be enclosed for the actual quantity executed in any one year during the last 5 financial years,

Annexure-I(Format: I-2)
(See douse 14 of Section 2 -ITB)

ANNUAL TURN OVER

Requirement:

Average annual construction turnover on the construction works not less than 50% of the probable amount of contract during the last 3 financial years.

To be filled in by the contractor:

Financial Year Payments received for contracts in progress or completed

Financial Year	Payments received for contracts in progress or completed	Net worth
1. 2020-2021		
2. 2021-2022		
3. 2022-2023		
4. 2023-2024		
5. 2024-2025		

Note:

- i Annual turnover from construction should be certified by the Chartered Accountant.
- ii Audited Balance sheet including all related notes, and income statements for the above financial years as well as Income Tax Returns for the relevant years to be enclosed.

Bid Capacity

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

Bid Capacity = $(1.5A \times B) - C$ and its should be more than PAC.

Where

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

B = Proposed contract period in number of years prescribed for completion of the works (period up to 1 year shall be taken as one year),

C = Value at current price level of existing commitments and ongoing works to be completed in the next 'B' years.

FY	2024-25	2023-24	2022-23	2021-22	2020-21
MF	1.00	1.10	1.21	1.33	1.46

Bids shall be opened in order of their listing in one NIT. In case of bidder's participation in multiple tenders listed in ine NIT, his bid capacity shall be exhausted, if found L1, in order of tenders opened. Soon after bid capacity of a bidder has exhausted, his next bid shall not be opened

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

List of Technical Personnel for the Key Positions³(to be referred for civil works)

The Contractor will have to appoint the following key personnel during the execution and entire contract period, apart from other key personnel and support staff as necessary.

The qualification and experience requirements are as under.

S.No.	Technical Evaluation Criteria
1	Project Director B.E./B.Tech (Civil) or Equivalent Experience: 15 years in conservation/infrastructure projects
2	Conservation Architect Master's in Architectural Conservation Experience: 10 year in Heritage buildings/ASI monuments/UNESCO projects or similar
3	Structure Engineer Qualification: M.Tech in Structural Engineering Experience: 10+ year in heritage structures/ "Retrofitting" aur "Strengthening"
4	MEP Engineer (Mechanical, Electrical, Plumbing) Qualification: B.E./B.Tech in Mechanical or Electrical Engineering.

	Experience: 7 years in construction projects /Heritage buildings, services (AC, Firefighting, Lighting), ICT
5	Content Writer Qualification: Degree in History, Archaeology, Literature, Journalism Experience: 5+ years in Museum galleries, coffee table books, or heritage signage research-based content writer experience.
6	Landscape Architect Qualification: B. Arch Experience: 5 years. in restoration of Historical gardens or Beautification of surrounding area in heritage project
7	Interpretation/AV Experience Designer Qualification: Degree in Design (NID/IIT) or Fine Arts / Multimedia Design Experience: 7–10 years in Museum interiors, Light & Sound shows, Interactive Kiosks, or experience to create visitor experience through AR/VR technology

NOTE: At the time of signing of the agreement the contractor must submit the biodata of experts for above positions for the approval from USCL and shall be mobilized after the approval only.

Bidder shall provide adequate number of personnel, each responsible for a specific role within the project. bidder shall provide clear definition of the role and responsibility of each individual personnel. bidder shall have a defined hierarchy and reporting structure for various teams that shall be part of the project. Bidder has to provide the list of proposed Manpower for the Project. Any changes in Manpower deployment will have to be approved by the Authority.

Following table indicates the minimum number, role and qualification required for Key Positions identified for this project during Implementation Phase. However, bidder shall independently estimate the teams size required to meet the requirements of Service Levels as specified as part of this tender. All proposed positions shall be onsite throughout the entire project.

The mentioned manpower effort estimation/requirement is Minimum and if the Bidder believes that to meet/achieve the objective of project, additional capacity is required, the same may be deployed as scope of the project and requirement.

Note:

The Technical Proposal must include an undertaking by the bidder stating that none of the Experts proposed in the present proposal have been demobilized for poor/unsatisfactory performance from any project during the last three years. The undertaking must be a separate document and should form an indispensable part of the Technical Proposal.

Penalty for non-deployment of above staff are as follows:

S. No.	Details	Penalty to be computed on Per Month basis
1	Project Director	Rs. 100,000/- p.m.
2	Other Experts	Rs. 75,000/- p.m.

Note:

1. Aforesaid personnel shall be deployed within the period starting from the date of award of contract as stipulated in the contract.
2. Approval of the superintending engineer about suitability of personnel shall be obtained before deployment.
3. The Bidder shall submit CVs of proposed personnel confirming eligibility, experience and suitability of the personnel for the project.

The Contractor shall fill the following format:

S. No	Key Positions	Qualifications	Age	Similar Work Experience	Total Work Experience	Name of Personnel	Key Position	Qualification	Similar Work Experience	Total Work Experience
1.										
2.										
3.										
4.										
5.										
6.										
7.										
Total										

Note:

1. Aforesaid personnel shall be deployed within the period starting from the date of award of contract as stipulated in the contract.
2. Approval of the superintending engineer about suitability of personnel shall be obtained before deployment.

Annexure - I (Format : I-5)
(See clause 14 of Section 2-ITB)

LIST OF EQUIPMENTS / MACHINES FOR CONSTRUCTION WORK

S. No.	Name of Equipment/ Machinery	Quantity	Available with the bidder	
			Name of Equipment/ Machinery	Quantity
1	Set of I. S. sieves			
2	Atterberg Limit Apparatus			
3	Sand replacement Apparatus			
4	Crushing Strength Testing Machine			
5	Flexural Strength Testing Machine			
6	Compression Testing Machine, Capacity 50 tones.			
7	Aggregate Crushing value Apparatus			
8	Los Angeles Abrasion Machine			
9	Aggregate Impact Test Machine			
10	Concrete Batching Plant			
11	Length and Thickness Gauges			
12	Vicat apparatus for testing setting times			
13	Slump testing apparatus			
14	Needle & Plate Vibrator			
15	500gm, 10 Kg balances			
16	Length and Thickness Gauges.			
17	Electrical Oven			

Annexure — J
(See clause 14 of Section 2 -ITB)

FINANCIAL BID
(To Be Contained in Envelope-C)

NAME OF WORK _____

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

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

Note:

- i. Only one rate at par based on the Bill of Quantities and item wise rates .given therein shall be quoted.
- ii. Rates shall be quoted in figures as well as in words. If any difference in figures and words is found lower of the two shall be taken as valid and correct rate. If the bidder is not ready to accept such valid and correct rate and declines to furnish performance -security and sign the agreement his earnest money deposit shall be forfeited.
- iii. ~~In case the percentage "above" or "below" is not given by a bidder, his bid shall be treated as non-responsive.~~
- iv. All duties, taxes, and other levies except Goods and services tax (GST) are included in the rates ~~(in case of Percentage Rate Bids)/~~ Lump sum offer (in case of Lump-sum Bids quoted by the bidder.

Signature of Bidder
Name of Bidder

The above bid is hereby accepted by me on behalf of the Ujjain Smart City Limited dated the _____ day of _____ 20_____

Signature of Officer
by whom accepted

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

MATERIALS TO BE ISSUED BY THE DEPARTMENT

Not Applicable for this contract

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

LETTER OF ACCEPTANCE (LOA)

No. _____

Dated: _____

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

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

Dear Sir(s),
Your bid for the work mentioned above has been accepted on behalf of the Ujjain Smart City Limited at your bided amount ____ (QCBS H-1 Basis) or at par the Bill of Quantities and item wise rates given therein.

You are requested to submit within 15 (Fifteen) days from the date of issue of this letter:
a. The performance security/ performance guarantee of Rs. _____ (in-figures) (Rupees _____ in words only). The performance security shall be in the shape of term deposit receipt / bank guarantee of any nationalized / schedule commercial bank valid up to three months after the expiry of defects liability period.
b. Sign the contract agreement.

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

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

Yours Faithfully

Executive Director
Ujjain Smart City Limited

Annexure — M
(See clause 22 of Section 2 -ITB)

FORM OF BANK GUARANTEE

Performance Security/Additional Performance Security

The Executive Director,

Ujjain Smart City Limited

Ujjain

WHEREAS:

- A. _____ [name and address of contractor] (hereinafter called the "Contractor") and Ujjain Smart City Limited, _____, (hereinafter called the "Employer") have entered into an agreement (hereinafter called the "Agreement") for the Construction of **<Project name>** in the state of Madhya Pradesh on online (QCBS H-1 Basis) basis, subject to and in accordance with the provisions of the Agreement.
- B. The Agreement requires the Contractor to furnish a Performance Security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the {Construction Period/ Defects Liability Period and Maintenance Period} (as defined in the Agreement) in a sum of Rs..... cr. (Rupees crore) (the "Guarantee Amount").
- C. We, through our branch at (the "Bank") have agreed to furnish this bank guarantee (hereinafter called the "Guarantee") by way of Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor's obligations during the {Construction Period/ Defects Liability Period and Maintenance Period} under and in accordance with the Agreement, and agrees and undertakes to pay to the Employer, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Employer shall claim, without the Employer being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.
2. A letter from the Employer, under the hand of an officer not below the rank of Engineer in Charge in the Ujjain Smart City Limited, that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Employer shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Employer and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other employer or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this Guarantee, the Employer shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the

- Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
4. It shall not be necessary, and the Bank hereby waives any necessity, for the Employer to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
 5. The Employer shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfillment and/ or three of all or any of the obligations of the Contractor contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Employer against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Employer, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Employer of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Employer or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.
 6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Employer in respect of or relating to the Agreement or for the fulfillment, compliance and/or performance of all or any of the obligations of the Contractor under the Agreement.
 7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Employer on the Bank under this Guarantee all rights of the Employer under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
 8. The Guarantee shall cease to be in force and effect on ****\$. Unless a demand or claim under this Guarantee is made in writing before expiry of the Guarantee, the Bank shall be discharged from its liabilities hereunder.
 9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Employer in writing and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
 10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Employer that the envelope was so posted shall be conclusive.
 11. This Guarantee shall come into force with immediate effect and shall remain in force and effect for up to the date specified in paragraph 8 above or until it is released earlier by the Employer pursuant to the provisions of the Agreement.
 12. This guarantee shall also be operatable at our..... Branch at <.....> , from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be

made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

Signed and sealed this day of, 20..... at

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

- (i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- (ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.

SECTION 3

Conditions of Contract Part - I General Conditions of Contract [GCC]

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A. General

1. DEFINITIONS

- 1.1. **Bill of Quantities:** means the priced and completed Bill of Quantities forming part of the Bid.
- 1.1 A **Chief Executive officer (C.E.O)** means Chief Executive officer , Ujjain Municipal Corporation, Ujjain
- 1.1 B **Commissioner** :means Commissioner, Ujjain Municipal Corporation, Ujjain
- ~~1.2. **Chief Engineer:** means Chief Engineer of the zone/ basin concerned:~~
- 1.3. **Completion:** means completion of the work as certified by the Engineer-in-Charge, in accordance with provisions of agreement.
- 1.4. **Contract:** means the Contract between the Employer and the Contractor to execute, complete and/or maintain the work. Agreement is synonym of Contract and carries the same meaning wherever used.
- 1.5. **Contract Data:** means the documents and other information, which comprise of the Contract.
- 1.6. **Contractor:** means a person or legal entity whose bid to carry out the work has been accepted by the Employer.
- 1.7. **Contractor's bid:** means the completed bid document submitted by the Contractor to the Employer.
- 1.8. **Contract amount:** means the amount of contract worked out on the basis of accepted bid.
- 1.9. **Completion of work:** means completion of the entire contracted work; Exhaustion of quantity of any particular item mentioned in the bid document shall not imply completion of work or any component thereof.
- 1.10. **Day:** means the calendar day.
- 1.11. **Defect:** means any part of the work not completed in accordance with the specifications included in the contract.
- 1.12. **Department:** means Ujjain Smart City Limited .
- 1.13. **Drawings:** means drawings including calculations and other information provided or approved by the Engineer-in-Charge.
- 1.14. **Employer:** means the party as defined in the Contract Data, who employs the Contractor to carry out the work. The Employer may delegate any or all functions to a person or body nominated by him for specified functions. The word Employer / Government / Department wherever used denote the Employer.
- 1.15. **Engineer:** means the person named in the Contract Data.
- 1.16. **Engineer in charge:** means the person named in the Contract Data.
- 1.17. **Equipment:** means the Contractor's machinery and vehicles brought temporarily to the Site for execution of work.
- 1.17B **Executive Engineer:** / EE mean Executive Engineer appointed by USCL from time to time.
- 1.17 C **Executive Director** means Executive Director of , Ujjain Smart City Limited
- 1.18. **Government:** means Government of Madhya Pradesh.
- 1.19. **In Writing:** means communicated in written form and delivered against receipt.
- 1.20. **Material:** means all supplies, including consumables, used by the Contractor for incorporation in the work.
- 1.21. **Superintending Engineer:** means Superintending Engineer-in-Charge of Ujjain Smart City
- 1.22. **Stipulated period of completion:** means the period in which the Contractor is required to complete the work. The stipulated period is specified in the Contract Data.
- 1.23. **Specification:** means the specification of the work included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.
- 1.24. **Start Date:** means the date of signing of agreement for the work.

- 1.25. **Sub-Contractor:** means a person or corporate body who has a Contract with the Contractor, duly authorized to carry out a part of the construction work under the Contract.
- 1.26. **Temporary Work:** means work designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the work.
- 1.27. **Tender/Bid, Tendered/Bidder:** are the synonyms and carry the same meaning where ever used. -
- 1.28. **Variation:** means any change in the work which is instructed or approved as variation under this contract.
- 1.29. **Work:** The expression “work’ or “works” where used in these conditions shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the work by virtue of contract, contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional,

2. INTERPRETATIONS AND DOCUMENTS

2.1 Interpretations

In the contract, except where the context requires otherwise:

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

2.2 Documents Forming Part of Contract:

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

3. Language and Law

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

4. Communications

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

5. Subcontracting

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

- a. The Contractor may subcontract up to 25 percent of the contract price with the approval of the Employer in writing, but will not assign the Contract. Subcontracting shall not alter the Contractors obligations.
- b. Following shall not form part of subcontracting:
 - I. Hiring of labour through a labour contractor.
 - II. The purchase of Materials to be incorporated in the works.
 - III. Hiring of plant & machinery.
- c. The sub-contractor will have to be registered in the appropriate category in the centralized registration system for contractors of the GoMP.

6. Personnel

- 6.1 The Contractor shall employ for the construction work and routine maintenance the technical personnel as provided in the Annexure I-3 of Bid Data Sheet if applicable. If the Contractor fails to deploy required number of technical staff, recovery as specified in the Contract Data will be made from the Contractor.
- 6.2 If the Engineer asks the Contractor to remove a person who is a member of the contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within three days and has no further connection with the Works in the Contract.

7. Force Majeure

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

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

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

- i. War, hostilities (whether war be declared or not), invasion, act of foreign enemies,
 - ii. Rebellion, terrorism, sabotage by persons other than the contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
 - iii. Riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
 - iv. Munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
 - v. Natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.
- 7.2. In the event of either party being rendered unable by force majeure to perform any duty or discharge any responsibility arising out of the contract, the relative obligation of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties.
- 7.3. For the period of extension granted to the Contractor due to Force Majeure the price adjustment clause shall apply but the penalty clause shall not apply. It is clarified that this sub clause shall not give eligibility for price adjustment to contracts which are otherwise not subject to the benefit of price adjustment clause.
- 7.4. The time for performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such cause lasts. Should the delay caused by force majeure exceed twelve months, the parties to the contract shall be at liberty to foreclose the contact after holding mutual discussions.

8. Contractor's Risks -

- 8.1 All risks of loss or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.
- 8.2 All risks and consequences arising from the inaccuracies or falseness of the documents, drawing, designs, other documents and/or information submitted by the contractor shall be the responsibility of the Contractor alone, notwithstanding the fact that the design/ drawings or other documents have been approved by the department.

9. Liability for Accidents to Person

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

10. Contractor to Construct the Works

- 10.1 The Contractor shall construct install and maintain the Works in accordance with the Specifications and Drawings as specified in the Contract Data.
- 10.2 In the case of any class of work for which there is no such specification as is mentioned in Contract Data, such work shall be carried out in accordance with the instructions and requirement of the Engineer-in-charge.

- 10.3 The contractor shall supply and take upon himself the entire responsibility of the sufficiency of the scaffolding, timbering, machinery, tools and implements, and generally of all means used for the fulfilment of this contract whether such means may or may not be approved or recommended by the Engineer.

11. Discoveries

Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

12. Dispute Resolution System

- 12.1 No dispute can be raised except before the Competent Authority as defined in Contract Data in writing giving full description and grounds of dispute. It is clarified that merely recording protest while accepting measurement and/or payment shall not be taken as raising a dispute.
- 12.2 No dispute can be raised after 45 days of its first occurrence. Any dispute raised after expiry of 45 days of its first occurrence shall not be entertained and the Employer shall not be liable for claims arising out of such dispute.
- 12.3 The Competent Authority shall decide the matter within 45 days.
- 12.4 Appeal against the order of the Competent Authority can be preferred within 30 days to the Appellate Authority as defined in the Contract Data. The Appellate Authority shall decide the dispute within 45 days.
- 12.5 Appeal against the order of the Appellate Authority can be preferred before the Madhya Pradesh Arbitration Tribunal constituted under Madhya Pradesh *Madhyastham Adhikaran Adhiniyam, 1983*.
- 12.6 The Contractor shall have to continue execution of the Works with due diligence notwithstanding pendency of a dispute before any authority or forum.

B. Time Control

13. Programme

- 13.1 Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme showing the general methods arrangements, order and timing for all the activities for the construction of works.
- 13.2 The program shall be supported with all the details regarding key personnel, equipment and machinery proposed to be deployed on the works for its execution. The contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/equipment being placed in field laboratory and the location of field laboratory along with the Programme.
- 13.3 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.
- 13.4 The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the

amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

13.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations.

14. Extension of Time

14.1. If the Contractor desires an extension of time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other grounds, he shall apply, in writing, to the Engineer-in-charge, on account of which he desires such extension. Engineer-in-Charge shall forward the aforesaid application to the Competent Authority as prescribed.

14.2 The competent authority shall grant such extension at each such occasion within a period of 30 days of receipt of application from contractor and shall not wait for finality of work. Such extensions shall be granted in accordance with provisions under clause 15 of this agreement.

14.3 In case the work is already in progress, the Contractor shall proceed with the execution of the works, including maintenance thereof, pending receipt of the decision of the competent authority as aforesaid with all due diligence.

15. Compensation for delay

15.1 The time allowed for carrying out the work, as entered in the agreement, shall be strictly observed by the Contractor.

15.2 The time allowed for execution of the contract shall commence from the date of signing of the agreement. It is clarified that the need for issue of work order is dispensed with.

15.3 In the event milestones are laid down in the Contract Data for execution of the works, the contractor shall have to ensure strict adherence to the same.

15.4 Failure of the Contractor to adhere to the timelines and/or milestones shall attract such liquidated damages as is laid down in the Contract Data.

15.5 In the event of delay in execution of the Works as per the time lines mentioned in the Contract Data the Engineer-in-charge shall retain from the bills of the Contractor amount equal to the liquidated damages leviable until the Contractor makes such delays good. However, the Engineer-in-charge shall accept bankable security in lieu of retaining such amount.

15.6 If the Contractor is given extension of time after liquidated damages have been paid, the Engineer in Charge shall correct any over payment of liquidated damages by the Contractor in the next payment certificate.

15.7 In the event the Contractor fails to make good the delay until completion of the stipulated contract period (including extension of time) the sum so retained shall be adjusted against the liquidated damages levied.

16. Contractor's quoted percentage

The Contractor's quoted percentage rate referred to in the "Bid for works" will be deducted added from/to the net amount of the bill after deducting the cost of material supplied by the department.

C. Quality Control

17. Tests

- 17.1 The Contractor shall be responsible for:
- a. Carrying out the tests prescribed in specifications, and
 - b. For the correctness of the test results, whether preformed in his laboratory or elsewhere.
- 17.2 The contractor shall have to establish field laboratory within the time specified and having such equipments as are specified in the Contract Data.
- 17.3 Failure of the Contractor to establish laboratory shall attract such penalty as is specified in the Contract Data.
- 17.4 Ten percent of the mandatory test prescribed under the specification shall be got carried out through laboratories accredited by national Accreditation Board of laboratories (NABL) By the Engineer-in-charge and the cost of such testing shall be deducted form the payments due to contractor .

18. Correction of Defects noticed during the Defect Liability Period

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

D. COST CONTROL

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

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

20. Extra items

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

21. Payments for Variations and / or Extra Quantities

- 21.1 The rates for such additional (Extra quantity), altered or substituted work / extra items under this clause shall be worked out in accordance with the following provisions in the irrespective order:
- a. The contractor is bound to carry out the additional (Extra quantity), work at the same rates as are specified in the contract for the work.
 - b. If the item is not in the priced BOQ and is included in the SOR of the department, the rate shall be arrived at by applying the quoted tender percentage on the SOR rate.
 - c. If the rates for the altered or substituted work are not provided in applicable SOR - such rates will be derived from the rates for a similar class (type) of work as is provided in the contract (priced BOQ) for the work.
 - d. If the rates for the altered, substituted work cannot be determined in the manner specified in the sub clause (c) above - then the rates for such composite work item shall be worked out on the basis of the concerned Schedule of Rates minus/plus the percentage quoted by the contractor.
 - e. If the rates for a particular part or parts of the item is not in the Schedule of Rates and the rates for the altered, or substituted work item cannot be determined in the manner specified in sub clause (b) to (d) above, the rate for such part or parts will be determined by the Competent Authority, as defined in the Contract Data on the basis of the rate analysis derived out of prevailing market rates when the work was done.
 - f. But under no circumstances, the contractor shall suspend the work on the plea of non-acceptability of rates on items falling under sub clause (a) to (d). In case the contractor does not accept the rate approved by the Engineer in Charge for a particular item, the contractor shall continue to carry out the item at the rates determined by the Competent Authority. The decision on the final rates payable shall be arrived at through the dispute settlement procedure.

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

- 22.1. If at any time after the commencement of the work, the Engineer-in-charge for any reason whatsoever, not require the whole or any part of the work as specified in the bid to be carried out the Engineer-in-charge shall give notice in writing of the fact to the Contractor and withdraw that whole or any part of the work.
- 22.2 The Contractor shall have no claim to any payments or compensation whatsoever, on account of any profit or advantage which he might have derived from the execution of work in full or on account of any loss incurred for idle men and machinery due to any alteration or restriction of work for whatsoever reason.
- 22.3 The Engineer-in-charge may supplement the work by engaging another agency to execute such portion of the work, without prejudice to his rights.

23. 'No Interest Payable

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

24. Recovery from Contractors

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

- (a) Appropriating, in part or whole of the Performance Security and Additional Performance Security, if any; and/or Security Deposit and / or any sums payable under the contract to the contractor.
- (b) If the amount recovered in accordance with (a) above is not sufficient, the balance sum may be recovered from any payment due to the contractor -under any other contract of the department, including the securities which become due for release.
- (c) The department shall, further have an additional right to effect recoveries as arrears of land revenue under the M.P. Land-Revenue Code.

25. Tax -

- 25.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other levies, duties, cess, toll, taxes of Central and State Governments, local bodies and authorities. But the GST shall be paid extra to the contractor as per rules.
- 25.2 The liability, if any, on account of quarry fees, royalties, octroi and any other taxes and duties in respect of materials actually consumed on public work, shall be borne by the Contractor.
- 25.3 Any changes in the taxes due to change in legislation or for any other reason shall not be payable to the contractor.

26. Check Measurements

- 26.1 The department reserves to itself the right to prescribe a scale of check measurement of work in general or specific scale for specific works or by other special orders.
- 26.2 Checking of measurement by superior officer shall supersede measurements by subordinate officer(s), and the former will become the basis of the payment.
- 26.3 Any over/excess payments detected, as a result of such check measurement or otherwise at any stage up to the date of completion of the defect liability period specified in this contract, shall be recoverable from the Contractor, as per clause 24 above.

27. Termination by Engineer in charge

- 27.1 If the Contractor fails to carry out any obligation under the Contract, the Engineer in Charge may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.
- 27.2 The Engineer in Charge, shall be entitled to terminate the Contract if the Contractor
 - a) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract;
 - b) the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
 - c) without reasonable excuse falls to comply with the notice to correct a particular defect within a reasonable period of time;
 - d) the Contractor does not maintain a valid instrument of financial security as prescribed;

- e) the Contractor has delayed the completion of the Works by such duration for which the maximum amount of liquidated damages is recoverable;
- f) If the Contractor fails to deploy machinery and equipment or personnel or set up a field laboratory as specified in the Contract Data;
- g) If the contractor, in the judgment of the Engineer in charge has engaged in corrupt or fraudulent practices in competing for or in executing the contract;
- h) Any other fundamental breaches as specified in the Contract Data.

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

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

28. Payment upon Termination

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

28.2 Payment on termination under clause 27.4 above -

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

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

29. Performance Security

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

30. Security Deposit-

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

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

30.3 The Security Deposit shall be refunded on completion of Defect Liability Period plus 3(three) Months.

31. Price Adjustment (Not Applicable for this project)

31.1 Applicability

1. ~~Price adjustment shall be applicable only if provided for in the Contract Data.~~
2. ~~The price adjustment clause shall apply only for the works executed from the date of signing of the agreement until the end of the initial intended completion date or extensions granted for reasons attributed to the Employer by the Engineer.~~
3. ~~The Contractor shall not be entitled to any benefit arising from the price adjustment clause for extension in the contract period for reasons attributed to the Contractor.~~
4. ~~In the Force Majeure event the price escalation clause shall apply.~~

31.2 Procedure

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

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

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

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

32. Mobilization and Construction Machinery Advance (Not Applicable to this contract)

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

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

~~32.3 The rate of interest chargeable shall be as per Contract Data.~~

~~32.4 The construction machinery advance, if applicable, shall be limited to 80% of the cost of construction machinery and admissible only for new construction machinery.~~

~~32.5 The advance payment shall be recovered as stated in the Contract Data by deducting proportionate amounts from payment otherwise due to the Contractor. No account shall~~

~~be taken of the advance payment or its recovery in assessing valuations of work done, variations, price adjustments, compensation events, or liquidated damages.~~

33. Secured Advance (Not Applicable to this contract)

~~33.1 Payment of Secured Advance shall be applicable if provided in the Contract Data.~~

~~33.2 If applicable, the Engineer shall make advance payment against materials intended for but not yet incorporated in the Works and against provision by the contractor of an unconditional Bank Guarantee in a form and by a nationalized/ scheduled bank, in the name as stated in the Contract Data, in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been adjusted, but the amount of the guarantee shall be progressively reduced by the amounts adjusted by the contractor.~~

~~33.3 The amount of secured advance and conditions to be fulfilled shall be as stipulated in the Contract Data.~~

~~33.4 The Secured Advance paid shall be recovered as stated in the Contract Data.~~

34. Payment Certificates

The payment to the contractor will be as follows for construction work:

- (a) The Contractor shall submit to the Engineer monthly statements of the value of the work executed less the cumulative amount certified previously, supported with detailed measurement of the items of work executed.
- (b) The Engineer shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- (c) The value of work executed shall be determined, based on the measurements approved by the Engineer/ Engineer-in-charge.
- (d) The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed:
- (e) The value of work executed shall also include the valuation of Variations and Compensation Events.
- (f) All payments shall be adjusted for deductions for advance payment, security deposit, other recoveries in terms of contract and taxes at source as applicable under the law.
- (g) The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- (h) Payment of intermediate certificate shall be regarded as payments by way of advance, against the final payment and not as payments for work actually done and completed.
- (i) Intermediate payment shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or be considered as an admission of the due performance of the contractor any part thereof, in any respect or the occurring of any claim.
- (j) The payment of final bill shall be governed by the provisions of clause 36 of GCC.

E. Finishing the Contract

35. Completion Certificate

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

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

36. Final Account

36.1 The Contractor shall supply the Engineer with a detailed account of the total amount that the Contractor considers payable for works under the Contract within 21 days of issue of certificate of physical completion of works. The Engineer shall issue a Defects Liability Certificate and certify any payment that is due to the Contractor within 45 days of receiving the Contractor's account if it is correct and complete. If the account is not correct

or complete, the Engineer shall issue within 45 days a schedule that states the scope of the corrections or additions that are necessary. If the Account is still unsatisfactory after it has been resubmitted, the matter shall be referred to the Competent Authority as defined in the Contract Data, who shall decide on the amount payable to the Contractor after hearing the Contractor and the Engineer in Charge.

- 36.2 In case the account is not received within 21 days of issue of Certificate of Completion as provided in clause 32.1 above, the Engineer shall proceed to finalize the account and issue a payment certificate within 28 days.

F. Other Conditions of Contract

37. Currencies

All payments will be made in Indian Rupees.

38. Labour

- 38.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- 38.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

39. Compliance with Labor Regulations

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

40. Audit and Technical Examination

Government shall have the right to cause an audit and technical examination of the works and the final bill of the contract including all supporting vouchers abstract etc to be made after payment of the final bill and if as a result of such audit and technical examination any sun is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed by him to have been done under the contract and found

not to; have been executed, the Contractor shall be liable to refund the amount of overpayment and it shall be lawful for Government to recover the same from him in the manner prescribed in clause 24 above and if it is found that the Contractor was paid less than what was due to him, under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Government to the Contractor.

41. Death or Permanent Invalidity of Contractor

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

42. Jurisdiction

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

[End of GCC]

Contract Data

<i>Clause reference</i>	<i>Particulars</i>	<i>Data</i>
1.14	Employer	Executive Director on behalf of USCL, Ujjain
1.15	Engineer	Engineer Nominated by USCL
1.16	Engineer in Charge	Superintending Engineer
1.12	Stipulated period of completion	18 months (including Rainy season)
3	Language & Law of Contract	Indian Contract Act 1872
4	Address & contact details of the Contractor	As per Annexure H
	Address & contact details of the Employer/ Engineer- phone, Fax, email.	Executive Director, USCL
5	Subcontracting permitted for the Contract Value	Up to 25% by approval of employer
6	Technical Personnel to be provided the contractor— requirement, &	As per Annexure - I (Format I-3)
	Penalty, if required Technical Personnel not employed (for full time staff) . In case the part time Personnel are not deployed as per requirements the payments shall be deducted on pro Rata basis.	As defined Annexure-I
10	Specifications	As per Annexure E
	Drawings / Location	As per Annexure N
12	Competent Authority for deciding dispute under Dispute Resolution System	Chief Executive officer USCL
	Appellate Authority for deciding dispute under Dispute Resolution System	Executive Director, USCL
13	Period for submission of updated construction program	Initial Work Plan shall be submitted within Seven days of Contract signing and then shall be updated. (a) Every Three Months Or (b) At end of every Milestone, Whichever is less
	Amount to be withheld for hot submitting construction program in prescribed period	As per rule (The contractor shall submit the planned as well as executed work in file compatible with Microsoft Project)
13.1	Additional supports for ensuring	As per Annexure – W

	proper Monitoring	
14	Competent Authority for granting Time Extension.	Superintending Engineer / Chief Executive Officer USCL
15	Milestones laid down for the contract	YES
	If Yes, details of Milestones	As per Annexure - O
	Liquidated damage	As per Annexure - P
17	List of equipment for lab	As per Annexure - Q
	Time to establish lab	30 days from the signing of Agreement.
	Penalty for not establishing field Laboratory	Not applicable
18	Defect Liability Period	36 months (3 years) after physical completion of work. Note – in accordance with clause 18.3 (GCC), the Engineer in charge shall intimate the contractor about the cost assessed, for making good the defects, action for correction of defects shall be taken by the Engineer in Charge as below: a) Deploy departmental labour and material or b) Engage a contractor by issuing a work order at contract rate/SOR rate or c) Sanction supplementary work in a existing agreement to a contractor of similar other work or d) Invite open tender or e) Combination of above
21	Competent Authority for determining the rate	Superintending Engineer, USCL
27	Any other condition for breach of contract	Yes, as below: If the contractor fails to achieve 50 % financial progress in any milestone and/or fails to achieve 75% financial progress in two consecutive milestone
28	Penalty	Penalty Shall include (a) Security deposit as per clause 30 of General Conditions of Contract and (b) Liquidated Damages imposed as per clause 15
29	Performance guarantee (Security) shall be valid up to	Till issue of physical Completion Certificate as per Clause 35.1 plus Defect Liability Period plus 3 months.
	Additional Performance guarantee (Security)	The Additional Performance guarantee shall be refunded on completion plus 3 Months.
30	Security Deposit to be deducted from each running bill	At the rate of 7%. of Gross amount of running bill

	Maximum limit of deduction of Security Deposit	Up to 7% of Final Contract Amount.
	30.3 Security deposit refund	50% of the security deposit (accumulated Retention Money) shall be released upon the successful completion of the project and the issuance of the Completion Certificate by USCL. The remaining 50% shall be released upon the successful completion of the Defect Liability Period and the issuance of the Final Acceptance Certificate.
31	Price Adjustment formula and procedure to calculate	Not Applicable.
31.1 (1)	Price adjustment shall be applicable	NO
32	32:1 Mobilization and Construction Machinery Advance Applicable	No Mobilization and Construction Machinery Advance shall be payable.
	32.2 If yes, Unconditional Bank Guarantee	Not Applicable
	32.3 If yes, Rate of interest chargeable on advances	Not applicable
	32.4 If yes, Type & Amount of Advance payment that can be paid	Not Applicable
	32.5 If yes, Recovery of advance payment	Not Applicable.
33	33.1 secured Advance Applicable	No Secured Advance payable.
	33.2 if yes, Unconditional Bank Guarantee	Not Applicable
	33.2 if yes, Amount of Secured Advance:	Not Applicable
	33.3 if yes, Conditions for secured advance.	Not Applicable
	33.4 if yes, Recovery of Secured advance	Not Applicable
34	Payment Certificates	As per Annexure - 002 (Attached at end of Contract Data)
35	Completion certificate - after physical completion of the Work	As per Annexure - U
	Final Completion Certificate — after final payment on completion of the Work	As per Annexure-V
	35.2 Final Payment	The final payment, including the release of the remaining Retention Money, shall be made only after the satisfactory conclusion of the DLP and the issuance of the Final Acceptance Certificate.

36	Competent Authority for deciding unsatisfactory Final Accounts	Executive Director, USCL
37	Salient features of some of the major labour laws that are applicable	As per Annexure – W

Annexure – 002 (Ref Clause 34: Payment Certificates)

PAYMENT SCHEDULE & SERVICE LEVEL AGREEMENT

PART A: PAYMENT SCHEDULE

A1. General Provisions

1. Payments to the Contractor shall be governed by this Annexure, read together with the Preamble to Bill of Quantities (BoQ), Scope of Work, Technical Specifications, and Conditions of Contract (GCC/SCC).
2. All payments shall be subject to certification by the Engineer-in-Charge / Authority / PDMC, as applicable.
3. Payments shall not be deemed as acceptance of defective work or waiver of the Authority's rights.
4. All rates and payments are exclusive of GST, which shall be paid separately as applicable.

A2. Payment for SOR-Based Items (Execution Phase)

1. Items covered under the MP UADD Schedule of Rates (SOR) 2025 shall be paid based on:
 - Actual measurements of work executed; and
 - The single quoted percentage rate (Above / Below / At Par) the applicable SOR.
2. Measurement shall be carried out strictly in accordance with:
 - Measurement provisions of MP UADD SOR 2025; and
 - Relevant BIS / IS Codes, unless otherwise specified.
3. Payments shall be released through Running Account (RA) Bills.
4. Variations in quantities shall be paid at the same quoted percentage rate, without any entitlement to rate revision.

A3. Payment for Non-SOR / NSR Items (Execution Phase)

1. Non-SOR / NSR items shall be paid on a lump sum, milestone-based payment system.
2. Milestones shall be linked to clearly identifiable deliverables such as approvals, fabrication, supply, installation, testing, commissioning, and final acceptance.
3. No item-wise measurement shall be required for NSR items.
4. Lump sum rates shall be deemed to include all costs, including surveys, investigations, design, drawings, IIT/NIT vetting, wind tunnel testing (where applicable), miniature

models, mock-ups, third-party inspections, approvals, testing, commissioning, and handover.

A4. Sample Milestone Structure for NSR Items (Indicative)

A4.1 Monumental Sculptures / Thematic Installations

Milestone	Description	% of Item Value
M1	Concept, theme & first-stage miniature model approval	10%
M2	Second-stage miniature model, materials & finish approval	10%
M3	Structural design, wind tunnel study (wherever required) & IIT/NIT vetting approval	15%
M4	Completion of off-site fabrication / casting	25%
M5	Erection of internal skeleton at site	15%
M6	Cladding, finishing & integrated lighting	15%
M7	Testing, commissioning & final acceptance	10%
Total		100%

A4.2 AV / Digital / Projection Mapping Systems/MEP items

Milestone	Description	%
A1	Concept, storyboards & content framework approval	10%
A2	Detailed design & equipment list approval	15%
A3	Factory Acceptance Test (FAT)	20%
A4	Supply & installation at site	25%
A5	Integration, testing & trial runs	20%
A6	Final commissioning & training	10%

A5. Payment for Operation, Management & Maintenance (O&M)

1. The Contractor shall provide Operation, Management and Maintenance (O&M) services for five (5) years from the date of commissioning/handing over.
2. The Bidder shall quote year-wise lump sum rates for O&M services in the Financial Bid.
3. O&M payments shall be made on a quarterly basis, subject to compliance with SLAs defined in Part B of this Annexure.
4. Quarterly O&M payments shall be released only after certification of SLA performance by the Engineer-in-Charge / Authority.

PART B: SERVICE LEVEL AGREEMENT (SLA) – O&M PHASE

B1. General Conditions

1. SLA performance shall be evaluated quarterly.
2. Penalties shall be deducted from the quarterly O&M payment.
3. SLA compliance shall be mandatory throughout the O&M period.

B2. Quarterly SLA Matrix

Sl. No.	KPI Category	Performance Requirement	Minimum Standard	Measurement	Penalty
1	Overall Facility Availability	Buildings, utilities & public areas operational	≥ 98% uptime	Logs & inspections	1% of quarterly payment per 1% shortfall (max 5%)
2	Electrical & Lighting Systems	Internal, façade & landscape lighting	≥ 98% uptime	Maintenance records	0.5% per incident (max 3%)
3	ICT & AV Systems	CCTV, PA, Wi-Fi, AV, projection systems	≥ 97% uptime	System logs	1% per major failure (max 5%)
4	Light & Sound Show	Scheduled shows conducted	≥ 95%	Show records	1% per cancelled show
5	Cleanliness & Housekeeping	Public areas, toilets, galleries	≥ 4.5/5 rating	Joint inspection	0.5% per observation
6	Landscape Maintenance	Plant survival	≥ 90%	Quarterly audit	Replacement cost + 1% penalty
7	Heritage Asset Protection	Damage, seepage or defacement	Zero tolerance	Visual inspection	5% + rectification cost
8	Safety & Security	CCTV, guards, lighting	100% compliance	Safety audit	2% per serious lapse
9	Response Time	Breakdown complaint response	≤ 4 hrs (major), ≤ 24 hrs (minor)	Complaint register	0.5% per delay
10	Reporting	Monthly & quarterly O&M reports	100% compliance	Submission records	0.5% per delay

B3. Penalty Cap & Escalation

1. Maximum penalty in any quarter shall be limited to 10% of the quarterly O&M payment.
2. If penalties exceed 10% in two consecutive quarters or in three quarters during a year, the Authority may invoke escalation measures including warning, additional performance security, or termination as per Contract.

PART C: TAXES, DEDUCTIONS AND FINAL PAYMENT

C1. Taxes and GST

- (i) All payments under this Contract shall be exclusive of GST.
- (ii) GST shall be paid separately by the Authority at applicable rates, subject to statutory compliance and submission of valid tax invoices.

C2. Retention, Security & Deductions

- (i) Retention money, performance security, liquidated damages, penalties, and other recoveries shall be governed by the relevant provisions of the Conditions of Contract.
- (ii) The Authority reserves the right to deduct any dues, penalties, or recoveries from any payment due to the Contractor.

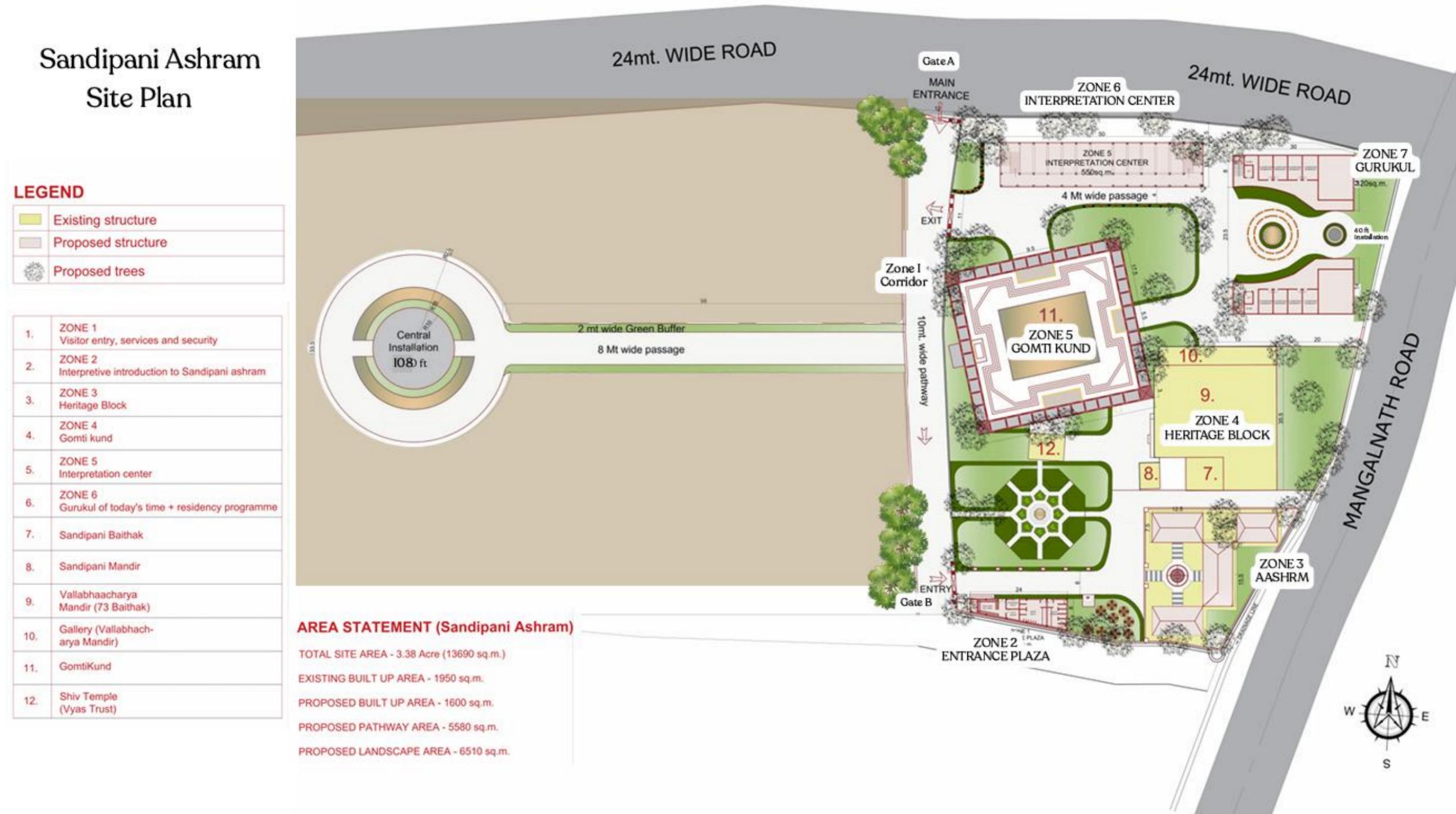
C3. Final Payment

Final payment shall be released only after:

- Completion of all works,
- Rectification of defects,
- Submission of as-built drawings, O&M manuals, and certificates, and
- Issuance of Completion Certificate by the Authority, subject to other contractual provisions.

Drawings

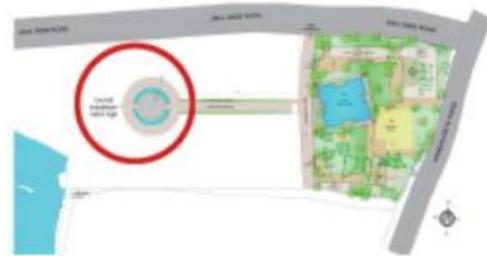
Concept Level Master Plan of the Project



Viras Swarup Sculpture - 108'

कृष्ण स्वरूप

- Standing as the spiritual heart of the ashram, this grand sculpture of Virat Swaroop Lord Krishna embodies the infinite cosmic form described in the Bhagavad Gita.
- **Viewed from the pathway outside** visitors experience a moment of awe and reflection, witnessing the boundless essence of the Supreme.



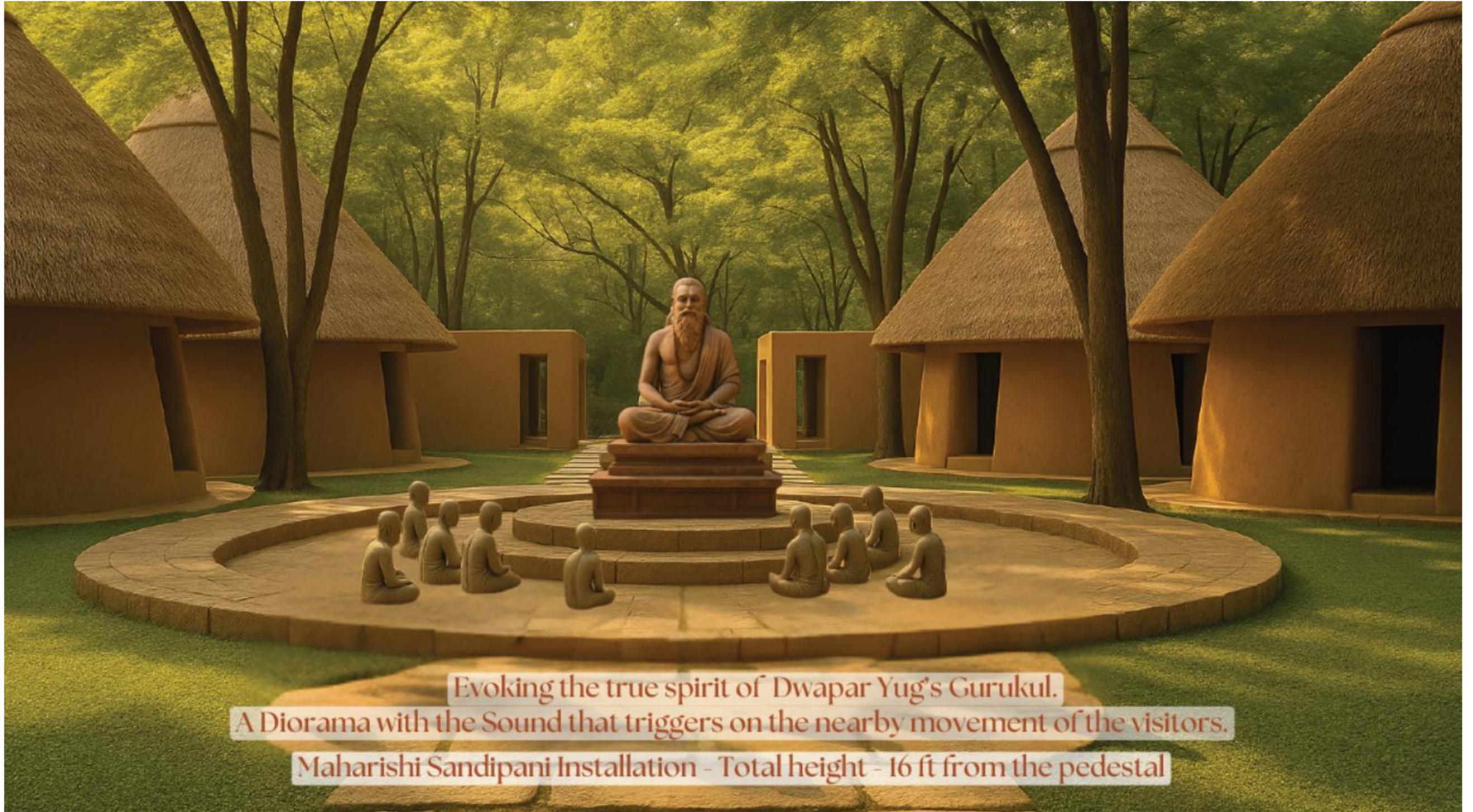
Main Entrance Gate



Main Entrance Gate

The entrance gate blends ancient Indian architecture with Dwarapala guardians, Ganga-Yamuna pillars, a lenticular doorway, and a protective Kirtimukha, creating a sacred, symbolic passage into the spiritual realm of Sandipani Ashram.

Maharishi Sandipani Gurukul



Evoking the true spirit of Dwapar Yug's Gurukul.
A Diorama with the Sound that triggers on the nearby movement of the visitors.
Maharishi Sandipani Installation - Total height - 16 ft from the pedestal

Drawings to be Prepared and Submitted by Contractor:

Below is the indicative list of drawings and related design documents to be submitted by the Contractor for approval of USCL. The Contractor shall prepare, submit, and obtain approval for the following drawings during various stages of the project. All drawings shall be submitted in **PDF + Editable (DWG/Revit)** formats.

A. Survey & Investigation Stage Drawings

1. Topographical Survey Plan (1:500)
2. Utility Mapping Plan (water, sewer, electrical)
3. Tree Survey & Landscape Inventory Map
4. Soil Investigation Drawings (Borehole logs, test results)
5. Contour & Terrain Analysis

B. Master Planning Stage Drawings

6. Master Plan Layout (1:500/1:1000)
7. Zoning Plan – Experience Areas
8. Circulation Plan – Pedestrian & Service Movement
9. Visitor Flow & Crowd Management Diagram
10. Urban Design Plan – Landscaping & Public Realm

C. Architectural GFC Drawings

11. Site Layout Plan (Building footprints, utilities)
12. Detailed Floor Plans – All Buildings
13. Elevations & Sections
14. Roof Plans
15. Door & Window Schedules
16. Interior Layouts (Galleries, Dormitories, Amenities)
17. Finishing Schedules (Flooring, Wall finishes, Paints)
18. Staircase & Ramp Details
19. Toilet & Amenity Block Details
20. Heritage-sensitive Construction Details

D. Structural GFC Drawings

21. General Notes & Design Basis Report
22. Foundation Layouts (including black cotton soil mitigation)
23. RCC Framing Plans – All Levels
24. Structural Details (Beams, Columns, Slabs)
25. Retaining Wall & Ghat Structural Details
26. Bridge Structural Drawings
27. Load Calculations & Reinforcement Schedules

E. MEP Drawings

28. Electrical Lighting Layouts (Indoor & Outdoor)
29. Power Layouts & DB Schedules
30. Earthing & Lightning Protection Drawings
31. Cable Routing & Trenching Drawings
32. Plumbing & Drainage Layouts
33. Water Supply & Storage Layouts
34. STP (MBBR) Process & Piping Diagrams
35. Fire Fighting Layouts
36. HVAC Layouts (VRV/VRF)

F. ICT, Security & AV Drawings

37. CCTV Layout & Camera Coverage Plan
38. PA System Drawings

- 39. Wi-Fi Access Point Layout
- 40. Server Room Rack Layout
- 41. Light & Sound Show Layout – Gomti Kund
- 42. Projection & AV Equipment Layouts
- 43. AR/VR Studio + Experience Room Drawings

G. Landscape Drawings

- 44. Softscape Plan (Plant species, densities, pits)
- 45. Hardscape Plan (Paths, plazas, stonework)
- 46. Irrigation/Drip Network Plan
- 47. Garden Structures (Pergolas, benches, signage)
- 48. Illumination Plan for Landscape

H. Monumental Installations & Corridor Artwork

- 49. Sculpture & Installation Structural Drawings
- 50. Corridor Artwork Elevations
- 51. Ghat Development Drawings
- 52. Portal Gate (120 ft) Drawings
- 53. Thematic Elements (20 ft Installations)

I. Construction Management Drawings

- 54. Site Logistics Plan
- 55. Safety & Barricading Plan
- 56. Phasing & Work Zone Plans

J. As-Built Drawings and O&M Manuals

- 57. As-built for all built components
- 58. O&M Manuals for all equipments

ANNEXURE—O
(See clause 15 of Section 3 -GCC)

Details of Milestones

Milestones to be followed are as under:

The time allowed for carrying out the work shall be strictly observed by the contractor and shall be deemed to be essence of the contract

The work shall throughout the stipulated period of contract be proceeded with all due diligence keeping in view that time is the essence of the contract. The contractor shall be bound in all cases to complete the following financial target:

- i. **Milestone 1:** 1/8th of the whole work before 1/4th of the whole time has elapsed
- ii. **Milestone 2:** 3/8th of the whole work before half of the whole time has elapsed
- iii. **Milestone 3:** 3/4th of the whole work before 3/4th of the whole time has elapsed
- iv. **Milestone 4:** Complete work within Stipulated time

Note: *The commencement date of the project shall be considered from the date of actual Signing date of Contract Agreement.*

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

Compensation for Delay

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

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

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

Annexure - Q
(See clause 17 of Section 3 GCC)

List of Equipment for Quality Control Lab

Suggestive list of equipment required in the field laboratory to be set up by Contractor at no additional cost to Authority.

S.No.	Equipment	Min. Nos. Required.
For Building Construction Projects		
1.	IS sieves with lid/pan: Size in mm: 100, 90, 80, 63, 53, 45, 37.5, 26.5, 19,13.2,11.2,9.5,4.75,2.8,5.6,3.35,2.36, 600 , 500, 425,355, 250, 212, 180, 150, 90, 75, 63,53,45,and 38 micron,	1 set
2.	Cube moulds 70 mm for mortar	6
3.	Cube moulds for CC 150 mm	6
4.	Compression testing machine 200t	1
5.	Electronic/digital balance 1 kg with least count of 0.01g	1
6.	Electronic / digital balance 5 kg	1
7.	Pan balance with weight box 5 kg.	1
8.	Enameled tray	6
9.	Oven (300oC) thermostatically controlled, sensitivity 1oC	1
10.	Slump cone	1
11.	First Aid Box	1
12.	Vicat Apparatus	1
13.	Room cooling equipment for temperature control	1 or 2
14.	Atterberg Limit Apparatus	1
For Road Construction Projects:		
1.	Additional -IS sieves with lid/pan: Size in mm: 125, 106, 75, 50, 40, 31.5, 25, 22.4, 20, 16, 12.5, 10, 8.6, 8, 6.7, 6.3, 4.75,2.8,5.6, 125, and 38 micron,	1set
2.	Balance 20 kg with 1 gm accuracy	1
3.	Proving ring 10kg, 50kg,100kg capacity	1 each
4.	Dial Gauge 25 mm, 50 mm travel (sensitivity 0.01 mm /division)	6 each
5.	Water bath (Electrically operated and thermostatically controlled) , water still (capacity 4 lit/hour)	1 each
6.	Thermometers: -Metallic type (Mercury in steel) with 300mm stem for near and distant readings. Glass type (mercury in glass) range of 110oC to 250oC	4 4
7.	Glassware: Flasks, beakers, Graduated cylinders, spatulas, wire gauges, scoops, steel scales, measuring tapes (30m, 15m, 5m), filter paper, glass marking pencils, heat resistant hand gloves, vernier calipers etc. Table lamp	
8.	Camber boards 3 m long	3
9.	Straight Edge 3 m long	1
10.	Thickness gauge	1
11.	Precision Level and staff, total station/theodolite	1 set each
12.	Rapid moisture meter.	1 set
13.	Liquid limit device	1
14.	Post hole auger (100 mm dia)	1
15.	Sampling Pipette 10 ml.	1
16.	B.S. Compaction apparatus	1
17.	Sand replacement equipment.	1
18.	Lab CBR equipment	1
19.	Core 100 mm cutter.	1
20.	Flakiness and Elongation gauges	1

S.No.	Equipment	Min. Nos. Required.
21.	Aggregate Impact value apparatus.	1
22.	Digging tools pickaxe, pan, axe, shovels,	LS
30.	Sieve shaker	1
31.	Steel tapes 50 m	1
32.	Steel tapes 5m	2
34.	Computer, printer , modem and internet	1 set.
35.	Others if required:	

- The contractor shall arrange to provide fully furnished and adequately equipped field laboratory with adequate qualified technical staff. Preferably located adjacent to the Project Office and provided amenities like water supply, electric supply etc.
- The laboratory equipment shall confirm I.S. specifications and MOST/MORTH/Applicable specifications. The Contractor shall carry out the calibration of the instruments as directed by the Engineer in- Charge on expiry date of calibration. On completion of work in all respect, the equipment will be the sole property of the contractor.
- It shall be considered as incidental to the work, and no extra payment will be made, what so ever, will not be made for the same.

ANNEXURE - R
(See clause 31 of Section 3 -GCC)

Price Adjustment
(Not Applicable)

The formulas for adjustment of price are as follow:

R = Value of work as defined in Clause 31.2(3) of General Conditions of Contract

Weightages* of component in the work

S.No.	Component	Percentage of Component in the work
1.	Cement - P _c	
2.	Steel - P _s	
3.	Bitumen - P _b	
4.	POL - P _f	

* Weightages of various components of the work shall be determined by the competent Technical authority.

Adjustment for cement component

(ii) Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:

$$V_c = 0.85 \times P_c / 100 \times R \times (C_1 - C_0) / C_0$$

V_c = increase or decrease in the cost of work during the month under Consideration due to changes in the rates for cement.

C₀ = The all India wholesale price index for Grey cement on the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi (www.eaindustry.nic.in)

C₁ = The all India average wholesale price Index for grey cement for the month under consideration as published by Ministry Government of India, New Delhi. (www.eaindustry.nic.in)

P_c = Percentage of cement component of the work

Note: For the application of this clause, index of Grey Cement has been chosen to represent Cement group.

Adjustment of steel component

(iii) Price adjustment for increase or decrease in the cost of steel procured by the Contractor shall be paid in accordance with the following formula:

$$V_s = 0.85 \times P_s \times R \times (S_1 - S_0) / S_0$$

V_s = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel.

S₀ = The all India wholesale price index for steel (Bars and Rods) on the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi (www.eaindustry.nic.in)

S₁ = the all India average wholesale price index for steel (Bars and Rods) for the month under consideration as published by Ministry of Industrial Development, New Delhi (www.eaindustry.nic.in)

P_s = Percentage of steel component of the Work.

Note : For the application of this clause, index of Bars and Rods has been chosen to represent steel group.

Adjustment bitumen component

(iv) Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$$V_b = \frac{0.85 \times P_b}{100} \times R_x (B_i - B_0) / B_0$$

V_b = Increase or decrease in the cost of work during the month under consideration due to changes in rates for bitumen.

B_0 = The official retail price of bitumen of the IOC at nearest center on the date of opening of Bids.

B_i = The official retail price of bitumen of the IOC at nearest center for the 15th day of the month under consideration.

P_b = Percentage of bitumen component of the work.

Adjustment of POL (fuel and lubricants) component

(V) Price adjustment for increase or decrease in cost of POL (fuel and lubricant) shall be paid in accordance with the following formula:

$$V_f = \frac{0.85 \times P_f}{100} \times R_x (F_i - F_0) / F_0$$

V_f = Increase or decrease in the cost of work during the month under consideration due to changes in rates for fuel and lubricant.

F_0 = the official retail price of High speed Diesel (HSD) at the existing consumer pumps of IOC at nearest center on the date of opening of Bids.

F_i = The official retail price of HSD at the existing consumer pumps of IOC at nearest center for the 15th day of month of the under consideration.

P_f = Percentage of fuel and lubricants component of the work.

Note: For the application of this clause, the price of High Speed Diesel has been chosen to represent fuel and lubricants group.

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

Bank Guarantee Form for Mobilization and Construction Machinery Advance
Not applicable for this Contract

To

_____ [name of Employer]
_____ [address of Employer]
_____ [name of Contractor]

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

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

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

This guarantee shall remain valid and in full effect from the date of the advance payment under the contract until _____ [name of Employer] receives full repayment of the same amount from the Contractor.

Yours truly,

Signature and Seal: _____
Name of Bank/Financial Institution: _____
Address: _____

Date: _____

* _____ An amount shall be inserted by the Bank or Financial Institution representing the amount of the Advance Payment and denominated in Indian Rupees.

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

Bank Guarantee Form for Secured Advance
(Not Applicable for this Contract)

~~INDENTURE FOR SECURED ADVANCES~~

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

~~Whereas by an agreement dated _____ (hereinafter called the said agreement) the contractor has agreed:~~

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

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

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

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

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

~~(2) — That the materials details in the said Account of Secured Advances which have been offered to and accepted by the Employer as security are absolutely the Contractor's own property and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance, on the security Of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnified the Employer against all claims to any materials in respect of which an advance has been made to him as aforesaid.~~

~~(3) — That the materials detailed in the said account of Secured Advances and all other materials on the security of which any further advance or advances may here after be made as aforesaid (hereafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Engineer.~~

~~(4) — That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Engineer or any officer authorized by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater~~

degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same required by the Engineer.

(5) — That the said materials shall not be removed from the site of the said works except with the written permission of the Engineer or an officer authorized by him on that behalf.

(6) — That the advances shall be repayable in full when or before the Contractor receives payment from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the Employer will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials than actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.

(7) — That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing of the Employer shall immediately on the happening of such default were payable by the Contractor to be the Employer together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances to the date of payment and with all costs, charges, damages and expenses incurred by the Employer for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the Employer to pay and pay the same respectively to him accordingly.

(8) — That the Contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rs. _____ and any further sum of sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS that the Contractor hereby covenants and declared that notwithstanding anything in the said agreement and with a prejudice to the power contained therein if and whenever the covenant for payment of the repayment here in before contained shall become enforceable and the money owing shall not be paid in accordance there with the Employer may at any time thereafter adopt all or any of the following courses as he may deem best:

(a) — Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provision in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and the amount due to the contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor, he is to pay same to the Employer on demand.

(b) — Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or repayable to the Employer under these presents and pay over the surplus (if any) to the Contractor.

(c) — Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.

(9) — That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.

(10) — That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail. In the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been here in before expressly provided for shall be referred to the Employer whose decision shall be final and the provisions of the Arbitration Act for the time being in force shall apply to any such reference.

Annexure - U
(See clause 35 of Section 3 -GCC)

Physical Completion Certificate

Name of Work:

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

Agreement NoDate

Amount of Contract Rs

Name of Agency

UsedMB No.

Last measurement recorded

a. Page No. &MB No. _____

b. Date _____

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

Date of issue

Executive Engineer/Engineer-in-charge

.....
.....

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

Final Completion Certificate

Name of Work:

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

Agreement noDate

Name of Agency:

Used MB No.

Last measurement recorded

a: Page No. & MB No. _____

b. Date _____

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

Agreed amount Rs

Final Amount paid to contractor Rs.

Incumbency of officers for the work

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

Date of issue

Executive Engineer

.....
.....

Annexure - W
(See clause 39 of Section 3 -GCC)

Salient Features of Some Major Labour Laws Applicable

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

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

SECTION 4

CONDITIONS OF CONTRACT [Part II: Special Conditions of Contract (SCC)]

1. All works shall be carried out in strict accordance to the norms, procedure and specifications issued and enforced by BIS in Relevant Indian Standard specifications and code of Practices with up-to-date amendments and revisions, latest edition of National building code and National electric code. In addition, the installation shall comply in all respects with the requirements of Indian Electricity Act 1910 and Indian Electricity Rule 1956 with up-to-date amendments and revisions and special requirements if any of the M.P. State Electricity Board or Chief Electrical Advisor to Government of Madhya Pradesh cum Chief Electrical Inspector and his subordinate office.
2. The contractor shall make his own arrangements for supply of water and electricity at his expense required for execution of work. The USCL shall neither make any such arrangements nor shall make any payments in this regard.
3. The contractor has to construct at his own cost his site office and store at site on a suitable place and location as permitted by USCL. The USCL shall not provide any place or room in the building under construction for storage of equipment's required for work. No amount shall be paid to the contractor in this regard. The site office shall have also an arrangement of one room for office of Employers representatives. No additional cost shall be paid for same.
4. Proper upkeep and maintenance and safety of store and stocks of materials brought at site shall be the sole responsibility of the contractor. The materials got damaged due to negligence of its up keeping at site or due to mishandling shall have to be replaced by the contractor at his own cost. On discovery of such damages the USCL shall recover the amount paid through the running bills to the contractor and shall only be reimbursed after the replacement of the same. The USCL shall also not be responsible for theft of materials from site and the contractor has to replace all such materials at his own cost. No compensation whatsoever shall be payable to the contractor on above grounds.
5. Time being the essence of the contract, the contractor shall before drawl of agreement prepares a detail time bound work execution program which shall be approved by Engineer in charge. The contractor has to execute the work in strict accordance to the time bound execution program (The contractor shall submit the planned as well as executed work in file compatible with Microsoft Project) submitted by him, mutually agreed, approved.
6. Time schedule can be revised by the USCL for any unforeseen unavoidable reasons whatsoever. It may be necessary to stop the work at certain place due to some unavoidable reasons and restart the work at later date. Such contingencies shall not vitiate the contract and shall not be considered a ground for extra claim for any reason whatsoever. However time extension shall be allowed only for such days for which the work was stopped by USCL.
7. The contractor shall not be entitled to any compensation for any loss suffered by him on account of delay in commencement or execution for work whatever the cause of delay may be including delay arising out of other materials, supply of materials, transportation for any matter related with MPPKVV Co. Ltd. &Electrical Safety Department or any other reasons whatsoever, the USCL shall not be liable for any claim in respect thereof.
8. Rate quoted shall be applicable for works at all height unless otherwise specified in the schedule of quantities.
9. The contractor shall submit test reports of the equipment's to be supplied and drawings for approval of the Engineer in charge before supplying/Installation the equipment. The successful tenderer shall also submit the purchase bill of all items as required and directed at no cost.
10. The contractor shall have to arrange all free of cost facilities for the inspection, such as employ or material labor etc. and any fees payable to Government or any competent authority at his own cost.
11. The consultant / Contract employees appointed by USCL are authorized for following:

- a) To visit the site from time to time to inspect the quality of work.
 - b) To check / issue working drawings with specifications to the contractor.
 - c) Technically guide the contractor if required.
 - d) To accompany USCL officials for factory inspections of material if required.
12. The contractor shall be responsible for removal of all defects and shall make rectification in the work at his own cost if any at the time of handing over without any claim for compensation.
13. The contractor has to quote his rates for items in strict accordance to the list of approved make of materials. The tenderer has to ensure before filling up the rates regarding their availability and period of delivery.
14. The contractor shall note that during the execution of works there is likelihood in charge of site/ specification and change in quantities of items entered in the schedule of items for which the contractor has tendered his rates. The increase or decrease in the quantities of such items may be up to any extent and the tenderer shall not be entitled to any compensation for any loss suffered by him on account or procurement of additional quantities of such items due to such changes.
15. Time schedule may be revised by the USCL from time to time keeping in view of the approval of concepts / drawings or items or for any reasons whatsoever. It may be necessary to stop the work at certain places due to some unavoidable reasons and restart the work at later date. Such contingencies shall not vitiate the contract and shall not be considered a ground for extra claim.
16. The contractor shall not be entitled to many compensations for any loss suffered by him on account of delay in commencement or execution of work whatever the cause of delay may be including delay arising out of other materials or any reasons whatever and the USCL shall not be liable for any claim in respect thereof.
17. The Contractor shall:
- a. comply with all applicable safety regulations,
 - b. take care for the safety of all persons entitled to be on the Site,
 - c. use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to the persons. provide fencing, lighting, guarding and watching of the Works until completion.
18. Provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and workers.
19. The Contractor has to ensure that the works included in this contract are done in strict accordance with all approved concepts and specifications and in accordance with manufacturer's instructions for application.
20. The site shall have to be sprinkled with water so that dust settles down. Dust control sprinkling shall have to be done several times a day during hot, dry weather depending on the site requirement.
21. Contractor shall ensure safe workplace and shall install safety signs.
22. The excavation is to be done carefully to avoid damage to underground cables and other service lines.
23. Appointment of Agency will be done on lowest rate quoted in tender, Quantity and place of work shall be decided by the authority and shall be binding to Successful bidder.
24. Order of precedence
- In a situation of contractual disputes or ambiguities the priority of documents is set out as
- a. the Contract Agreement (if any).
 - b. any Addenda / Corrigendum
 - c. the Letter of Acceptance. (if any).
 - d. the Letter of Tender. (if any).
 - e. the Particular Conditions.
 - f. General Conditions,
 - g. Site Works Instructions

- h. the Specification.
 - i. the Drawings, and
 - j. the Schedules and any other documents forming part of the Contract.
25. Extra items

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

-Not Applicable

26. COVID-19 Health and Safety Protocols

General Obligations of the Contractor:

- To take all necessary precautions to maintain the health and safety of the Contractor's Personnel.
- To ensure, in collaboration with local health authorities, access to medical help, first aid and ambulance services are available for workers/labors, as and when needed.
- Provide health and safety training/orientation on COVID19 to all workers and staff and other employees of the sub-contractor (tips on cough etiquette, hand hygiene and social distancing).
- Prepare a detailed profile of the project work force, key work activities, schedule for carrying out such activities, different durations of contract and rotations, confirmed addresses of the labor and any underlying health conditions that increases the risk of severe infection, to facilitate tracking of workers in case of COVID-19 exposure.
- All laborers to be provided with photo ID cards for accessing the construction site.
- All laborers engaged at construction site to be provided with the required Personal Protection Equipment (PPE) – safety helmet and shoes, secured harness when working at heights, electrical gloves, eye protection for welding etc., without which entry to the construction site shall not be allowed.
- In relation to COVID19, masks, adequate hand washing/ sanitization, clean drinking water and sanitation facilities to be provided at construction site.
- All workers/labor to be regularly checked for symptoms before allowing entry to the work site.
- Paid leave to be mandatorily given if labor contacts COVID-19 and/or any other contagious disease while working at the construction site or in the labor camp.

For Labour Camp:

- Contractor to provide hygienic living conditions and safe drinking water.
- Separate toilets for male and females and adequate hand washing/sanitization facilities.
- Monthly/weekly health check up to be organized at the camp for all labors/family.
- Organize awareness campaign for social distancing and general health and hygiene.

Construction Management in Upgrading of Existing Facilities:

- Maintain a roster of workers/staff at work site indicating their health condition and symptoms and ensure screening procedures (non-physical temperature measurement) at work sites.
- Depute and assign monitoring and reporting responsibilities on environmental management, health and personnel safety.
- Preventing a worker from an affected area or who has been in contact with an infected person from returning to the site for 14 days or (if that is not possible) isolating such worker for 14 days.
- Place posters and signage's at/around the site, with images and text in local languages relating to personal safety, hygiene and on COVID-19 symptoms and guidelines.
- Ensuring hand washing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places throughout site, including at entrances/exits to work areas; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; at stores; and in common spaces.
- Segregate lunch hours at worksite of workers to maintain social distancing.
- Securing the construction site with entry only for authorized personnel and disinfecting of the worksite to be undertaken at close of work every day or as may be required.

- Any medical waste produced during the care of ill workers should be collected safely in designated containers or bags and treated and disposed of following relevant requirements (e.g., Biomedical Waste Rules-2018, WHO).

27. Coordination with other Contractors

Due to the peculiar nature and location of the project, and in view of the objective of proper laying of all utility services, and adjacent works being done by other contractors the different contractors will need to work simultaneously and ensure proper mutual coordination. EMPLOYER reserves the right to require each Contractor to schedule the order of performance of their Work in such a manner as will minimize interference with work of any of the parties involved.

28. Photographic record of works

All the processes of conservation works should be well documented before , during and after execution of the works through photographs by the contractor's team and submitted to the USCL Project regularly, supported with relevant photographs. These photographed should be saved date wise as per work description

29. Add the following Additional Clause 17.5 under C. Quality Control, 17 – Tests in GCC (General Conditions of Contract)

17.5 Third Party Inspection

17.5.1 The bidder will also facilitate third party quality control and inspections on behalf of Engineer in charge as required. All the cost of third party inspection shall be born by the contractor and the contractor shall the quote accordingly.

17.5.2 The inspection and testing of the samples from a lot will be carried out by the employer and or inspecting agency approved by the employer, in the manufacture's workshop, before application of any paint. All the tests, as required as per the IS, shall be carried out on samples from each lot (number of samples from a lot shall be as per the relevant IS for sampling and testing), in presence of the inspecting agency. The materials will be dispatched only after issue of the test certificate by the inspecting agency for satisfactory performance of the tested materials. The inspection charges for such tests shall be paid by the contractor to the inspecting agency, No Reimbursement shall be made for the same and the rates quoted for this bid shall include these costs also.

17.5.3 Ten percent (10%) of the mandatory test prescribed under the specification shall be got carried out through laboratories accredited by national Accreditation Board of laboratories (NABL) By the Engineer-in-charge and the cost of such testing shall be deducted form the payments due to contractor .

17.5.4 The supplier shall give the inspection notice before or at least 10 days prior to the last date of supply of material. The material will be dispatched by the supplier after inspection by the representative of USCL. The supplier is required to dispatch the material within 10 days from the date of acceptance of material. In case the time taken in dispatch the material exceeds 10 days, the excess period shall be counted for levy of penalty. USCL's representative will visit the manufacturer's work and witness the tests as per specifications on each type of lighting fixtures as per the samples selected by USCL's representative. The sample of the material may also be sent to the government approved NABL laboratory at the cost of supplier for any kind of specific test required by USCL. Supplier shall submit the schedule with date, time & venue of the inspection to USCL in writing for the inspection of the material. USCL is authorized to get the material tested from the approved laboratory at the supplier cost for any kind of specific test if required. The contractor needs to make arrangements for Factory Inspection at his own cost for Luminaires, Brackets. INSPECTION WILL BE CARRIED OUT AT MANUFACTURER PREMISISONLY. It will not be permitted at vendor's place.

30. The contractor may have to do only manual excavation on site. The payment for same shall be as per BOQ / UADD SOR / Other SOR
31. If any heritage structure / Article etc. is encountered / found at site during Excavation, then the work must be stopped by the contractor till its solution/ Decision. No compensation shall be given to contractor for delay caused due to stopping of work except

Annexure - Y
(See Contract Data, Point No 13.1)

PROCESS PARAMETERS -			
Sr. No.	MIS Report	Frequency of Submission	Submission Date
1	Quarterly Plan	Quarterly	7 th of every quarter ad as and when required.
2	Construction Schedule for next Quarter	Quarterly	7 th of every quarter
3	Plan vs Achievement Report - Turnover (WD Status)	Weekly	
4	Daily Progress Report/Daily Labour Report / Including Gender segregated Labour report.	Daily	-
5	Material Identification/Tracker	Process	-
6	Monthly Dia-wise Steel & Cement requirement	Monthly	1 st of every month
7	Drawing Register	Process	-
8	Fortnightly Labour Report	Fortnightly	7 th / 22 nd
9	Sub-Contractor employed Details	Process	-
10	Material Stock Report	Monthly	7 th of every month
11	Hinderance Register Copy	Monthly	7 th of every month

SECTION 5

Bill of Quantities

Preamble to BOQ

1. General

The Bill of Quantities (BoQ) shall be read and interpreted **in conjunction with** the complete RFP document, including but not limited to the **Scope of Work, Technical Specifications, Concept Plans/Drawings, Design Intent Documents, Applicable BIS Codes, Referenced International Standards**, and all other instructions, conditions, and addenda issued by the Employer. Any omission in the BoQ descriptions shall not relieve the Bidder of the responsibility of executing the work in full conformity with the intent of the Contract.

2. Basis of Quoting

The Bidder shall submit the Financial Bid as follows:

- **SOR-based items:** The Bidder shall quote a **single percentage rate 'Above / Below / At Par'** the applicable Schedule of Rates.
- **Non-SOR / NSR items:** The Bidder shall quote **lump sum item-wise rates** for each Non-SOR/NSR item indicated in the BoQ.

The quoted rates shall be **firm and inclusive** of all costs, overheads, profits, tools & plants, labour, materials, equipment, testing, insurance, safety measures, site establishment, temporary works, **survey, investigations, drawings, detailed design, structural vetting, approvals, mock-ups, models, third-party inspections**, and all other obligations required for successful completion of the works, **excluding GST**, which shall be payable as applicable.

3. Applicable Schedule of Rates (SOR)

Unless otherwise specified, the **applicable Schedule of Rates** for SOR-based items shall be the **Madhya Pradesh Urban Administration & Development Department (MP UADD) Schedule of Rates – 2025** (including all corrigendum and addendum in force at the time of bid submission).

4. Scope Coverage of Rates

The rates quoted by the Bidder shall be deemed to cover **complete execution of the work**, including compliance with drawings, specifications, standards, approvals, testing, commissioning, and handover, irrespective of whether such requirements are explicitly mentioned against individual BoQ items.

5. Quantities

The quantities indicated in the BoQ are **indicative and provisional**. Payment shall be made based on **actual measurements** of work executed or on **approved milestones**, as applicable. Variations in quantities shall not entitle the Bidder to any claim for revision of rates.

6. Measurement & Payment – SOR Items

Measurement and payment for **SOR-based items** shall be carried out strictly in accordance with:

- Measurement provisions of the **MP UADD SOR 2025**, and
- Relevant **Indian Standard (IS) Codes / BIS specifications**, unless otherwise specified in the Contract.

7. Measurement & Payment – Non-SOR / NSR Items

Measurement and payment for **Non-SOR / NSR items** shall be made on a **milestone-based lump sum basis**, as defined in the RFP/Contract, linked to achievement of clearly identified deliverables, stages, or outputs, duly certified by the Engineer-in-Charge/Authority.

8. Rates to be Inclusive

All rates shall be deemed to include allowances for working in restricted areas, phasing of works, protection of existing utilities and heritage assets, night work (if required), coordination with multiple agencies, and compliance with all statutory and contractual obligations.

The contractor at his own cost shall arrange (i) fully furnished and adequately equipped Project Office with amenities like water supply, electric supply, office equipment, etc.; and (ii) a vehicle for USCL project staff during the contract period.

9. Taxes & Duties

All quoted rates shall be **exclusive of GST**, which shall be paid separately by the Employer at applicable rates, subject to statutory provisions. All other taxes, duties, levies, royalties, cess, and fees shall be deemed to be included in the quoted rates unless specifically stated otherwise.

10. No Claim for Ambiguity

No claim shall be entertained on account of ambiguity, discrepancy, or omission in the BoQ if the intent of the work is reasonably inferable from the Contract documents taken as a whole.

11. Operation, Management & Maintenance (O&M) Services

The scope of the BoQ shall also include Operation, Management and Maintenance (O&M) services for a period of five (5) years from the date of commissioning/handing over of the Project, as defined in the RFP. The Bidder shall quote year-wise lump sum rates for O&M services in the Financial Bid, covering manpower, routine and preventive maintenance, repairs, consumables, utilities management, ICT/AV systems upkeep, landscape maintenance, heritage-sensitive maintenance, reporting, and compliance with all Service Level Agreements (SLAs) specified in the RFP. Payment for O&M services shall be made on a quarterly basis, subject to achievement of prescribed SLAs and certification by the Engineer-in-Charge/Authority. Failure to meet SLAs may result in deductions, penalties, or withholding of payments as per the Contract. The quoted O&M rates shall be firm, inclusive of all contingencies, and exclusive of GST, which shall be payable as applicable.

ABSTRACT OF COST		
SNO	PARTICULARS	AMOUNT IN Rs.
A	SOR Items	
1	Transportation Work	
2	Surface Dressing & Earth Work	
3	PCC & RCC Works.	
4	Brick Work, Plaster & Painting Work	
5	Stonework	
6	Door & Window	
7	Flooring works	
8	False Ceiling & Water Proofing	
9	Cantering & Shuttering Works	
10	Plumbing and sanitary	
11	Landscaping & Horticulture Works.	
	Sub-total A	
	Tender premium to be quoted by Bidder on A	
	Sub-total A including Tender Premium	
B	Non-SOR Items (Rates to be quoted by Bidder)	
1	Conservation of work	
2	Sewage Treatment Plant (STP 500 KLD)	
3	Solar Plant (100 KWP)	
4	Furniture	
5	Internal Interior	
6	Services	
	Sub-total B	
C	Operation, Management and Maintenance for 5 (five) years (Rates to be quoted by Bidder)	
1	Year 1	
2	Year 2	
3	Year 3	
4	Year 4	
5	Year 5	
	Sub-total C	
	Total Project Cost (A+B+C) excluding GST	

	Amount In Words	Rupees	Only
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DETAILED BILL OF QUANTITIES

Attached Separately.

SECTION 6

AGREEMENT FORM

AGREEMENT

This agreement, made on the _____ day of _____ between: _____ (name and address of Employer) (hereinafter called "the Employer) and _____ (name and address of contractor) hereinafter called "the Contractor" of the other part.

Whereas the Employer is desirous that the Contractor execute _____ (name and identification number of Contract) (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs.....

NOW THIS AGREEMENT WITNESSED as follows:

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

In witnessed where of the parties there to have caused this Agreement to be executed the day and year first before written.

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

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

Binding Signature of Employer _____

Binding Signature of Contractor _____

UJJAIN SMART CITY LIMITED

SUMMARY OF CONSERVATION OF MAHARISHI SANDIPANI ASHRAM AT UJJAIN (MP)

S. no.	Description	Amount	Remark
1	Civil Work	₹ 32,40,39,568.00	
a	Transpotation Work	₹ 88,47,455.00	
b	Surface Dressing & Earth Work	₹ 1,80,50,169.00	
c	PCC & RCC Works.	₹ 10,97,14,912.00	
d	Brick Work, Plaster & Painting Work	₹ 2,66,66,035.00	
e	Stone Work	₹ 10,02,43,024.00	
f	Door & Window	₹ 60,46,390.00	
g	Flooring works	₹ 1,85,98,606.00	
h	False Ceiling & Water Proofing	₹ 59,55,103.00	
i	Centering & Shuttering Works	₹ 86,24,217.00	
j	Plumbing and sanitary	₹ 98,86,225.00	
k	Landscaping & Horticulture Works.	₹ 1,14,07,431.00	
2	Conservation of work	₹ 2,29,67,818.00	
3	Sewage Treatment Plant (STP 500 KLD)	₹ 61,52,390.00	
4	Solar Plant (100 KWP)	₹ 47,84,000.00	
5	Servicess	₹ 10,89,45,417.80	
a	Electrical Internal	₹ 2,38,88,409.00	
b	Electrical External	₹ 2,65,27,628.00	
c	Façade Lighting	₹ 4,17,05,834.00	
e	Firefighting & Fire Alarm System	₹ 86,67,903.80	
f	ICT System	₹ 50,89,973.00	
g	LIFT / ELEVATORS	₹ 30,65,670.00	
	Total	₹ 46,68,89,193.80	
	Amount in Cr.	46.69 Cr.	

ESTIMATE OF CONSERVATION OF MAHARISHI SANDIPANI ASHRAM AT UJJAIN (MP)

CIVIL & Plumbing WORKS

Sr. No.	UADD SOR 2025-26 Vol (II)	Descriptions	Unit	Qty.	Rate	Amount
	A	Building Work				
	a	Transportation Work				
1	1.0	Transportation By Mechanical means including loading, unloading and stacking where ever necessary				
	1.1	Excavated Earth				
		3km	Cum	20000.00	₹ 144.45	₹ 28,89,000.00
		5km	Cum	30000.00	₹ 171.38	₹ 51,41,400.00
		Beyond 5km upto 10 Km Per Km	Cum/Km	10000.00	₹ 12.62	₹ 1,26,200.00
	1.10	Manure or sludge				
		3km or Part thereof	Cum	5500.00	₹ 125.61	₹ 6,90,855.00
					Total	₹ 88,47,455.00
	b	Surface Dressing & Earth Work				
1	2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth up to 50 m and lift up to 1.5 m, as directed by Engineer-in- Charge:				
		All kind of Soil	Sqm	15000.00	₹ 67.00	₹ 10,05,000.00
2	2.2	Earth work by mechanical/manual means in rough excavation, banking excavated earth in layers not exceeding 20cm in depth, breaking clods, watering, rolling each layer with ½ tonne roller or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions, lead up to 50 m and for all lift.				
	2.2.1	All kind of Soil	Cum	3000.00	₹ 254.00	₹ 7,62,000.00
3	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	2.8.1	All kinds of soil	Cum	23839.50	₹ 155.00	₹ 36,95,122.50
4	2.23	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.	Cum	14303.70	₹ 101.00	₹ 14,44,673.70
	2.25	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
	2.25.1	All kinds of soil.	Cum	95358.00	₹ 66.00	₹ 62,93,628.00
5	2.26	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	2712.70	₹ 1,582.00	₹ 42,91,491.40
6	2.30	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	Sqm	15987.00	₹ 9.00	₹ 1,43,883.00
7	15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
	15.2.1	Nominal concrete 1:3:6 or richer mix (including equivalent design mix)	Cum	50.00	₹ 890.00	₹ 44,500.00
8	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	Cum	120.00	₹ 1,298.00	₹ 1,55,760.00
9	15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	15.7.4	In cement mortar	Cum	135.00	₹ 751.00	₹ 1,01,385.00

10	15.10	Dismantling dressed stone work ashlar face stone work, marble work or precast concrete work manually/ by mechanical means including stacking of serviceable and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge :				
	15.10.2	In cement mortar	Cum	55.00	₹ 1,048.00	₹ 57,640.00
11	15.11	Removing mortar from and cleaning stones and concrete articles (net quantity of stacks of cleaned materials will be measured):				
	15.11.2	In cement mortar	Cum	35.00	₹ 251.00	₹ 8,785.00
12	15.23	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
	15.23.1	For thickness of tiles 10 mm to 25 mm	Sqm	500.00	₹ 27.00	₹ 13,500.00
	15.23.2	For thickness of tiles above 25 mm and up to 40 mm	Sqm	800.00	₹ 41.00	₹ 32,800.00
					Total	₹ 1,80,50,168.60
	c	PCC & RCC Works.				
13	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level				
	4.1.5.2	1:3:6 (1 cement: 3 manufactured sands derived from Recycled concrete Aggregate (RCA): 6 graded stone aggregate 20 mm nominal size Recycled Aggregate (RA))	Cum	1877.85	₹ 3,825.00	₹ 71,82,776.25
14	5.33	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing,ncarriage for all leads; but excluding the cost of centering,nshuttering, finishing and reinforcement as per direction ofthe engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either redesign the mix or bear the cost of extra cement.				
	5.33.1	All works up to plinth level				
	5.33.1.1	Concrete of M25 grade with minimum cement content of 330 kg /cum	Cum	3065.24	₹ 5,904.00	₹ 1,80,97,176.96
	5.33.2	All works above plinth level up to floor V level				
	5.33.2.1	Concrete of M25 grade with minimum cement content of 330 kg /cum	Cum	3832.35	₹ 6,194.00	₹ 2,37,37,575.90
15	5.22.7	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position andbinding all complete above plinth level.				
	5.22.7.6	Thermo-Mechanically Treated bars of grade Fe-500D or more.	KG	820234.90	₹ 74.00	₹ 6,06,97,382.60
					Total	₹ 10,97,14,911.71
	d	Brick Work, Plaster & Painting Work				
16	6.1	Brick work with common burnt clay modular bricks of class designation 4.0 (40 kg/cm2) in foundation and plinth in:				
	6.1.2	Cement Mortar 1:6 (1 cement: 6 coarse sand).	Cum	237.18	₹ 5,074.00	₹ 12,03,451.32
17	6.2	Brick work with common burnt clay machine moulded perforated bricks of class designation 4.0 (40 kg/cm2) conforming to IS: 2222 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement: 6 coarse sand):	Cum			
	6.2.1	With Modular bricks	Cum	1750.71	₹ 5,945.00	₹ 1,04,07,982.84
	6.3	Extra for brick work / AAC block masonry / Tile brick masonry in superstructure above floor V level, for each four floors or part thereof by mechanical means.	Cum	1750.71	₹ 131.00	₹ 2,29,343.27
18	6.6	Extra for half brick masonry in superstructure, above floor V level for every four floors or part thereof by mechanical means.	Sqm	1703.94	₹ 12.00	₹ 20,447.28
19	6.5	Extra for additional cost of centering for arches exceeding 6m span including all shuttering, bolting, wedging and removal (Area of the soffit to be measured).	Sqm	352.00	₹ 475.00	₹ 1,67,200.00
20	13.1.1	12 mm cement plaster of mix :				
	13.1.2	1:4 (1 cement: 4 sand)	Sqm	8881.20	₹ 175.00	₹ 15,54,210.00

21	13.16	6 mm cement plaster of mix :				
	13.16.1	1:3 (1 cement: 3 fine sand)	Sqm	4368.00	₹ 138.00	₹ 6,02,784.00
21	13.12	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement: 3 coarse sand) finished rough with sponge	Sqm	5884.00	₹ 249.00	₹ 14,65,116.00
22	13.20	Pebble dash plaster up to 10 m height above ground level with a mixture of washed pebble or crushed stone 6 mm to 12.5 mm nominal size, dashed over and including fresh plaster in two layers under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand) and top layer 10 mm cement plaster with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 10% finely ground hydrated lime by volume of cement.	Sqm	3992.00	₹ 392.00	₹ 15,64,864.00
23	13.21	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.	kg	23300.00	₹ 19.00	₹ 4,42,700.00
24	Intach 2016 9.8	Mud plaster 1:3:1(1 lime slaked : 3 Mud:1 coarse sand)	Sqm	1512.00	₹ 1,232.53	₹ 18,63,588.38
25	Approved in Rudrasagar Project Non SOR	Supply & Installation of Thatch roofing for Dhyana Kuti ar Chota Rudrasagar. The Roofing is a traditional roofing method that involves using dry vegetation such as straw, water reed, & sarkanda grass. Strong thatched roofing with sakanda leaves including Balli rafters 5 to 8cm dia at average 80cm c/c and purlins of bamboo of 4 to 5cm dia at average 30 cm c/c and cover with polythene and 3 layer thached roof of minimum thickness 200 to 300mm.	Sqm	594.00	₹ 3,712.00	₹ 22,04,928.00
26	Approved in Rudrasagar Project Non SOR	Providing and liping wall floor and plinth with mud mix with cowdung.	Sqm	430.00	₹ 200.00	₹ 86,000.00
27	MRIDA Project	Mandna as approved in MRIDA Project	Sqm	1200.00	₹ 743.00	₹ 8,91,600.00
28	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	13879.20	₹ 80.00	₹ 11,10,336.00
29	13.45	Finishing walls with textured exterior paint of required shade :				
	13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	Sqm	13109.20	₹ 132.00	₹ 17,30,414.40
30	13.46	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
	13.46.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	Sqm	8402.00	₹ 91.00	₹ 7,64,582.00
31	13.46	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications:				
	13.48.3	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/10 sqm of approved brand and manufacture	Sqm	4051.00	₹ 88.00	₹ 3,56,488.00
					Total	₹ 2,66,66,035.50
	e	Stone Work				
32	8.18	Providing and fixing dry cladding up to 10 metre height with 30 mm thick gang saw cut stone with machine cut edges of uniform colour and size up to 1mx1m, fixed to structural steel frame work and/ or with the help of cramps, pins etc. and sealing the joints with approved weather sealant as per Architectural drawing and direction of Engineer-in-charge. (The steel frame work, stainless steel cramps and pins etc. shall be paid for separately).				
	8.18.1	Red sand stone - 30 mm thick gang saw cut stone	Sqm	545.00	₹ 1,828.00	₹ 9,96,260.00

33	8.19	Providing and fixing structural steel frame (for dry cladding with 30 mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square/ rectangular tube in the required pattern as per architectural drawing, including cost of cutting, bending, welding etc. The frame work shall be fixed to the wall with the help of M.S. brackets/ lugs of angle iron/ flats etc. which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement :2 coarse sand :4 graded stone aggregate 20 mm nominal size) of size 300x230x300 mm, including cost of necessary centring and shuttering and with approved expansion hold fasteners on CC/RCC surface, including drilling necessary holes. Approved cramps/ pins etc. shall be welded to the frame work to support stone cladding, the steel work will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer-in-charge for approval before execution). The frame work shall be fixed in true horizontal & vertical lines/planes. (Only structural steel frame work shall be measured for the purpose of payment, stainless steel cramps shall be paid for separately and nothing extra shall be paid).	Kg	6250.00	₹ 216.00	₹ 13,50,000.00
33	8.20	Providing and fixing adjustable stainless-steel cramps of approved quality, required shape and size, adjustable with stainless steel nuts, bolts and washer (total weight not less than 260 gram), for dry stone cladding fixed on frame work at suitable location, including making necessary recesses in stone slab, drilling required holes etc complete as per direction of the Engineer-in-charge.	Each	5500.00	₹ 275.00	₹ 15,12,500.00
34	11.55	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.				
	11.55.1	Polished Granite stone slab of colour Black, Cherry/Ruby Red or equivalent	Sqm	700.00	₹ 3,484.00	₹ 24,38,800.00
	11.55.2	Polished Granite stone slab of all colour and texture except Black, Cherry/Ruby Red	Sqm	350.00	₹ 2,246.00	₹ 7,86,100.00
35	NSR	Stone cladding work in red sand stone, Best Quality Stone, as approved by Engineer-incharge and consultant, with specific design and as per drawings upto any height,with necessary scaffolding / centering etc. as provided in tender document and as per requirement of items and measurement from site. Stone Carving depth 15mm to 30 mm varies as per design including sunk and moulding works.Other moulding, grooves, cornices, sculpture, etc. work as per drawings, backing filled with grout of cement mortar 1:3(1 cement : 3 sand) minimum 12mm thick, including pointing in white cement mortar 1:2 (1 cement : 2 marble dust) with an admixture of pigment matching the stone shade, to be secured to backing by means of Stainless Steel cramps/anchor/fastner of required size and shape anchoring stone wall lining to the backing or securing adjacent stone in stone wall lining in cement mortar 1:2(1 cement : 2 sand) including making necessary chases in stone and holes in wall/RCC where ever required including epoxy (Araldite etc.) wherever required All fixing work should be executed as per instructions of engineer in charge and consultant and the traditional pattern of fixing the stone work.For protection of stone, from weatheric action coat of protection layer shall be apply on whole stone surface area, Stone work should have coated in two or more coat of clear lacquar coat of pidilite / K2 / Nippon	Sqm			

	a	Stone thickness 70 mm , design as per attached drawings. For Wall	Sqm	5560.00	₹ 7,671.00	₹ 4,26,50,760.00
	b	COLUMN WORK , stone thickness 40mm to 150 mm ,	Sqm	3976.00	₹ 8,360.00	₹ 3,32,39,360.00
	c	FASCIA WORK , stone thickness 100 mm to 300 mm , .	Sqm	200.00	₹ 18,685.00	₹ 37,37,000.00
	d	BRACKET (Average thickness of stone 200mm, 450X450)	Sqm	180.00	₹ 1,540.00	₹ 2,77,200.00
36	8.12	Stone work (machine cut edges) for wall lining etc. (vener work) up to 10 metre height, backing filled with a grout of average 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade : (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) :				
	8.12.2	Red sand stone - Exposed face machine cut and table rubbed with rough backing.				
	8.12.2.4	40 mm thick	Sqm	2329.00	₹ 3,715.00	₹ 86,52,235.00
37	7.24	Providing and fixing horizontal chajja of stone 40 mm thick and up to 80 cm projection in cement mortar 1:4 (1 cement: 4 coarse sand), including pointing in white cement mortar 1:2 (1 white cement: 2 stone dust) with an admixture of pigment matching the stone shade:				
	7.24.1	Red sand stone:	Sqm	145.00	₹ 820.00	₹ 1,18,900.00
38	7.25	30 mm red sand stone sun-shade (chisel-dressed) supported on red sand stone brackets, fixed in walls with cement mortar 1:4 (1 cement: 4 coarse sand), including finishing complete.	Sqm	125.00	₹ 1,737.00	₹ 2,17,125.00
39	7.26	Providing and fixing red sand stone brackets 55x22.5x45cm sunk and moulded including providing and fixing with 4 Nos. gun metal cramp 25x6mm 30 cm long and dowel bars 7.5 cm long 6 mm dia as per design.	Each	768.00	₹ 1,737.00	₹ 13,34,016.00
40	7.27	Stone work, plain in copings, cornices, string courses and plinth courses, up to 75 mm thick in Cement mortar 1:6 (1 cement: 6 coarse sand), including pointing with white cement mortar 1:2 (1 white cement: 2 stone dust) with an admixture of pigment matching the stone shade.				
	7.27.1	Red Sand Stone	Sqm	37.00	₹ 34,128.00	₹ 12,62,736.00
41	7.28	Providing and fixing stone jali 40 mm thick throughout in cement mortar 1:3 (1 cement: 3 coarse sand), including pointing in white cement mortar 1:2 (1 white cement: 2 stone dust) with an admixture of pigment, matching the stone shade, jali slab without any chamfers etc.				
	7.28.1	Red Sand Stone	Sqm	212.96	₹ 7,842.00	₹ 16,70,032.32
					Total	₹ 10,02,43,024.32
	f	Door & Window				
42	9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
	9.1.1	Second class teak wood	Cum	4.98	₹ 1,07,949.00	₹ 5,37,046.28
43	9.5	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge. (Note: Butt hinges and necessary screws shall be paid separately)				
	9.5.1	Second class teak wood				
	9.5.1.1	35 mm thick shutters	Sqm	196.20	₹ 2,858.00	₹ 5,60,739.60

44	9.7	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick.				
	9.7.4	Ply wood 7 ply, 9 mm thick				
	9.7.4.1	Decorative plywood one side decorative veneer and commercial veneer on other face (Type 1) conforming to IS 1328 BWR Type	Sqm	550.00	₹ 1,975.00	₹ 10,86,250.00
45	9.7.7	Float glass panes				
	9.7.7.2	5.0 mm thick glass panes (weight not less than 12.50 kg/sqm).	Sqm	90.54	₹ 1,457.00	₹ 1,31,916.78
46	9.34	Providing and fixing chromium plated brass curtain rod having wall thickness of 1.25 mm with two chromium plated brass brackets fixed with C.P. brass screws and PVC sleeves etc., wherever necessary complete:				
	9.34.2	20 mm dia	Mtr	220.00	₹ 350.00	₹ 77,000.00
47	9.36	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
	9.36.1	Fixed to steel windows by welding	KG	1380.00	₹ 135.00	₹ 1,86,300.00
48	9.39	Providing and fixing fly proof galvanized M.S. wire gauge to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm all complete				
	9.39.1	With second class teak wood beading 62X19 mm	Sqm	420.00	₹ 916.00	₹ 3,84,720.00
49	MP PWD 2024 9.65	Providing and fixing ISI marked stainless steel sliding door bolts with nuts and screws etc. complete:				
	MP PWD 2024 9.65.1	300x16 mm	Each	115.00	₹ 389.00	₹ 44,735.00
50	MP PWD 2024 9.66	Providing and fixing ISI marked stainless steel tower bolt black finish, (Barrel type) with necessary screws etc. complete :				
	MP PWD 2024 9.66.1	250x10 mm	Each	115.00	₹ 148.00	₹ 17,020.00
51	MP PWD 2024 9.69	Providing and fixing ISI marked stainless steel handles with necessary screws etc. complete :				
	MP PWD 2024 9.69.1	125mm	Each	70.00	₹ 60.00	₹ 4,200.00
52	MP PWD 2024 9.76	Providing and fixing Stainless steel hanging type floor door stopper with necessary screws, etc. complete.	Each	90.00	₹ 103.00	₹ 9,270.00
53	9.72	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS: 3564, embossed on the body, door weight up to 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	Each	81.00	₹ 1,092.00	₹ 88,452.00
54	10.14	Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge:				
	10.14.1	Profile B				
	10.14.1.1	Fixing with adjustable lugs with split end tail to each jamb	Meter	495.00	₹ 443.00	₹ 2,19,285.00

55	MP PWD SOR 2024 11.75	Providing and fixing 16mm thick gang saw cut mirror polished premoulded and prepolished machine cut Granite of approved shade, colour and texture of Granite Door frame. in cement mortar 1:3 (1 cement :3 sand) including pointing with an admixture of pigment to match the shade including fixing of granite stone door frame with epoxy resin based adhesive including secured to the backing by means of cramps, drilling of hole with rawl plugs and screws 75mm long cleaning etc. complete. Including rubbing, curing, moulding and polishing edges to give high glossy finish and drilling of hole for fixing stainless steel hinges, aldrops, towerbolts etc complete at all levels as per instruction of Engineer-in-Charge.				
	MP PWD SOR 2024 11.75.1	Granite Door frame for 100mm thick wall Thickness.	Meter	50.00	₹ 1,010.00	₹ 50,500.00
	MP PWD SOR 2024 11.75.2	Granite Door frame for 200mm thick wall Thickness.	Meter	80.00	₹ 1,512.00	₹ 1,20,960.00
55	19.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately)				

	19.1.1	For fixed portion				
	19.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	KG	300.00	₹ 457.00	₹ 1,37,100.00
56	19.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
	19.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	KG	700.00	₹ 514.00	₹ 3,59,800.00
57	19.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
	19.3.2	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	Sqm	118.24	₹ 1,035.00	₹ 1,22,378.40
58	9.18	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well-matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
	9.18.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	88.20	₹ 2,543.00	₹ 2,24,292.60
59	10.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
	10.16.1	Hot finished welded type tubes.	KG	7500.00	₹ 121.00	₹ 9,07,500.00
60	19.10	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	Sqm	150.00	₹ 3,682.00	₹ 5,52,300.00
61	19.11	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
	19.11.3	355 X 19 mm	Each	30.00	₹ 245.00	₹ 7,350.00
62	19.12	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.				
	19.12.2	Powder coated minimum thickness 50 micron aluminium tubular handle bar	Each	8.00	₹ 603.00	₹ 4,824.00
63	19.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in- charge (Door handle, lock and stopper etc.to be paid separately).	Sqm	50.00	₹ 3,689.00	₹ 1,84,450.00
64	19.19	Filling the gap in between aluminium/ stone/ wood frame and adjacent RCC/Brick/ Stone/ wood/ Ceramic/ Gypsum work by providing weather/structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction of Engineer- in-charge complete, complying to ASTM C920, DIN 18540-F & ISO 11600				
	19.19.1	Upto 5 mm depth and 5 mm width	Meter	200.00	₹ 140.00	₹ 28,000.00
	g	Flooring works			Total	₹ 60,46,389.66
65	11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1: 4 (1 cement: 4 coarse sand):	Sqm	6630.00	₹ 1,271.00	₹ 84,26,730.00
	11.26.1	25 mm thick				

66	11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	Sqm	132.60	₹ 1,449.00	₹ 1,92,137.40
67	11.31	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	Mtr	300.00	₹ 156.00	₹ 46,800.00
68	11.28	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement: 5 coarse sand) with joints finished flush.				
	11.28.1	Red Sand stone	Sqm	1966.00	₹ 880.00	₹ 17,30,080.00
69	MP PWD 2024 11.81	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours & shades, 1st quality/ premium quality in skirting, riser, dado and wall lining laid on 12mm thick cement mortar 1:4(1cement :4sand) including grouting the joints with white cement and matching pigments etc. complete				
	MP PWD 2024 11.81.1	In light colour and shades as ivory, beige blanco, grey etc.				
	MP PWD 2024 11.81.1.2	(b) Size 600X600mm thickness 9-10mm	Sqm	174.00	₹ 1,196.00	₹ 2,08,104.00
70	MP PWD 2024 11.80	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality in flooring laid on 20mm thick cement mortar 1:4(1cement :4sand) including grouting the joints with white cement and matching pigments etc. complete				
	MP PWD 2024 11.80.1	In light colour and shades as ivory, beige blanco, grey etc.				
	MP PWD 2024 11.80.1.2	(b) Size 600X600mm thickness 9-10mm	Sqm	380.00	₹ 1,206.00	₹ 4,58,280.00
71	MP PWD 2024 11.82 For floors	Providing and laying digital print random design(PGVT)/(GVT) vitrified tiles in different sizes with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality including grouting the joints with white cement and matching pigments etc. complete				
	MP PWD 2024 11.82.1	For floor glossy/ rustic /stain/matt finished laid on 20mm thick cement mortar 1:4 (1 cement:4sand)				
	MP PWD 2024 11.82.1.5	Size 600X1200 mm thickness 9-10 mm	Sqm	290.00	₹ 1,235.00	₹ 3,58,150.00
72	MP PWD 2024 11.83 Forin skirting, riser, dado and wall lining	Providing and laying digital print random design(PGVT)/(GVT) vitrified tiles in different sizes with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality / premium in skirting, riser, dado and wall lining laid our 12mm thick cement mortar 1:3 including grouting the joints with white cement and matching pigments etc. complete				
	MP PWD 2024 11.83.1	For skirting, riser, dado and wall lining etc. glossy/ rustic /stain/matt finished in all colours and shades				
	MP PWD 2024 11.83.1.4	Size 600X1200 mm thickness 11-12mm	Sqm	603.40	₹ 1,224.00	₹ 7,38,561.60
73	8.1	Marble work gang saw cut (polished and machine cut) of thickness 18 mm for wall lining (vaneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).				
	11.45.1	Area of Slab Over 0.50 Sqm				
	11.45.1.1	Fine granite dark Black/dark Red/ White with self design/ pattern/ crystals of other colors of glitter.	Sqm	545.00	₹ 3,386.00	₹ 18,45,370.00
74	11.2	Dry brick on edge flooring in required pattern with bricks of class designation 7.5 on a bed of 12 mm mud mortar, including filling joints with Jamuna sand, with common burnt clay non modular bricks.	Sqm	396.00	₹ 545.00	₹ 2,15,820.00

75	11.5	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix: 2 graded stone aggregate, 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	Sqm	150.00	₹ 623.00	₹ 93,450.00
76	23.69	Providing and laying 60mm thick factory-made cement concrete paver block of approved shape and colour of M -30 grade made of C&D waste by block making machine with vibratory compaction laid in required pattern and including over 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer- in-charge	Sqm	2210.00	₹ 571.00	₹ 12,61,910.00
77	RUIDP 2023	Flooring with Cobble stone of approx. Size 125x125x75 mm (thick) laid on 25 mm average thick cement mortar 1:3 (1 cement : 3 Coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the stone, laid in approved pattern complete in all respect as per direction of Engineer-in-charge.	Sqm	1473.33	₹ 1,822.00	₹ 26,84,413.33
78	MP UADD SOR 2021 (VOL 3) 11.16	Providing and fixing of White Marbles circular/oval in shape (stone) pebbles of size 2"to 2.50" dia in natural colour at site of work including loading, unloading, carriage with all taxes paid etc. and as per direction of Engineer-in-Charge.	Kg	1000.00	₹ 22.00	₹ 22,000.00
79	MP UADD SOR 2021 (VOL 3) 11.17	Providing and fixing of 3 seater stone bench made of 75mm thick stone slab finished by different numbers of ambry stone and two coats of 124 no sealer coat to prevent from weather including fixing on a pedestal (cost of pedestal to be paid separately)etc. complete as per direction of engineer in charge. Size: length 1500mm, width 600mm, legs height 500 mm, back support height 500mm.	Each	18.00	₹ 9,700.00	₹ 1,74,600.00
80	MP UADD SOR 2021 (VOL 3) 11.18	Providing and fixing of stone table made of 75mm thick stone slab finished by different numbers of ambry stone and two coats of 124 no sealer coat to prevent from weather including fixing on a pedestal (cost of pedestal to be paid separately)etc. complete as per direction of engineer in charge. Size: length 1000mm, width 600mm, legs height 750 mm.	Each	18.00	₹ 7,900.00	₹ 1,42,200.00
					Total	₹ 1,85,98,606.33
	h	False Ceiling & Water Proofing				
81	12.44	Providing and fixing at all height false ceiling including providing and fixing of frame work made of special sections power pressed from M.S. sheet and galvanised in accordance with zinc coating of grade 350 as per IS : 277 and consisting of angle cleats of size 25mm wide x 1.6mm thick with flanges of 22mm and 37mm at 1200mm centre to centre one flange fixed to the ceiling with dash fastener 12.5mm diax40mm long with 6mm dia bolts to the angle hangers of 25x25x0.55mm of required length, and other end of angle hanger being fixed with nut and bolts to G.I. channels 45x15x0.9mm running at the rate of 1200mm centre to centre to which the ceiling section 0.5mm thick button wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular to G.I. channel with connecting clips made out of 2.64mm dia 230mm long G.I. wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre to centre with 25mm long drive-all screws @ 230mm interval including jointing and fixing to a flush finish of tapered and square edges of the board with recommended filler, jointing tapes, finisher and two coats of primer suitable for board as per manufactures specification and also including the cost of making openings for light fittings, grills, diffusers,				
	12.44.1	12.5 mm thick tapered edge gypsum board conforming to IS: 2095- Part I	Sqm	3990.00	₹ 906.00	₹ 36,14,940.00

81	20.7	Providing and laying integral cement-based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls up to 300 mm height including cleaning the surface before treatment.				
		(b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls up to 300 mm height including rounding of junctions of walls and slabs.				
		(c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-charge.				
		(d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.				
		(e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge:				
	20.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	Sqm	2036.00	₹ 1,043.00	₹ 21,23,548.00
82	20.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying: (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours.	Sqm	290.00	₹ 324.00	₹ 93,960.00
		(b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours.				
		The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.				
83	14.86	Providing and laying in situ seven course water proofing treatment with APP (Atactic poly-propylene) modified Polymeric memberane over roof consisting of first coat of bitumen primer @ 0.40 litre per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 1.5 mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).	Sqm	255.00	₹ 481.00	₹ 1,22,655.00
					Total	₹ 59,55,103.00
	i	Centering & Shuttering Works				
84	5.9	Centering and shuttering including strutting, propping etc. and removal of form for				
	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	1901.25	₹ 229.00	₹ 4,35,386.25

	5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	Sqm	1581.00	₹ 320.00	₹ 5,05,920.00
	5.9.3	Suspended floors, roofs, landings, balconies and access platform	Sqm	3776.00	₹ 521.00	₹ 19,67,296.00
	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	9082.60	₹ 427.00	₹ 38,78,270.20
	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm	1033.00	₹ 453.00	₹ 4,67,949.00
	5.9.7	Stairs, (excluding landings) except spiral-staircases.	Sqm	474.00	₹ 468.00	₹ 2,21,832.00
	5.9.19	Weather shed, Chajjas, corbels etc., including edges	Sqm	990.00	₹ 590.00	₹ 5,84,100.00
85	5.11	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured).	Sqm	2696.00	₹ 209.00	₹ 5,63,464.00
	5.11.1	Suspended floors, roofs, landings, beams and balconies (Plan area to be measured)				
					Total	₹ 86,24,217.45
	j	Plumbing and sanitary				
86	UADD SOR 2021 (Vol-I) 11.2	Providing, Laying & Jointing of DWC (double wall corrugated) PE Pipes of renowned duly tested inclusive of all cost of inspection charges, transportation charges, transit insurance, loading/ unloading and stacking at site/ store etc, complete.				
	UADD SOR 2021 (Vol-I) 11.2.1	76 mm / 90 mm Meter 101.00 Meter 155.00 11.2.3 135 mm / 160 mm	Meter	60.00	₹ 101.00	₹ 6,060.00
	UADD SOR 2021 (Vol-I) 11.2.2	100 mm / 120 mm	Meter	90.00	₹ 155.00	₹ 13,950.00
	UADD SOR 2021 (Vol-I) 11.2.3	135 mm / 160 mm	Meter	120.00	₹ 220.00	₹ 26,400.00
	UADD SOR 2021 (Vol-I) 11.2.8	300 mm / 345 mm	Meter	200.00	₹ 1,260.00	₹ 2,52,000.00
	UADD SOR 2021 (Vol-I) 11.2.9	400 mm / 480 mm	Meter	200.00	₹ 1,753.00	₹ 3,50,600.00
	UADD SOR 2021 (Vol-I) 11.2.10	500 mm / 580 mm	Meter	200.00	₹ 2,622.00	₹ 5,24,400.00
87	UADD SOR 2021 (Vol-I) 12.3	Providing and Laying non-pressure (NP3) RCC socket & spigot pipes with rubber gasket joint including testing of joints.				
	UADD SOR 2021 (Vol-I) 12.3.1	150mm	Meter	200.00	₹ 437.00	₹ 87,400.00
	UADD SOR 2021 (Vol-I) 12.3.3	250mm	Meter	200.00	₹ 660.00	₹ 1,32,000.00
	UADD SOR 2021 (Vol-I) 12.3.4	300mm	Meter	200.00	₹ 964.00	₹ 1,92,800.00
88	UADD SOR 2021 (Vol-I) 17.9	Providing, fixing and constructing of pre-cast RCC M-40 grade circular manholes with internal dia. 900mm and 1055mm depth, conical piece, wall thickness 125mm, and jointing of circular rings of required height as per depth of manhole below conical piece and having steel reinforcement in all pieces of manhole including cast-in-situ PCC M-10 grade (1:3:6) foundation, PCC M-10 grade benching and channel portion complete with curing, compaction and form work, supplying and fixing of plastic encapsulated CI/MS foot steps, supply & fixing of heavy duty (HD-20) SFRC cover and frame as per IS 12592 fixed in Cement concrete 1:2:4 (nominal mix) with stone aggregate 20mm nominal size including centering and shuttering, steel reinforcement etc. complete in all respect including testing for water tightness, as per specification and the direction of the Engineer, Depth of manhole shall be considered as the vertical distance from top of the manhole cover to the outgoing invert of main drain channel (as per Drawing No. - 15A,B,C,D) {Note:- Only Excavation as per actual shall be paid separately}	Each	20.00	₹ 12,494.00	₹ 2,49,880.00
89	UADD SOR 2021 (Vol-I) 17.9.1	Extra for increasing depth of manhole beyond 1055mm and upto 1254mm with extension piece of internal dia 1000mm as per drawing and direction of Engineer. (Excavation as per actual shall be paid separately)	Each	10.00	₹ 6,899.00	₹ 68,990.00

90	UADD SOR 2021 (Vol-I) 17.17	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block grade M-10 (Nominal Mix with 20 mm maximum size of stone aggregate) complete as per design.	Each	500.00	₹ 284.00	₹ 1,42,000.00
91	2.11	Excavating trenches of required width for pipes, cables, etc, including excavation for sockets, depth up to 1.5 m, including getting out the excavated materials, returning the soil as required in layers not exceeding 20 cm in depth, including consolidating each deposited layers by ramming, watering etc., stacking serviceable material for measurements and disposal of unserviceable material as directed, within a lead of 50 m:				
	2.11.1	Ordinary rock:				
	2.11.1.2	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	Meter	835.00	₹ 429.00	₹ 3,58,215.00
92	UADD SOR 2021 21.1 Internal work - Exposed on wall.	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain and brass threaded fitting i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	21.1.1	15 mm nominal outer dia .Pipes.	Meter	260.00	₹ 109.00	₹ 28,340.00
	21.1.2	20 mm nominal outer dia .Pipes.	Meter	530.00	₹ 134.00	₹ 71,020.00
	21.1.3	25 mm nominal outer dia .Pipes.	Meter	315.00	₹ 161.00	₹ 50,715.00
	21.1.4	32 mm nominal outer dia .Pipes.	Meter	945.00	₹ 207.00	₹ 1,95,615.00
	21.1.5	40 mm nominal outer dia .Pipes.	Meter	660.00	₹ 260.00	₹ 1,71,600.00
	21.1.6	50 mm nominal outer dia .Pipes.	Meter	350.00	₹ 334.00	₹ 1,16,900.00
93	UADD SOR 2021 21.3 External work	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
	21.3.5	40 mm nominal outer dia .Pipes.	Meter	140.00	₹ 218.00	₹ 30,520.00
	21.3.6	50 mm nominal outer dia .Pipes.	Meter	165.00	₹ 292.00	₹ 48,180.00
	21.3.7	62.50 mm nominal inner dia Pipes.	Meter	210.00	₹ 1,426.00	₹ 2,99,460.00
	21.3.8	75 mm nominal inner dia .Pipes.	Meter	195.00	₹ 1,854.00	₹ 3,61,530.00
94	UADD SOR 2021 21.12 BRASS FITTINGS	Providing and fixing brass bib cock of approved quality :				
	21.12.2	20 mm nominal bore 0.75kg	Each	22.00	₹ 247.00	₹ 5,434.00
95	UADD SOR 2021 21.13	Providing and fixing brass stop cock of approved quality :				
	21.13.2	20 mm nominal bore 0.75kg	Each	22.00	₹ 247.00	₹ 5,434.00
96	UADD SOR 2021 21.15	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
	21.15.2	20 mm nominal bore	Each	9.00	₹ 301.00	₹ 2,709.00
97	UADD SOR 2021 21.16	Providing and fixing gun metal non- return valve of approved quality (screwed end)				
	21.16.3	40 mm nominal bore				
	21.16.3.1	Horizontal		11.00	₹ 639.00	₹ 7,029.00
	21.16.3.2	Vertical	Each	11.00	₹ 798.00	₹ 8,778.00
98	UADD SOR 2021 21.18	Providing and fixing uplasticised PVC connection pipe with brass unions				
	21.18.1	30 cm length				
	21.18.2	20 mm nominal bore	Each	15.00	₹ 99.00	₹ 1,485.00
99	UADD SOR 2021 21.25	Providing and placing on terrace at all floor polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	Ltr	28000.00	₹ 8.00	₹ 2,24,000.00
100	UADD SOR 2021 21.48	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete grade M-15 (Nominal Mix with 20mm maximum size of stone aggregate) including finishing complete so as to make it leak proof	Each	130.00	₹ 145.00	₹ 18,850.00

101	UADD SOR 2021 22.1	Providing and laying below ground unplasticised PVC pipe to with stand working pressure of 4 kg/cm2 soild waste pipes conforming to IS:13592 and IS:4985 including jointing with seal ring conforming to IS :5282 leaving 10mm gap for thermal expansion all necessary fittings etc. complete. Excavation to be paid seperately.				
	22.10.1	110 mm diameter OD	Meter	430.00	₹ 217.00	₹ 93,310.00
	22.10.2	160 mm diameter OD	Meter	700.00	₹ 448.00	₹ 3,13,600.00
102	MP PWD 2024 VOL (ii) 18.13	Providing and fixing CPVC gate valve with knob of approved quality.				
	MP PWD 2024 VOL (ii) 18.13.1	25mm Dia	Each	25.00	₹ 428.00	₹ 10,700.00
	MP PWD 2024 VOL (ii) 18.13.2	32mm Dia	Each	25.00	₹ 500.00	₹ 12,500.00
	MP PWD 2024 VOL (ii) 18.13.3	40mm Dia	Each	25.00	₹ 584.00	₹ 14,600.00
	MP PWD 2024 VOL (ii) 18.13.4	50mm Dia	Each	25.00	₹ 749.00	₹ 18,725.00
103	17.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.				
	17.32.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Per Pit	1.00	₹ 17,693.00	₹ 17,693.00
104	MP PWD 2024 (II) 25.3	Providing and fixing white vitreous china European Wall hung Anti germ Fluoro-Polymer Coated water closet of approved shape with soft closing seat cover, and 7.2 litre Low level slim dual flushing, PP (Poly Propylene) made 80 mm thick concealed flushing cistern, flushing capacity 3 litre/6 litre, with all fittings and fixtures complete including cutting and making good the wall and floors wherever required.				
	MP PWD 2024 (II) 25.3.1	Anti germ Fluoro-Polymer Coated (Nano coating) Wall hung water closet Size 380X520X375 mm with solid poly propelyne made soft closing seat cover (Premium Range)	Each	50.00	₹ 26,412.00	₹ 13,20,600.00
105	MP PWD 2024 (II) 25.1	Providing and fixing white vitreous china Anti germ Fluoro-Polymer Coated Water closet squatting pan with 100 mm sand cast Iron P and S- trap, and 7.2 liter Low level, dual flush, PP (Poly Propylene) made open slim wall hung cistern capacity 3 liter/6 liter flushing, with all fittings and fixtures complete including cutting and making good the wall and floors wherever required.				
	MP PWD 2024 (II) 25.1.1	White Vitreous china Anti germ Fluoro-Polymer coated Orissa Pattern W. C. Pan of Size 440X575X250mm With integral foot rests. (Premium Range)	Each	9.00	₹ 4,726.00	₹ 42,534.00
106	MP PWD 2024 (II) 25.10	Providing and fixing white vitreous china type Anti germ Fluoro-Polymer Coated Wash Basin with 15 mm Table mounted single lever Tall boy basin mixture, (cartridge size 32 mm) 15mm quarter turn angular stop cock, 32 mm C. P. brass made waste coupling length 130mm and 32 mm C. P. Brass Made Bottle Trap size 200x300mm fittings and fixtures complete including Painting of fittings and cutting and making good the wall and floors wherever required.				
	MP PWD 2024 (II) 25.10.2	White vitreous china type Anti germ fluoropolymer coated counter top wash basin Size 530x420x140mm with tall boy basin mixture, (cartridge size 32 mm). (Premium Range)	Each	32.00	₹ 16,785.00	₹ 5,37,120.00
107	MP PWD 2024 (II) 25.12	Providing and fixing white vitreous china Flat Back Anti germ Fluoro-Polymer Coated urinal (Inbuilt spreaders, Inbuilt Bottle trap and inbuilt ceramic Waste coupling) with sensotronic concealed type flushing valve battery & electrical oprated type (9V transformer) for urinal complete set with installation box with control cock complete including painting of fittings and brackets, cutting and making good the wall and floors wherever required .				
	MP PWD 2024 (II) 25.12.1	White Vetricious China Anti germ Fluoro-Polymer Coated Urinal Size 340x325x650 mm with sensotronic concealed type flushing valve battery & electrical oprated type (9V transformer) for urinal complete set with installation box with control cock. (Premium Range)	Each	23.00	₹ 23,927.00	₹ 5,50,321.00
108	MP PWD 2024 (II) 25.16	Providing & Fixing 8mm thick froasted Urinal glass partition size height 900 mm top width 450mm and bottom width 300mm brass made bracket with chrome plating. (Premium Range)	Each	25.00	₹ 7,631.00	₹ 1,90,775.00

109	MP PWD 2024 (II) 25.18	Providing and fixing in position best Indian (bonut size 24mm, ceramic disc size 19mm and min. body thickness 2mm, nickel plating 0.10 micron and chrome plating 0.3 micron, quarter turn) Pillar cock. (Premium Range)	Each	32.00	₹ 2,326.00	₹ 74,432.00
110	MP PWD 2024 (II) 25.19	Providing and fixing in position best Indian (bonut size 24mm, ceramic disc size 19mm and min. body thickness 2mm, nickel plating 0.10 micron and chrome plating 0.3 micron, quarter turn)Bib cock. (Premium Range)	Each	32.00	₹ 2,071.00	₹ 66,272.00
111	MP PWD 2024 (II) 25.37	Providing and fixing in position best Indian Health Faucet with 8mm dia 1.2 meter long Flexible Tube and wall bracket with N. R. V. (non-return wall).(Premium Range Sanitary Ware)	Each	43.00	₹ 1,818.00	₹ 78,174.00
112	MP PWD 2024 (II) 25.50	Providing and fixing in position best Indian Stainless steel made (0.3 micron Chrome and 10 micron Nickel plated) Single Towel Rail 600 mm long. (Premium Range)	Each	43.00	₹ 2,631.00	₹ 1,13,133.00
113	MP PWD 2024 (II) 25.56	Providing and fixing in position best Indian Stainless steel made (0.3 micron Chrome and 10 micron Nickel plated) Toilet paper holder with Flap. (Premium Range)	Each	40.00	₹ 1,881.00	₹ 75,240.00
114	UADD SOR Vol (I) 20.1	Carrying out the resistivity survey by VES method using Schlumberger configuration for locating the proper spot for drilling of tube well with in the selected habitation, including Photography, interpretation of resistivity data and submission of report in the desired format along with resistivity necessary graph, photographs and readings.	Per successful point	4.00	₹ 1,544.00	₹ 6,176.00
115	UADD SOR Vol (I) 20.9	Providing and fixing of well cap on top of the tube well for protection				
	UADD SOR Vol (I) 20.9.4	150 mm dia	Each	4.00	₹ 269.00	₹ 1,076.00
116	UADD SOR Vol (I) 20.6	Drilling of perfectly vertical bore hole of a diameter suitable to receive 200mm nominal diameter casing pipe upto desired depth below ground level inclusive of the labour charges for transporting, lowering and fixing of 200mm nominal diameter M,S./G.I./U.P.V.C. casing pipe inside the bore hole including all works pertaining to drilling such as transportation, installation and removal of drilling machine etc. complete.				
	UADD SOR Vol (I) 20.6.1	in all types of collapsible strata consisting of soils, clays, sand, moorum, gravel, boulders etc.	Meter	750.00	₹ 587.00	₹ 4,40,250.00
117	UADD SOR Vol (I) 20.25	Supply of I.S.I. marked G.I. casing pipe (Plain) medium class in 4 to 7 meters length one end fitted with socket as per I.S. 1239 (Part-1 & Part-2) 1992 with IVth revision (Up-to-date amendments)				
	UADD SOR Vol (I) 20.25.3	150mm dia	Meter	340.00	₹ 1,525.00	₹ 5,18,500.00
118	UADD SOR Vol (I) 20.11	Labour charges for assembling, centering and lowering of properly designed casing pipe assembly inside the bore hole drilled for construction of Gravel Packed tube well including the cost of providing and fixing of centraliser, and transportation of casing assembly etc. complete.				
	UADD SOR Vol (I)	Casing assembly composed of 150mm diameter blank and slotted G.I. Casing pipes	Meter	320.00	₹ 83.00	₹ 26,560.00
119	PHE SOR 2023 11.3	Supplying & Installation of Energy efficient five star BEE rating ISI Marked required capacity of Three Phase, 50 Hz, 415V, deep well submersible pump Steel body, suitable for 6" tube well with Control Panel Starter suitable for Submersible pump with dry run protection, single phase preventer, connections, including 3 mtr. submersible flat cable ISI marked 3 core copper wire, length equal to head of the pump at duty point + 3mtr. in single or double run (as per requirement of the set/control panel. The size of the cable should be so selected that voltage drop at motor terminal does not exceed the limit of the rated voltage) clamps, bore cap etc. as required as per specifications but excluding pipe, SS/ Nylon wire rope.				
	PHE SOR 2023 11.3.6	7.5 HP Head Mt. 129-52 Discharge LPM 60-270	Each	3.00	₹ 59,518.00	₹ 1,78,554.00
120	PHE SOR 2023 9.13	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				-
	PHE SOR 2023 9.13.5	65mm Dia				
	PHE SOR 2023 9.13.5.1	Horizontal	Each	3.00	₹ 1,484.00	₹ 4,452.00

	PHE SOR 2023 9.13.5.2	Vertical	Each	3.00	₹ 1,701.00	₹ 5,103.00
121	Chapter 7 Vol. 1 UADD SOR 2021 7.1	Providing, laying, Jointing & field testing of High Density Polyethylene pipes, (HDPE) conforming to IS 4984/ 14151/12786/ 13488 with necessary jointing material like mechanical connector or jointing pipes by heating to the ends of pipes with the help of Teflon coated electric mirror/ heater to the required temperature and then pressing the ends together against each other, to form a monolithic & leak proof joint by thermosetting process. It may be required to be done with Jacks/Hydraulic Jacks/ But fusion machine. (50mm & above fusion jointed & below 50mm mechanical jointed)				
	7.1.1	20 mm dia	RM	30.00	₹ 38.00	₹ 1,140.00
	7.1.2	25 mm dia	RM	102.00	₹ 45.00	₹ 4,590.00
	7.1.3	32 mm dia	RM	110.00	₹ 56.00	₹ 6,160.00
	7.1.4	40 mm dia	RM	150.00	₹ 70.00	₹ 10,500.00
	7.1.5	50 mm dia	RM	165.00	₹ 83.00	₹ 13,695.00
	7.1.6	63 mm dia	RM	300.00	₹ 127.00	₹ 38,100.00
	7.1.7	75 mm dia	RM	450.00	₹ 181.00	₹ 81,450.00
120	Chapter 14 Vol. 1 UADD SOR 2021 14.35	Providing & fixing cast iron single air valves , small orifice with screwed end as per IS : 14845-2000 including jointing & testing with cost of jointing material and rubber insertion all complete (PN-1.0)				
	14.35.1	25mm dia (PN- 1.0)	Each	5.00	₹ 868.00	₹ 4,340.00
121	Chapter 14 Vol. 1 UADD SOR 2021 14.24	Providing & fixing cast iron butterfly valves including jointing & testing with cost of jointing material such as bolts, nuts and rubber insertion all complete as per IS :13095-1991 (PN-1.0)				
	14.24.1	50mm dia	Each	5.00	₹ 1,964.00	₹ 9,820.00
	14.24.2	65mm dia	Each	8.00	₹ 2,119.00	₹ 16,952.00
122	Chapter 21 Vol. 2 UADD SOR 2021 21.16	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
	21.16.2	32 mm nominal bore				
	21.16.2.1	Horizontal	Each	5.00	₹ 523.00	₹ 2,615.00
	21.16.3	40 mm nominal bore				
	21.16.3.1	Horizontal	Each	5.00	₹ 639.00	₹ 3,195.00
	21.16.4	50 mm nominal bore				
	21.16.4.1	Horizontal	Each	5.00	₹ 1,023.00	₹ 5,115.00
123	Chapter 12 Vol. 1 UADD SOR 2021 12.5	Providing, Laying and Jointing non-pressure (NP4) RCC socket & spigot pipes with rubber gasket joint including testing of joints. [Conforming to IS ; 458-1988, ISI marked laying as per IS 783:1985)				
	12.5.1	150 mm dia	Per Meter	50.00	₹ 592.00	₹ 29,600.00
	12.5.2	225 mm dia	Per Meter	33.00	₹ 578.00	₹ 19,074.00
124	Chapter 19 Vol. 2 PWD SOR 2020 19.27	Constructing brick masonry road gully chamber 50x45x60cm with bricks in cement mortar 1:4 (1 cement : 4 sand) including 500x450 mm precast R.C.C. horizontal grating with frame complete as per standard design :				₹ -
	1 9. 2 7. 2	With fly ash bricks 100 key/cm2 strength	each	50.00	₹ 4,900.00	₹ 2,45,000.00
125	Chapter 19 Vol. 2 PWD SOR 2020 19.28	Constructing brick masonry road gully chamber 45x45x77.5cm with bricks in cement mortar 1:4 (1 cement : 4 sand) with precast R.C.C. vertical grating complete as per standard design :				
	1 9. 2 8. 2	With fly ash bricks 100 kg/cm2 strength	each	30.00	₹ 6,983.00	₹ 2,09,490.00
126	19.5 (MPPWD 2020 SOR)	Providing and laying cement concrete 1:3:6 (1 cement: 3 sand: 6 graded stone aggregate 20 mm nominal size) all-round PVC . pipes including bed concrete as per standard design:				
	1 9 . 5 . 1	110 mm dia	Metre	100.00	₹ 576.00	₹ 57,600.00
	1 9 . 5 . 2	160 mm dia	Metre	100.00	₹ 704.00	₹ 70,400.00
	1 9 . 5 . 3	200 mm dia	Metre	100.00	₹ 821.00	₹ 82,100.00

127	19.9 (MPPWD 2020 SOR)	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 sand) R.C.C. top slab with Cement Concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 sand : 4				
	19.9.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)				
	19.9.1.1	With well burnt bricks	Each	15.00	₹ 7,997.00	1,19,955.00
128	19.10 (MPPWD 2020 SOR)	Extra for depth for manholes. With Modular bricks class designation 40				
	19.10.1	Size 90x80 cm				
	19.10.1.1	With well burnt bricks	meter	15.00	₹ 6,176.00	92,640.00
					Total	98,86,225.00
	h	Horticulture Works.				
129	Vol (III) 11.1 Permanent Hedges:	Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with compost/manure, (compost/manure will be paid separately) and supplying and planting hedge plants (duranta, Clerodendrum, pedilanthus etc. at 30 cm apart including watering and maintenance for 3 months).	Metre	1200.00	₹ 278.00	₹ 3,33,600.00
130						
131	Vol (III) 11.3	Supplying, stacking and spreading of good earth for plantation at site including royalty and carriage earth measured in stacks will be reduced by 20% for payment.	Cum	5000.00	₹ 375.00	₹ 18,75,000.00
132	Vol (III) 11.4	Supplying and stacking sludge at site including royalty and carriage up to 1 km (sludge measured in stacks will be reduced by 8% for payment).	Cum	2500.00	₹ 213.00	₹ 5,32,500.00
133	Vol (III) 11.5	Supplying, stacking and spreading compost/manure from approved source, (manure measured in stacks will be reduced by 8% for payment)	Cum	2500.00	₹ 207.00	₹ 5,17,500.00
134	Vol (III) 11.6	Spreading only of Sludge manure or/and good Earth: Spreading of sludge farm yard manure or/ and good earth in required thickness (cost of sludge, farm- yard manure or/and good earth to be paid for separately).	Cum	10000.00	₹ 37.00	₹ 3,70,000.00
135	Vol (III) 11.8	Making Lawns including Ploughing and Dragging with 'Swagha' Breaking of Clod (Making lawns including ploughing and breaking of clod, removal of rubbish, dressing and supplying doobs grass or any other variety of grass roots and planting at 15 cm apart, including supplying and spreading of farm yard manure at rate of 0.18 cum per 100 Sqm) including as directed by Engineer-in-Charge.	Sqm	5400.00	₹ 65.00	₹ 3,51,000.00
136	Vol (III) 11.9	Maintenance of Lawns or Turfing of Slopes (Maintenance of lawns or turfing of slopes (rough grassing) for a period of one year including watering etc).	Sqm	5400.00	₹ 142.00	₹ 7,66,800.00
137	Vol (III) 11.10	Turfing Lawns with American/Carpet Grass, fine Grassing including Ploughing, Dressing (Turfing lawns with fine grassing including ploughing, dressing including breaking of clods, removal of rubbish, dressing and supplying doobs grass roots at 10 cm apart, including supplying and spreading of farm yard manure at rate of 0.6 cum per 100 Sqm) including maintenance one year.	Sqm	1200.00	₹ 59.00	₹ 70,800.00
138	Vol (III) 11.11	Providing and planting different variety of plants of approved quality and sizes as mentioned including making pits of required size at site, refilled with B.C. Soil mixture manuring and pesticide etc. complete (to be paid separately) including watering and 90 days maintenance from the date of final bill as per direction of Engineer-in- Charge complete in all respect (B.C. Mixture paidseparately).				
	Vol (III) 11.11.1	Shrubs :-				

		Bahunia Tomentosa, Beloperone Species, Caselpinnia Pulcherima, Caliandra Emarginata, Callandra Hybrida, Cassia Bi flora, Cassia Laevigata, Cestrum Nocturnum, Dombeya Mastersii, Euphorbia Caracasana, Euphorbia Pulcherima, Excorea bi color, Excorea tri color, Ficus Blackii, Ficus Reginold, Ficus Panda, Gardenia, Gulphinia, Jasminoides, Hamelia Pattens, Heliconia, Hibiscus Rosasinensis, Hibiscus Verigated, Hibiscus Viceroy, Jatropha Multifida, Largestomia Indica, Malpighia Coccigera, Murraya Exotica, Murraya Koeniggi, Murraya Sambucum, Mussaenda Erythrophylla, Nerium Oleander, Nyctanthus Arbortristis, Plumbago Capensis, Putranjeeva Roxburghii, Tabernaemontana Coronaria, Tabernaemontana Divaricata, Tecoma Gaudi Chaudi, Tecoma Stans, Thevetia Nerifolia, Thuja Compacta and equivalent plants.	Each	1500.00	₹ 357.00	₹ 5,35,500.00
	11.11.2	Creeper plants (height:30cm to 45 cm)				
		Allamanda Cathartica, Allamanda Grandiflora, Allamanda Violacea, Begonia Venustha, Boughan Villas (Variety : Butiana, Lady Mary Bearing, Mahaara, Mohan, Scarlet Queen Variagata, Glabra Formosa, Peruviana Odissi, Partha, Shubhra, Thimma, Spectabilis, L.N. Birla, Refulgens), Clerodendrum Splendens, Clerodendrum Thompsonae, Ipomea Purpurea, Jasminum Grandiflorum, Jasminum Humile (Yellow), Passiflora Caerulea (Rakhi Bel), Petrea Volubilis, Quis Qualis Indica, Tecoma Grandiflora, Veronia Elaegnifolia (Curtain Creeper), Mandvella, Garlic Creeper, Callimitis	Each	500.00	₹ 346.00	₹ 1,73,000.00
	11.11.3	Ground cover plants height: 30cm-45cm				
		Alpinia Verigated, Alternanthera species, Aspyragus Myerri, Aspyragus Springenii, Aspidistra, Canna (regular, Dwarf), Chlorodendron Inermii, Chlorophytum (Green), Chlorophytum verigated, Coffea Chinensis, Dianella Verigated, Durranta (Goldiana, Green, Verigated), Euphorbia Milli hybrid, Ipomea (Golden leaves), Iresine herbstii, Juniper Prostata, Juniper Africana, Ophiopogon plant, Ophiopogon jaburan, Portulacaria Afra (jade Plant), Schefflera Green, Schefflera verigated, Setcreasea Purpurea, Syngonium (Butterfly) species, Syngonium miniature, Syngonium Dwarf, Syngonium variegated, Tradescantia, Wadelia Trilobata, Zebrina Tradescantia, Pendasas, Spider Lily Black, Spider Lily verigated, Aclypha (Red, Green,Mini), Lantana (Red, Yellow, Purple, White, verigated), Haemalia Mini and similar plants.	Each	700.00	₹ 334.00	₹ 2,33,800.00
139	11.12	Edging with 2nd class Bricks, laid dry lengthwise Edging with 2nd class bricks, laid dry lengthwise, including excavation, refilling, consolidation, with a hand packing and spreading nearly surplus earth within a lead of 50 metres.	Mater	300.00	₹ 51.00	₹ 15,300.00
140	11.27	Construction rain water harvesting recharge trench cum recharge shaft/ well including grating passage joining storm water drain and trench having brick walls, RCC cover slab and filled with layers of filter media (size 75 mm to 100 mm), grating having brick walls and CC 1:2:4 base and PVC pipe shaft packed with gravel, provided with wire screen and bottom plug complete as per drawing, direction of the Engineer and MORT&H specifications sections 300, 1000, 1300, 1500, 1600 and 1700. (Dimension of rain water harvesting pit 6.5 m depth, 2.10-meter inner dia, wall width 375 mm and top slab thickness 150 mm)	Each	1.00	₹ 1,59,839.00	₹ 1,59,839.00
141	NSR Approved in Pedestrian Bridge Project	Providing & fixing of 40 mm thickness Basalt Stone Shot Blasted as per given design and patern including preparing the surface and levelling in the desired line, laid in 20mm thickness 1:2 cement mortar bed including cement float, machine cutting dressing, levelling, jointing, filling joint with matching colour cement slurry/cement mortar (1:2) inclusive of pointing the joint (Joints thickness 3mm) fixed over surface /concrete bed or as shown on the drawing, curing, finishing, champhored edges wherever necessary etc complete as directed by Engineer -in - charge.	Sqm	1200.00	₹ 3,891.00	₹ 46,69,200.00

142	NSR Taken from Maharaj wada (II) Project	Supply, installation, testing & commissioning of skid mounted fully Automatic Reverse Osmosis of output capacity 40 LPH with appropriate thickness designed at a minimum Flux at inlet and necessary recovery: With Centralized Water Coolers of SS 304 MOC with 80 LPH cooling capacity with inbuilt storage capacity as per system with insulation of required thickness & of appropriate material and with power supply of 220/230+/-10% volts, 1 phase 50 Hz A.C. supply	Each	4.00	₹ 91,523.00	₹ 3,66,092.00
143	NSR Approved in EEE Project	Providing & fixing of cast iron & ms fabricated decorative ornamental grill , partition, gates, railing, arches, brackets, benches, customised items & crown etc. as per drawings of make Dwarka India / Puja Industries / Gopi Intercast. instructions and Specifications- 1 - Cast iron material must follow FG-150 grade(as per isi specification) having hardness 135 to 165 BHN. 2 - Colour finishing - all parts must be first sand blasted or shot blasted to expose the metal surface than use epoxy primer for prevent the rust after than use again epoxy top coat for extra metal look in require antique shed with top coating of UV base clear lacquer to protect colour from UV rays i/c. cutting and fixing of members by nut bolts, welding with Co2 / M.I.G, grinding, smmoth finishing, transportation, labour, tools and plants etc. complete as per direction of Engineer-in-charge. 3 - All cast iron parts must have thickness of 22 to 30 mm (as per drawings), assembeled with 50x50 ms pipe & 25x25 square bar as required as per design & gate's having sliding arangements for opening and closing and it must be fitted with crown. & welded with co2/mig welding process & fully grinded for best finish.	KG	2500.00	₹ 175.00	₹ 4,37,500.00
					Total	₹ 1,14,07,431.00
					Grand Total	₹ 32,40,39,567.56

ESTIMATE OF CONSERVATION OF MAHARISHI SANDIPANI ASHRAM AT UJJAIN (MP)

Conservation of old Temple & Kund

Sr. No.	Intach SOR 2016	Descriptions	Unit	Qty.	Rate	Amount
	A	Kund and Restorration				
	a	SITE CLEARANCE				
1	2.1	Clearance of debris around the heritage building by excavation upto depth 1.50mtr to 2.00 mtr carefully without damaging the buried architectural parts of the building and collect all the intact parts at proper place for reuse at the time of restoration work as per direction of Engineer incharge.	Cum	1250.00	₹ 433.31	₹ 5,41,642.50
2	UADD SOR 2025-26 Vol (ii) 22.1	Raking out joints of stone masonry surface to the required width and depth, with due care and precaution, by mechanical / manual means, including preparing and cleaning the surface for re-pointing/ refilling of joints, including disposal of rubbish to the dumping ground within 50 metre lead.	Sqm	550.00	₹ 37.00	₹ 20,350.00
	b	SURFACE CLEANING AND BONDING				
3.00	UADD SOR 2025-26 Vol (ii) 22.1	Providing and applying antifungal wash treatment using 3% solution of sodium pentachloro phenate, of reputed brand and manufacturer, on cleaned sand stone surface at desired locations as per direction of Engineer-in-charge (The rate is inclusive of all materials & labours involved except scaffolding).	Sqm	790.00	₹ 42.00	₹ 33,180.00
4	2.1	Removing of old sulphated lime wash/white or colour wash in multiple applications without causing damage to the below stone/brick/plastered surface. Scrubbing (not by scraping which leaves surfaces scarred and scratched) with bristle brushes and hot water (Care to be taken if the surface is weak one it will break down). Hot water should be used if the limewash has an oil or tallow binder. Gentle cleaning with air abrasive tools can be used if the wall surface is not very week.The final clean will almost invariably have to be carried out by hand scrubbing and rinsed with clean water on completion. The work should be done under supervision of a trained conservator.	Sqm	125.00	₹ 420.01	₹ 52,501.50
5	2.2	Removal of rust, existing coatings, mill scale, dirt, oil, grease, and other contaminants from steel sections/stone surface using Micro sand with the help of pressure pump.	Sqm	2250.00	₹ 278.94	₹ 6,27,608.25

6	UADD SOR 2025- 26 Vol (ii) 22.3	Cleaning the sand stone surface and removing dirt, dust, bird dropping, grease, oil, algae, fungus, monkey beats, vegetable growth etc., including providing, applying and washing the surface with liquid Ammonia Chemical of 5% solution and other chemical cleaning agent as approved by Archaeological Survey of India/ Engineer-in-charge, of approved brand and manufacturer, with the help of required scrubbers and also cleaning with machine operated water jet mixed with desired quantity of fine silica where ever required, without causing any scratching/ damage to the stone surface and finally washing the surface with clean water with the help of pressure jet machine, complete in all respect, including taking all precautions to safeguard ventilators, windows, doors etc. by suitable covering so as to avoid any damage to the building/structure, all as per direction of Engineer-in-charge (The rate is inclusive of all materials & labours involved except scaffolding).	Sqm	112.00	₹ 1,200.00	₹ 1,34,400.00
7	2.9	Cleaning of Araish work without wall/border painting				
		Cleaning smog, black soot, etc with help of Di-ionized soap or suitable solvent	Sqm	95.00	₹ 304.75	₹ 28,951.16
8	3.0	Construct two tanks at ground level. One for slaking of lime and other for storage of slaked lime. Slake the lime in the tank mixing it with water. Water should be sufficiently more and above the lime. Mix and stir with wooden solid pole for three days under the supervision of conservation Architect. Sieve the sand passing through 4.75mm sieve set. Take one part of slaked lime in a container and 3 parts of sieved sand in the same size container Place these materials in a lime mortar miller Grind the mix for a 12 to 15 minutes Remove the mix from the miller and stack it in a storage tank for maturity period of 4 to 5 days.				
		A good aggregate for a Lime Mortar should be with angular grains and free of contaminants such as salt and organic matter. The aggregates should be well graded sand typically has grain sizes between 4mm and 0.125mm, with the largest proportion of grains at the mid-point sieve fractions.				
	3.5	Lime Mortar 1:2 (1 Slaked lime: 2 Coarse Sand)	Cum	60.00	₹ 5,693.52	₹ 3,41,611.02
9	5.1	Traditional brick masonry in nanakshahi or lakhori bricks in lime mortar in proportion similar to the existing traditional lime mortar 1:1:1 (lime :1 surkhi: 1 finesand)	Cum	25.00	₹ 21,116.30	₹ 5,27,907.38
10	6.6	Stone work in plain ashlar masonry in superstructure in lime mortar 1:1:1 (1 lime:1 surkhi:1 coarse sand) including pointing with lime mortar and an admixture of pigmen matching the stoneshade.				
	6.6.2	Both face dressed				
	6.6.2.1	Red sand stone	Cum	200.00	₹ 87,383.05	₹ 1,74,76,610.40
11			Sqm	100.00	₹ 466.68	₹ 46,668.00
12			Sqm	100.00	₹ 674.97	₹ 67,497.00

13	UADD SOR 2025- 26 (Vol-2) 22.2	Providing and fixing double scaffolding system (cup lock type) on the exterior side of building/ structure, up to 25 metre height, above ground level, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm Dia M.S. tube, placed 1.5 metre centre to centre, horizontal & vertical tubes joint with cup & lock system with M.S. Tubes, M.S. tube challis, M.S. clamps and staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work of cleaning and/ or pointing and/ or applying chemical and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connecting with the building etc, wherever required, if feasible, for inspection of work at required locations with essential safety features for the workmen etc., complete as per directions and approval of Engineer-in- charge.	Sqm	1500.00	₹ 195.00	₹ 2,92,500.00
14	8.7	Providing and Making Gola (batta) in lime concrete using 50% lime surkhi / sand mortar 1:2 with 12mm brick aggregate, along joints of wall and terrace finished with lime surkhi mortar 1:2 plaster with gur, gugal, methi etc as per traditional practice in concave /approved shape of (size 75mmx75mm)	Sqm	50.00	₹ 231.78	₹ 11,588.85
15	8.8	Making khurras 45 x 45 cm with average minimum thickness of 10 cm lime concrete 1:3:6 (1 Slaked lime :3 surkhi : 6 coarse sand) with graded stone aggregate 20mm nominal size over PVC sheet 1m x 1m x 400 micron, finished with 12mm lime plaster 1:3 (1 Slaked lime : 3 Coarse sand), rounding the edges and making and finishing the outlet complete.	Each	4.00	₹ 352.73	₹ 1,410.91
16	9.2	Lime plaster 1:1:1 (1 lime putty : 1 surkhi: 1 finesand)				
	9.2.1	20mm thick in two coarses. First coat will be in 12mm and second coat will be in 8 mm.	Sqm	95.00	₹ 1,303.07	₹ 1,23,792.03
17	9.9	Making cornice band with ornamental design as per the conservation Architect's design with lime plaster (1lime:3 finesand)				
	9.9.1	Size 150mm wide and 50mm average thick	M	150.00	₹ 680.91	₹ 1,02,136.95
18	10.1	Stone work (Machine cut edges) for wall lining (Veneer work) upto 10m height, backing filled with a grout of average 12 mm thick lime mortar 1:2 (1 lime : 2 coarse sand) including pointing in lime mortar 1:2 (1 lime : 2 stone dust) with an admixtureof pigment matching the stone shade : (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) :				
	10.1.5	30mm Thk	Sqm	75.00	₹ 2,155.46	₹ 1,61,659.13

19	10.6	Marble work gang saw cut (polished and machine cut) of thickness 18 mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3(1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).	Sqm	80.00	₹ 2,750.36	₹ 2,20,028.40
20	10.7	Marble work gang saw cut (polished and machine cut) of thickness 18 mm for cladding over dome (veneer work), backing filled with a grout of average 20 mm thick in lime mortar 1:3 (1 lime : 3 coarse sand), including pointing with lime mortar 1:2 (1 lime : 2 arble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).	Sqm	80.00	₹ 3,300.69	₹ 2,64,054.96
21	10.8	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in lime mortar 1:2 (1lime : 2 coarse sand), including making the necessary chases in stone and holes in walls wherever required	Kg	1500.00	₹ 612.14	₹ 9,18,216.00
22	11.1	Repairing of .5mm to 5 mm wide open joints / cracks in all types of sand stone masonry work including scrapping of loose jointing material from cracks. The inner side to be filled/pointed with polymer mixed lime mortar with wooden trowel and fixing grouting nipple from outer side as directed by Architect. Then apply polymer based lime mortar by injection grouting through 5mm diameter nozzle through the pre fix nipple up to total thickness of existing stone wall and removing the PVC nipple pipe, lime moratr of mix lime & sand 1:1 mix with polymer using katha or other additives to achieve require matching colour and including cost of all materials, labour, machinery, equipment, curing and cleaning the site as directed.	M	100.00	₹ 64.99	₹ 6,498.90

23	14.1.3	Starting at low point from the roof, unroll the APP membrane 3mm (Non Woven Polyester of 160 gsm) (50 kgs)(1 Mtr X 10 Mtr) roll once the priming coat is dried. Align the roll correctly and RE- roll it half in alignment before torching. Avoid shifting of the membrane while torching. Use gas burner to heat substrate and underside to softening points. When the embossing disappears, roll forward and press firmly against substrate to bond from the lower end toward and press firmly against substrate to bond from the lower end towards the higher end. Ensure sufficient bleed on side and end over laps. Once the half of the roll is torched properly to the substrate, unroll the balance roll and repeat the process.	Sqm	80.00	₹ 383.34	₹ 30,666.96
24	MP PHE SOR 2023 29.32	Cleaning of Silt, sludge brick bats, polythene bags, garbage etc. from choked sewer manholes / sewer drains & Nallahs/ wet well of SPH/ Anaerobic & Facultative Pond of STP with all required T&P such as bucket, manila rope, and all required safety equipment such as safety belt, gas mask, oxygen cylinder etc. including disposal of silt/ sludge upto 50 mtr lead & 1.5 mtr. lift as directed by Engineer-in-Charge including dewatering but excluding dat (plugging of sewer pipe line)				
	MP PHE SOR 2023 29.32.1	Depth up to 1.5 mtr	Cum	1575.00	₹ 550.00	₹ 8,66,250.00
	MP PHE SOR 2023 29.32.2	Extra rate for depth 1.5 m to 3m or part	Cum	787.50	₹ 30.00	₹ 23,625.00
	MP PHE SOR 2023 29.32.3	Extra rate for depth 3m to 4.5 m or part	Cum	787.50	₹ 59.00	₹ 46,462.50
				Grand Total		₹ 2,29,67,817.79

ESTIMATE OF CONSERVATION OF MAHARISHI SANDIPANI ASHRAM AT UJJAIN (MP)

STP Plant

Sr. No.	SOR Ref	Descriptions	Unit	Qty.	Rate	Amount
1	30.1.1 STP MBBR Conventional Technology	Conventional MBBR STP Technology Primary Treatment – -Manual Bar Screen -Oil, Grease Trap and Grit Removal System Secondary Treatment – -Raw Sewage Transfer Pump (01set) - Air Blower (01set) and Diffuser System - Media -Tube Media/Lamella -Chlorine Dosing system with Chlorine Dosing Pump(01set) -Sump Pump (01set) -Plant/Interconnecting Piping And Valves -Manual/PLC Based Electrical Control Panel -Incoming/Outgoing Feeder -Cable Laying With Cable Tray -Earthing Systems				
		Pressure Gauges -Level Switches -Online Rota meter -Air Rota meter -Flow Meter -Filter Feed Pump (01set) -Multi Grade Sand Filter -Activated Carbon Filter -Micro Filtration system Sludge Handling System – -Sludge Recycling Pump (01set) -Sludge Feed Screw Pumps (01set) -Filter Press System				
	30.1.1.8	500 KLD	Each	1.00	₹ 61,52,390.00	₹ 61,52,390.00
				Total	Total	₹ 61,52,390.00

ESTIMATE OF CONSERVATION OF MAHARISHI SANDIPANI ASHRAM AT UJJAIN (MP)

Solar Plant

Sr. No.	SOR Ref	Descriptions	Unit	Qty.	Rate	Amount
	a	Solar Plant				
1	UADD SOR 2025- 26 18.7	Supply, Installation, Testing and Commissioning of on grid Solar Photo voltaic Power Plant conforming to MNRE specifications as amended, consisting of Mono/Poly Crystalline 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 Photo voltaic Module of capacity 330Wp 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 350-800V DC Input voltage range and 400 VAC, three phase, 4wire, 50Hz+/-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	KWP	100.00	₹ 47,840.00	₹ 47,84,000.00
					Total	₹ 47,84,000.00

ELECTRICAL WORK		
Sr No	Item Description	AMOUNT SOR
1	INTERNAL ELECTRICAL WORK	23888409
2	EXTERNAL ELECTRICAL WORK	26527628
3	Façade Lighting	41705834
4	CCTV	5089973
5	Fire Fighting System	5581670
6	Fire Alarm System	3086234
7	LIFT / ELEVATORS	3065670
	GRAND TOTAL	108945418

Item No.	Sub item no.	Description of Items	Unit	Quantity	Rates (in Rs.)	Amount
1.2		Point Wiring in surface rigid P.V.C. conduit system with Modular Accessories				
		Point wiring including switches, sockets, lamp holders/ceiling roses etc but excluding metallic switch box and Face Plate with 1.5 Sq. mm. PVC FRLSH insulated cable with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC FRLSH insulated copper earth continuity conductor of green colour inside conduit including painting and making the surface good as required as per specification for :-				
	1.2.1	Light Point/Fan Points.				
		a) Short point	Each	80	354.00	28320
		b) Medium point	Each	150	642.00	96300
		c) Long point	Each	100	981.00	98100
	1.2.2	(Light point/fan points) looping point				
		a) Secondary short point	Each	240	177.00	42480
		b) Secondary medium point	Each	100	321.00	32100
		c) Secondary long point	Each	175	491.00	85925
	1.2.3	3 Pin 6 Amp socket outlet on Separate Board				
		a) Short point	Each	80	388.00	31040
		b) Medium point	Each	80	676.00	54080
		c) Long point	Each	50	1015.00	50750
	1.2.4	Call Bell / Buzzer Points				
		a) Short point	Each	10	372.00	3720
		b) Medium point	Each	15	666.00	9990
		c) Long point	Each	25	1009.00	25225
	1.2.5	Twin Control light points				
		a) Short point	Each	10	377.00	3770
		b) Medium point	Each	20	737.00	14740
		c) Long point	Each	40	1167.00	46680
	1.2.6	Point wiring excluding metallic switch box, sheet but including switches, sockets for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC FRLSH insulated cable with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI marked of suitable size and 1.5 Sq. mm. PVC FRLSH insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board.	Each	120	254.00	30480
	1.3.7	Circuit Wiring (For Flush and Modular)				
		Wiring for circuit wiring with PVC FRLSH insulated cable with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) of ISI marked suitable size including painting and making the surface good as required etc. as required as per specification				
		a) 2x2.5 Sq.mm.	meter	4000	133.00	532000
		b) 4x2.5 Sq.mm.	meter	3000	209.00	627000
		c) 6x2.5 Sq.mm.	meter	900	286.00	257400
		d) 8x2.5 Sq.mm.	meter	500	362.00	181000
	1.5.3	POWER WIRING IN SURFACE RIGID P.V.C. CONDUIT SYSTEM WITH MODULAR ACCESSORIES				
		Point wiring (excluding metallic switch box & sheet) for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC FRLSH insulated cable with copper multi strand conductor ISI marked in Surface rigid P.V.C. Conduit (MMS) ISI Marked of suitable size including painting and making the surface good as required with 16/20 Amp. Modular Switch & Socket 6/16/20 Amp. of ISI Marked and 4 Sq. mm. PVC FRLSH insulated copper earth continuity conductor of green colour inside conduit as per specification for:-				
		On Separate Board				
		A. Short Point	Each	40	696.00	27840
		B. Medium Point	Each	25	1197.00	29925
		C. Long Point	Each	30	1813.00	54390
		D. Extra Long -I	Each	30	2448.00	73440
		E. Extra Long -II	Each	30	2865.00	85950
		F. Extra Long -III	Each	50	3303.00	165150
	1.5.4	Same board switch-socket 6/16 Amp	Each	5	388.00	1940
	1.6.3	POWER WIRING IN CONCEALED RIGID P.V.C. CONDUIT SYSTEM WITH MODULAR ACCESSORIES				
		Point wiring (excluding metallic switch box & sheet) for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC FRLSH insulated cable with copper multi strand conductor ISI marked in Concealed rigid P.V.C. Conduit (HMS) ISI Marked of suitable size including painting and making the surface good as required with 16/20 Amp.				
		Modular. Switch & Socket / S.S. Combined 6/16/20 Amp. of ISI Marked and 4 Sq. mm. PVC FRLSH insulated copper earth continuity conductor of green colour inside conduit as per specification for:-				
		On Separate Board				
		A. Short Point	Each	40	777.00	31080
		B. Medium Point	Each	25	1366.00	34150
		C. Long Point	Each	30	2072.00	62160
		D. Extra Long -I	Each	30	2601.00	78030
		E. Extra Long -II	Each	30	3121.00	93630
		F. Extra Long -III	Each	50	3646.00	182300
	1.6.4	Same board switch-socket 6/16 Amp	Each	5	374.00	1870
1.7		Supplying and fixing PVC conduit as required confirming to IS 9537 (Part-3), ISI marked along with accessories on surface etc. as required.				
	1	PVC conduit 20 mm (HMS)	Metre	1000	27.00	27000
	2	PVC conduit 25 mm. (MMS)	Metre	500	34.00	17000
	3	PVC conduit 32 mm. (MMS)	Metre	500	48.00	24000

1.8		Supply and fixing PVC conduits required confirming to IS 9537 (Part-3), ISI marked along with the accessories in concealed system etc. as required.				
	1	PVC. conduit 20 mm (HMS)	Metre	3500	39.00	136500
	2	PVC. conduit 25 mm (HMS)	Metre	4250	52.00	221000
	3	PVC. conduit 32 mm (HMS)	Metre	1000	72.00	72000
4.3		CIRCUIT WIRING IN EXISTING CONDUIT / PVC CASING CAPPING				
		Supplying and drawing single core PVC FRLSH insulated cable with copper multi strand conductor ISI marked in existing rigid conduit/PVC casing capping in surface or concealed as per specification.				
	4.3.1	1.5 Sq mm wire				
	1	1 X 1.5 sq mm	meter	5500	23.00	126500
	2	2 X 1.5 sq mm	meter	1000	46.00	46000
	3	3 X 1.5 sq mm	meter	1000	68.00	68000
	4	4 X 1.5 sq mm	meter	1000	91.00	91000
	4.3.2	2.5 Sq mm wire				
	1	1 X 2.5 sq mm	meter	2200	37.00	81400
	2	2 X 2.5 sq mm	meter	2200	73.00	160600
	3	3 X 2.5 sq mm	meter	1000	110.00	110000
	4	4 X 2.5 sq mm	meter	1000	146.00	146000
	4.3.3	4.00 Sq mm wire				
	1	1 X 4.00 sq mm	meter	3500	56.00	196000
	2	2 X 4.00 sq mm	meter	250	110.00	27500
	3	3 X 4.00 sq mm	meter	120	164.00	19680
	4	4 X 4.00 sq mm	meter	150	219.00	32850
5.2		SUB-MAIN IN CONCEALED RIGID PVC CONDUIT IN COPPER CONDUCTOR				
		Wiring for sub-mains with PVC FRLSH insulated cable with copper multi strand conductor ISI marked in recessed / concealed rigid PVC ISI marked conduit of suitable size (Conduit included) including connection painting and making the surface good as required as per specification				
	5.2.1	2 WIRE SUB-MAIN				
	2	4.0 sq. mm.	meter	200	272.00	54400
	3	6.0 sq. mm.	meter	600	349.00	209400
	5.2.4	4 WIRE SUB-MAIN				
	2	4.0 sq mm cable in 20 mm conduit	meter	250	408.00	102000
	3	6.0 sq mm cable in 25 mm conduit	meter	250	551.00	137750
	4	10.0 sq mm cable in 25 mm conduit	meter	500	865.00	432500
	5	16.0 sq mm cable in 25 mm conduit	meter	350	1224.00	428400
8		Supplying of ISI Marked of Moulded Case Circuit Breaker (MCCB) suitable for 3 phases, 3 pole, 50 Hz, 415 Volts, AC supply with respective interrupting capacity (KA) at 415 Volts cited against their range standard conforming to IS - 8828				
8.2	8.2	MCCB with Breaking Capacity 25 KA at 415 V				
	1	Current Rating -25 to 100 Amps & 80% -100% adjustable	Each	30	5482.00	164460
8.6	8.6	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of 'C' series suitable for 240/415 Volts, 50 Cycle, 10 kA Value AC supply conforming to IS : 8828 : 1996, IEC : 60898 :2002 but without enclosures :-				
	8.6.1	SINGLE POLE (SP)				
	2	6 Amp to 32 Amp, 10kA Rating	Each	10	180.00	1800
	3	For 40 Amps. only, 10kA Rating	Each	10	436.00	4360
	8.6.3	DOUBLE POLE (DP)				
	2	6 Amp to 32 Amp, 10kA Rating	Each	10	639.00	6390
	8.6.6	FOUR POLES(FP)				
	2	6 Amp to 32 Amp, 10kA Rating	Each	10	1423.00	14230
	3	For 40 Amps, 10kA Rating	Each	7	1951.00	13657
	4	50 Amp to 63 Amp, 10kA Rating	Each	18	2021.00	36378
8.9	8.9	Supply of powder coated sheet steel enclosure SPN MCB DB inclusive of Busbar, Neutral bar, Earth bar & two earth terminals etc. complete as per IS:13032 (exclusive of MCB & isolator)-				
	2	4 way single door	Each	6	430.00	2580
	5	8 way double door IP 43 protection	Each	6	923.00	5538
	6	12 way double door IP 43 protection	Each	1	1214.00	1214
	7	16 way double door IP 43 protection	Each	1	1580.00	1580
8.10	8.10	Supplying of approved make TPN MCB DB Metal Double Door IP 43 Protection with provision for FP MCB/isolator/RCCB/RCBO as incomer and SP MCBs as outgoing inclusive of Busbar, Neutral bar, Earth bar, connection copper wire not less than 16 sq. mm & two earth terminals etc. complete as per IS:13032(exclusive of MCB & isolator):-				
	2	4 Way (8+12)	Each	5	3978.00	19890
	3	6 Way (8+18)	Each	5	1545.00	7725
	4	8 way (8+24)	Each	15	6336.00	95040
	5	12 way (8+36)	Each	10	9019.00	90190
8.12	8.12	Supplying of powder coated Vertical TPN MCB DB Metal Double Door with IP 43 protection with MCCB 100A TP 10kA as incomer and space for SP/TP MCBs as outgoing (without MCCB/MCBs) inclusive of busbar &connections etc without MCCB:-				
	1	4 way with MCCB	Each	1	10326.00	10326
	2	8 way with MCCB	Each	5	11627.00	58135
	3	12 way with MCCB	Each	1	15733.00	15733
8.16		Supplying and installing of RCBOs (Residual current circuit breaker with overload and short circuit protection) ISI marked complete as per I.S. standard confirming to IEC:61009-2-1 & IS:12640-2:2001,240/415V 50 Hz with 10 kA short circuit withstand capacity for earth leakage, overload & short circuit protection including connection in existing enclosure in approved manner as per specification.				
	8.16.2	FP (8 module)				

	2	4 pole 25-32 Amps, 30 mA sensitivity	Each	5	4133.00	20665
	3	4 pole 40 Amps, 30 mA sensitivity	Each	20	4199.00	83980
	4	4 pole 63 Amps, 30 mA sensitivity	Each	50	5030.00	251500
8.17		FIXING OF SFUs, DBs, BUSBAR, MCCBs, MCBs, ISOLATORS & RCBOs				
		Fixing of metal clad enclosure on 25 X 5 mm flat iron clamps including supplying and fixing of clamps as required duly embedded in masonry including cable connection and other required material as per specification :-				
	1	16 Amps SP/DP Switch /SPN DB up to 4 way	Each	300	202.00	60600
	2	32 Amps DP switch /SPN DB up to 8 way /16 Amp TPN DB up to 3 way per pole or 16 Amps TP or TPN switch / 16 Amps 415 V Isolator	Each	120	223.00	26760
	3	32 Amps TP or TPN switch/ 32 Amps 415 V Isolator / 16 Amps TPN DB up to 6 way per pole /32 Amps 415 Volt busbar 4 way	Each	100	245.00	24500
8.18		Fixing of metal clad enclosure on 25X 25 X 5 mm angle iron clamps including supplying and fixing of clamps as required duly embedded in masonry including cable connection and other required material as per specification :-				
	1	Fixing of 63 Amps TP or TPN main switches/ DB 63 Amps. 240/415 Volt 4 to 8 way or 63 Amps change over switch /63 Amps 415 Volt Isolator /30 Amps 415V TPN DB up to 6 way per pole and busbar 4 way	Each	50	396.00	19800
	2	Fixing of 100 Amps TP or TPN main switch or 100 Amps change over switch /100 Amps 415 Volt Isolators and busbar 4 way	Each	50	580.00	29000
	3	Fixing of 200 Amps TP or TPN main switch or 200 Amps change over switch /200 Amps 415 Volt Isolators and busbar 4 way	Each	50	809.00	40450
8.19		Fixing of metal clad enclosure on 35X 35 X 5 mm angle iron clamps including supplying and fixing of clamps as required duly embedded in masonry including cable connection and other required material as per specification :-				
	1	Fixing of 300/400 Amps TP or TPN main switch or 300/400 Amps change over switch /300/400 Amps 415 Volt Isolators and busbar 4 way	Each	50	841.00	42050
	2	Fixing of 500/600 Amps TP or TPN main switch or 500/600 Amps change over switch 500/600 Amps 415 Volt Isolators and busbar 4 way	Each	50	828.00	41400
8.20		Fixing of MCB /MCCB/ Isolator				
	1	Fixing of MCB / Isolator SP/DP in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete (Labour only)	Each	100	33.00	3300
	2	Fixing of MCB /MCCB Isolator TP /TPN/FP in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete.	Each	100	66.00	6600
8.21		Labour charges for fixing sheet steel enclosure, MCB DB surface mounting type , as per accepted practice on 25x5mm flat iron clamps duly embedded in wall, cable connection etc. complete.				
		FOR S. No :-				
	1	8.5 (1) to 8.5 (4)	Each	100	202.00	20200
	2	8.5 (5) & 8.5 to 8.6 (2)	Each	100	223.00	22300
	3	8.6 (3), 8.6(4) & 8.7 (1)	Each	100	245.00	24500
8.22		Labour charges for fixing sheet steel enclosures, MCB DB surface mounting type , as per accepted practice on 25x25x 5 mm angle iron clamp , including supplying and fixing of clamps duly embedded in wall, cable connection etc. complete :-				
		FOR S. No :-				
	1	8.5(6) & 8.5(7), 8.6(5) to 8.6 (7) 8.7(2) & 8.7(3) & 8.8(1) to 8.8 (3)	Each	500	396.00	198000
8.23		Labour charges for fixing sheet steel enclosures, MCB DB flush mounting type , as per accepted practice, duly embedded and end plate completely flushed in wall, cable connection etc. Complete :-				
		FOR S. No :-				
	1	8.5(1) to 8.5(5), 8.6(1) to 8.6 (5) & 8.7(1)	Each	100	518.00	51800
	2	8.5(6) & 8.5(7), 8.6(6) to 8.6(7), 8.7(2) to 8.7(3) & 8.8(1) to 8.8(3)	Each	100	737.00	73700
9.4		Supplying and fixing as per specification Call bell / buzzer with necessary materials complete.				
	1	Buzzer	Each		90.00	0
	2	Ding Dong bell	Each	25	155.00	3875
	3	Musical bell	Each		327.00	0
	4	Remote/cordless bell	Each	25	915.00	22875
9.6(b)		Supplying and laying of submersible flat cable ISI marked 3 core copper wire of suitable size with proper clamping of approved make.				
	2	4.0 sq.mm multi strand	Metre	500	153.00	76500
	3	6.0 sq.mm multi strand	Metre	350	220.00	77000
9.8		Supplying and fixing 3 pin plug top ISI marked				
	1	6 Amp 250 Volt 3 Pin	Each	50	61.00	3050
	2	16 Amp 250 Volt 3 Pin	Each	50	112.00	5600
9.10		Supplying and fixing as per specification Caution / Danger Board as required & design with necessary material complete.				
	1	Small Size	Each	10	85.00	850
	2	Large Size	Each	15	165.00	2475
9.11		Supplying and fixing as per specification polycarbonate Ceiling rose 3 Plate of approved make ISI marked with necessary material complete.	Each	100	24.00	2400
9.17		Supply and fixing of mixed die-electric ultra-heavy duty APP capacitor 440Volt, 3 Ph., peak inrush current up to 500 x In, over current up to 3 x In(normal current), operating losses total not more than 0.35 W/kVAR, operating life not less than 300000 hrs, switching 20000 operation/year, as per IS:13340-1993, IS:13341-1992, IS:13585-1994, of approved make as required as per specification				
	1	5 to 25 kVAR bank	Per kVAR	160	759.00	121440

9.18		Supply and fixing of MPP - H heavy duty capacitor 415 Volt, 3 Ph., peak inrush current up to 250 x In, over current up to 1.8 x In(normal current), operating losses total not more than 0.35 W/kVAR, switching 8000 operation/year, as per IS:13340-1993, IS:13341-1992 of approved make as required as per specification				
	1	1 to 4 kVAR bank	Per kVAR	100	364.00	36400
	2	5 to 25 kVAR bank	Per kVAR	100	308.00	30800
9.19		Supplying and fixing of capacitor duty contactor of approved make in existing power factor/LT panel including connections etc.as required as per specification.				
	1	Upto 3 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	4	1469.00	5876
	2	For 5 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	4	1538.00	6152
	3	For 8.5 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	4	1781.00	7124
	4	For 10 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	4	1900.00	7600
	5	For 12.5 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	4	1988.00	7952
	6	For 15 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	8	2588.00	20704
	7	For 20 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	5	3031.00	15155
	8	For 25 KVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	5	3400.00	17000
9.20		Supplying and fixing of APFC relay 1A/5 A site selectable, measurement of individual current and voltage harmonic (THD), capacitor failure indication, In-built temperature sensor of approved make in existing power factor Panel including connections etc. as required as per specification as mentioned below :				
	1	8 Step APFC relay (144 x144mm)	Each	1	10717.00	10717
	2	Automatic power factor relay 12 Steps 230V 144 x 144mm	Each	1	17079.00	17079
9.25		Supplying and drawing following pair,0.5 Sq mm PVC Insulated copper conductor unarmoured telephone cable in existing surface / concealed, steel / PVC Conduit as required.				
	3	4 Pair	meter	1400	63.00	88200
	4	10 Pair	meter	300	97.00	29100
9.26		supplying and drawing Co-axial T.V. Cable RG-6 Grade , 0.7 mm Solid Copper conductor PE Insulated , Shielded with fine lined copper braid and protected with PVC Sheath in the existing surface / concealed ,steel / PVC. Conduit as required.	meter	1500	24.00	36000
9.27		Supply installation, testing and commissioning of 0.5 mm size solid annealed copper, jelly filled telephone cables , polythene insulated, petroleum jelly filled with poly-al laminate moisture barrier, polythene sheathed, armoured polythene jacketed telephone cables as per DOT specifications of following sizes				
	1	10 Pair	Metre	100	143.00	14300
	2	20 Pair	Metre	100	208.00	20800
9.28		Supply, installation testing and commissioning of telephone tag block krone connector with enclosure complete as mentioned below:-				
	1	10 Pair	each	5	780.00	3900
	2	20 Pair	each	5	1040.00	5200
	3	30 Pair	each	5	1300.00	6500
	4	50 Pair	each	5	2599.00	12995
	5	100 Pair	each	5	3899.00	19495
	6	200 Pair	each	5	6498.00	32490
9.29		Supply, fixing and testing RJ - 11 telephone jack single with shutter F.T	each	100	91.00	9100
9.30		Supply, fixing and testing of RJ 11 telephone jack modular (1 Module)	each	100	195.00	19500
9.31		Supply, fixing and testing of T.V. Outlet F. T	each	50	61.00	3050
9.32		Supply, fixing and testing of T.V. outlet modular (1Module)	each	50	149.00	7450
9.33		Supply, installation testing and commissioning RJ - 45 computer jack cat 6 with shutter modular (1Module)				
	1	RJ - 45 computer socket cat 6 with shutter modular (1Module)	each	200	337.00	67400
	2	RJ - 45 computer socket cat 6 tool less connection (1Module)	each	250	471.00	117750
9.34		Supply, installation testing and commissioning RJ - 45 computer jack cat 6 with shutter modular (2Module)	each	250	606.00	151500
9.45		Supplying and fixing step type Modular electronic, Fan regulator single/double module including connection etc. as required on existing board				
	1	450 Watt	Each	160	242.00	38720
9.46		Supplying, erection and testing electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required confirming to IS :374/1979 with up-to-date amendments.				
	1	Ceiling Fan (Energy Saver)-1200 mm Sweep with minimum air delivery 210 m³/min	Each	160	2231.00	356960
9.47		Supplying, erection and testing Wall Mounting fan complete with Wall Bracket, canopy, blades, speed Regulator etc. A.C 230-250 volts with connections and including raw bolt/Anchor hole fastener etc. complete finished and as required.				
	1	300 sweep	Each	20	2704.00	54080
	2	400 sweep	Each	10	2974.00	29740
9.48		Supplying, erection and testing Cabin fan oscillating type with base, blades, guard, speed regulator etc. AC 230-250 volts with connections and including raw bolt/Anchor hole fastener etc. complete finished and as required.				
	1	300 sweep	Each	10	2569.00	25690

9.50		Supplying, erecting and testing Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fasteners etc. complete finished and as required.				
	1	300mm sweep 900 RPM	Each	30	2569.00	77070
	3	450mm sweep 900 RPM	Each	5	4597.00	22985
11.1		Earthing with G.I. Earth pipe 4.5 meter long and 40 mm dia with masonry enclosure in cement mortar, cover plate having locking arrangement on the top etc.(but without charcoal or coke and salt) complete as required.	Each	16	7745.00	123920
11.2		Add Extra for using salt and charcoal / coke for pipe earth electrode as required including excavation & refilling.				
	1	Excavation 4.5m by manual labour	Each	10	1457.00	14570
	2	Excavation by making hole with Auger	Each	10	1403.00	14030
11.3		Earthing with G.I. Earth plate 600mm X 600mm X 6mm thick including accessories and providing masonry enclosure in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 meter long etc. (but without charcoal or coke and salt) complete as required.	Each	10	4755.00	47550
11.5		Add Extra for using salt and charcoal / coke for G.I. Plate or Copper plate earth electrode as required including excavation & refilling the pit in all type of soilure.	Each	10	1005.00	10050
11.6		Supplying and laying 4.0mm (8 SWG) copper wire at 0.5 meter below ground level as conductor earth electrode including soldering etc. as required.	meter	160	88.00	14080
17.6		Supplying and fixing of approved make modular type G.I. metal box 1.2mm minimum thick and depth 50mm for single row boxes and 60mm depth for two/three row boxes earth terminal stud with nut and washer with modular base and cover plate including fixing in concealed etc. as required for:-				
	1	1Or 2 Module metal box	Each	187	146	27302
	2	3 Module metal box	Each	84	189	15876
	3	4 Module metal box	Each	19	208	3952
	4	6 Module metal box	Each	156	274	42744
	5	8/9 Module metal box	Each	4	334	1336
	6	12 Module metal box	Each	180	421	75780
	7	16 Module metal box	Each	10	517	5170
	8	18 Module metal box	Each	5	552	2760
19.1		Supply and fixing of LED tube rod comprising of LED tube with non-integral / integral driver, upto 6500K color temp having 40000 burning hrs life with minimum @ L 70, system lumen output should be minimum with efficacy > 100 lm/W. LED driver PF > 0.95 & THD < 20%. The colour rendering index of LED light should be more than 70. Submission of LM 79-08/IS16106 (2012), IEC60598, IEC61347 i/c connection wire, testing etc.to complete the job. 2 Yrs Guarantee certificate from manufacturer.				
	19.1.1	Tube light LED 1 X 5/8/10Watt Integral i/c batten aluminium body, Polycarbonate diffuser	Each	50	268.00	13400
	19.1.3	Tube light LED 1 X 18/20/22Watt, Integral i/c batten aluminium body, Polycarbonate diffuser.	Each	250	463.00	115750
19.4		Supply of recessed mounting type Led light fixture, LED of 1 to 3 W each assembled on single MCPCB, having colour temp upto 6500K & having 50000 burning hrs life with minimum @ L 70, system lumen output should be minimum with efficacy> 100 lm/W. LED driver, PF 0.95 & THD < 20% & Surge protection minimum 5KV. The colour rendering index of LED light should be more than 70. Housing made of CRCA powder coated frame with glare free diffused polycarbonate cover. Submission of LM 79- 08/IS16106 (2012), IEC60598, IEC61347 i/c connection wire, testing etc.to complete the job. 2 Yrs Guarantee certificate from manufacturer.				
	19.4.1	Led luminaire 2' X 2', 36W, 4-6.5K	Each	75	3474.00	260550
	19.4.2	Led luminaire 2' X 2', 45W, 4-6.5K	Each	15	3901.00	58515
19.5		Supply of surface mounting type Led light fixture, LED of 1 to 3 W each assembled on single MCPCB, having colour temp upto 6500K & having 50000 burning hrs life with minimum @ L 70, system lumen output should be minimum with efficacy>120 lm/W. LED driver, PF 0.95 & THD < 20% & Surge Protection minimum 5 KV. The colour rendering index of LED light should be more than 70. Housing made of CRCA powder coated frame with glare free diffused polycarbonate cover. Submission of LM 79-08/IS16106 (2012), IEC60598, IEC61347 i/c connection wire, testing etc.to complete the job. 2 Yrs Guarantee certificate from manufacturer.				
	19.5.1	Led luminaire 2' X 2', 36W	Each	75	4023.00	301725
	19.5.2	Led luminaire 2' X 2', 42/45W	Each	65	4510.00	293150

19.6		Supplying and fixing surface mounting LED down lighter , LED of 1 to 3 W each assembled on single MCPCB, having colormap up to 6500K & having 50000 burning hrs life with minimum @ L 70, system lumen output should be minimum with efficacy>120 lm/W. LED driver PF 0.95 & THD < 20% & surge protection minimum 5KV. The colour rendering index of LED light should be more than 70. Housing made of CRCA powder coated frame with glare free diffused polycarbonate cover. Submission of LM 79-08/IS16106 (2012), IEC60598, IEC61347 connection wire, testing etc. to complete the job. 2 Yrs Guarantee certificate from manufacturer.				
	19.6.3	7/8W	Each	150	670.00	100500
	19.6.5	14W /15 W	Each	100	975.00	97500
	19.6.6	18/20W	Each	250	1341.00	335250
	19.6.7	22/24W	Each	50	1829.00	91450
	19.6.13	14/15 W COB Lights	Each	25	1615.00	40375
19.7		Supplying and fixing recessed mounting LED down lighter , LED of 1 to 3 W each assembled on single MCPCB, having colour temp up to 6500K & having 50000 burning hrs life with minimum @ L 70, system lumen output should be minimum with efficacy>120 lm/W. LED driver PF 0.95 & THD < 20% & surge protection minimum 5KV. The colour rendering index of LED light should be more than 70. Housing made of CRCA powder coated frame with glare free diffused polycarbonate cover. Submission of LM 79-08/IS16106 (2012), IEC60598, IEC61347 connection wire, testing etc. to complete the job. 2 Yrs. guarantee certificate from manufacturer.				
	19.7.5	14/15 Watt	Each	120	853.00	102360
	19.7.13	14/15 W COB Lights	Each	120	1560.00	187200
28.1.00		SPLIT AC (inverter model) :- Supply, installation, testing and commissioning of Split type wall mounted air conditioning unit of following capacity including indoor, outdoor unit fitted with inverter based rotary compressor, copper condenser and first charge refrigerant R410A. The condensing unit working range should be capable for providing cooling between +/-5 deg. C to 50 deg. C & heating within 0 deg. C to 15 deg. C including connection of copper pipe of required size upto 3 mtr., insulation, cordless remote control, auto air swing louvers, wall stand for outdoor unit, connection copper lead wire, condensed water outlet pipe 2 mtr. complete etc as required. Outdoor/indoor units should be of same make (brand).				
	28.11.2.6	1.8/2 TR star rating 5 star	Each	15	63195.00	947925
28.18		VRV/VRV outdoor AC unit:- Supply installation testing and commissioning of VRV /VRV /MRV outdoor units with following multiple inverter based scroll type compressors, electronic expansion valve, R 410A/eco-friendly green refrigerant, cooling & heating mode both options, special pre-coated fin type heat exchanger, low noise direct driven propeller condenser fans in each module with top discharge including internal wiring, microprocessor controls, safety. The condensing unit should be capable of providing cooling between +/- 5deg. C. to 48 deg. C & heating within 0 deg. C to 15 deg. C, COP not less than 3.3. Each system should have the provision to combine maximum 3 nos compressor in each outdoor unit, every single outdoor unit should not have more than maximum Capacity 20 HP (3 phase) each compressor complete as per specification. Outdoor/indoor units should be of same make (brand). (Single phase/three phase)				
	28.18.23	50 HP	Each	2	1115385	2230770
28.21		VRV/VRV indoor AC unit (ceiling mounted compact 4 way):- Supply installation testing and commissioning of 4 way round flow ceiling suspended/mounted compact cassette type unit comprising of copper evaporator, electronic expansion valve, blower, motor, filter pad, auto air swing louvers, temperature & on/off display with inbuilt drain pump & decorative panels including internal wiring, controls. Dimension in terms of length & width should not be more than 750mmX 750mm with wireless remote controller. (Single phase/three phase)				
	28.21.5	1.65 TR	Each	48	55007	2640336
28.3		Copper piping: - Supply, installation, testing and commissioning of interconnecting copper refrigerant pipe work (19mm/13mm thick) duly insulated with elastomeric nitrile rubber type tubular insulation between indoor & outdoor units as per specifications. And exposed piping should be wrapped with glass woven cloth and lag coating for vapour barrier and weather protection. Joints shall be covered with nitrile rubber tape of 3 mm thick complete as per specification.				
	28.30.1	44 mm O.D. wall thickness ≥ 1.4mm (insulation – 19 mm thick)	Rmt	1200	2967	3560400
28.31		Drain piping :- Providing and fixing of CPVC, 6Kg/cm2 drain water piping with fittings, support and insulated with 6 mm thick closed cell elastomeric nitrile rubber insulation complete as per specification.				
	28.31.4	40 mm dia ID	Rmt	470	382	179540
28.32		Flexible pre insulated duct: - Supply and fixing of aluminum foil flexible pre-insulated duct in accordance with the approved specifications.				
	28.32.2	150 mm dia	Rmt	150	484	72600
28.33		PVC fresh air pipe fan: - Supply and fixing of PVC fresh air pipe fan complete as per specification.				
	28.33.4	250 mm dia	Rmt	12	444	5328
28.33.6		VRV/VRV indoor AC unit installation charges: - Installation of cassette unit 4/2/1 way flow ceiling suspended/mounted cassette type unit & decorative panels including labour for internal wiring, controls with wireless remote controller. (Single phase/three phase)	Each	48	3000	144000
(PWD-2024)41.24		Supply and erection of hot dip G.I. cable tray perforation not more than 17.5% for specific dimensions along with tees, bends. The cable tray shall be hang from ceiling/ fixed to wall with necessary angle/flat iron/hanging rod, for ceiling suspensions, clamp, anchor fastener, nuts, bolts, washers, not more than 1.0 mtr. apart complete as per specification to complete the job. The tray shall be as follows :-				
	41.24.1	100x50x1.6mm thick	Metre	1500	586.00	879000
	41.24.2	150x50x1.6mm thick	Metre	1200	699.00	838800
	41.24.3	300x50x1.6mm thick	Metre	500	1027.00	513500
Total Internal Electrical Amount						23888409

External Electrical Estimate						
Item No.	Sub item no.	Description of Items	Unit	Rates (in Rs.)	QTY.	Amount
UADD-2025	14.2	Supply of approved High Tension XLPE cable (conforming IS-7098/II/85) 11kV/grade as per ISI standard single/three core Armoured with Alu. Solid/stranded conductor ISI Marked as required				
	14.2.3	3 Core XLPE CABLE 11 KV GRADE				
	6	300 Sq.mm	meter	2775.00	1000	2775000
UADD-2025 14.1		Supply of XLPE Insulated power cable (conforming IS- 7098 Part-I) 1100 Volt grade/Heavy duty power cable conforming to IS 1554-1100 Volts grade , 2 core /3½ core/4 core ISI MARKED with Alu. Stranded /solid conductor				
	14.1.8	ARMOURED 3½ CORE				
	1	25 Sq.mm(XLPE)	meter	251.00	345	86595
	2	35 Sq.mm(XLPE)	meter	305.00	425	129625
	3	50 Sq.mm(XLPE)	meter	413.00	225	92925
	4	70 Sq.mm(XLPE)	meter	556.00	374	207944
	5	95 Sq.mm.(XLPE)	meter	697.00	250	174250
	7	150 Sq.mm.(XLPE)	meter	1035.00	1000	1035000
	10	300 Sq.mm.(XLPE)	meter	2024.00	1100	2226400
	14.1.10	ARMOURED 4 CORE				
	1	6 Sq.mm.(XLPE)	meter	139.00	1200	166800
	2	10 Sq.mm.(XLPE)	meter	191.00	1500	286500
	3	16 Sq.mm.(XLPE)	meter	204.00	1000	204000
	14.6	BRASS COMPRESSION GLAND				
	14.6.1	Supplying and fixing heavy duty cable gland for P.V.C. insulated armoured cable with brass washer, Rubber ring complete erected with cable and lead connection etc. as per specification complete.				
	1	Gland Size 22mm suitable for cable 2,3,3½ & 4 x up to 6 Sq.mm	Each	66.00	20	1320
	2	Gland Size 22mm suitable for cable 2,3, 3½, 4 x 10 Sq.mm or 2x 16 Sq.mm	Each	76.00	20	1520
	3	Gland size 28mm suitable for cable 3,4 x 16 Sq.mm	Each	116.00	20	2320
	4	Gland size 32mm suitable for cable 2,3, 3½, 4 x 25 Sq.mm OR 2,3, 3½ x 35 Sq.mm OR 2,3 x 50 Sq.mm.	Each	134.00	20	2680
	5	Gland size 38mm suitable for cable 3½ x 70 Sq.mm, 3x95 Sq.mm	Each	209.00	20	4180
	7	Gland Size 50 mm suitable for cable 3½ x 150 Sq.mm OR x 185 Sq.mm	Each	335.00	20	6700
	9	Gland Size 70mm suitable for cable 3 x 240 Sq.mm OR 3½ x 300 Sq.mm	Each	620.00	20	12400
14.7		Supplying and fixing ferrules . (Aluminium in Line connector) As per IS - specification suitable for following size of cable with Aluminium stranded/solid conductor evenly cramped with high pressure tool including connection as required complete				
	14.7.1	For Conductor Size-				
	1	2.5 to 6.00 Sq.mm	Each	4.00	150	600
	2	10.00 Sq.mm	Each	4.00	100	400
	3	16.00 Sq.mm	Each	6.00	70	420
14.8		LUGS: -				
		Supplying and fixing cramping type Alum. lugs as per I.S.S. Specification suitable for following size of cable with Alu. /Copper solid/stranded conductor evenly cramped with high/pressure tool and connected to switch gear/Bus/M.C.C.B./ M.C.B. etc. as required complete. For Conductor Size-				
	1	6mm to 16 Sq.mm	Each	6.00	100	600
	2	25 Sq.mm	Each	9.00	120	1080
	3	35 Sq.mm	Each	11.00	70	770
	4	50 Sq.mm	Each	16.00	50	800
	5	70 Sq.mm	Each	22.00	50	1100
	6	95 Sq.mm.	Each	26.00	50	1300
	8	150 Sq.mm.	Each	46.00	50	2300
	11	300 Sq.mm.	Each	144.00	50	7200
14.9		Supplying & fixing pin terminal lugs as per ISS specification suitable for cable evenly cramped with high pressure tool & connection to switch gear terminal.				
	1	Aluminium Lugs Pin Type				
		a. Up to 16 Sq.mm Conductor Size	Each	5.00	150	750
	2	Copper Lugs Pin Type				
		a. Up to 16 Sq.mm Conductor Size	Each	15.00	70	1050
14.10		CABLE LAYING				

	7	Laying of one number power cable of 1:1 kV grade of size not exceeding 25 Sq.mm in the existing RCC Hume/Stone/Ware/G.I./DWC/Surface pipe as required.	meter	38.00	4045	153710
	8	Laying of one number power cable of 1.1 kV grade of size exceeding 25 Sq.mm but not exceeding 400 Sq mm in the existing RCC/Hume Stoneware/G.I. Pipe /DWC/Surface as required.	meter	61.00	3374	205814
	15	Laying of one number power cable of grade exceeding 1.1kV but not exceeding 11kV of size not exceeding 400 Sq.mm in the existing RCC / Hume / Stoneware / G.I. Pipe in existing trench as required.	meter	61.00	1000	61000
	14.11	Excavation of the trenches in Hard Rock not exceeding 1.5 meter in width and lift upto 1.5 meter including getting out the excavated soil and disposal of surplus excavated soil as directed within the lead of 50 meter (without blasting)	Cu. Mtr.	348.00	250	87000
	14.14	Supplying Route Marker with 10cm x 10cm G.I. Plate 5mm. Thick with Inspection thereon bolted/welded to 35mm x 35mm x 6mm angle iron 60cm long and fixing the same in ground as required.	Each	342.00	15	5130
7.5		Supplying of ISI Marked Automatic Transfer Switches (ATS) conforming to IEC : 60947-1 & IEC : 60947-6-1 with automatic inbuilt time delay 4 pole, 415 V with two earthing terminals if required.				
	11	400 Amp (with enclosure)	Each	83525.00	1	83525
	12	630 Amp (with enclosure)	Each	101465.00	1	101465
11.1		Earthing with G.I. Earth pipe 4.5 meter long and 40 mm dia with masonry enclosure in cement mortar, cover plate having locking arrangement on the top etc.(but without charcoal or coke and salt) complete as required.	Each	7745.00	10	77450
11.2		Add Extra for using salt and charcoal / coke for pipe earth electrode as required including excavation & refilling.				
	1	Excavation 4.5m by manual labour	Each	1457.00	10	14570
	2	Excavation by making hole with Auger	Each	1403.00	10	14030
11.3		Earthing with G.I. Earth plate 600mm X 600mm X 6mm thick including accessories and providing masonry encloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 meter long etc. (but without charcoal or coke and salt) complete as required.	Each	4755.00	25	118875
11.4		Earthing with Copper Earth plate 600mm X 600mm X 3mm thick including accessories and providing masonry encloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 meter long etc. (but without charcoal or coke and salt) complete as required.	Each	14327.00	10	143270
11.5		Add Extra for using salt and charcoal / coke for G.I. Plate or Copper plate earth electrode as required including excavation & refilling the pit in all type of soilure.	Each	1005.00	35	35175
11.6		Supplying and laying 4.0mm (8 SWG) copper wire at 0.5 meter below ground level as conductor earth electrode including soldering etc. as required.	meter	88.00	1200	105600
11.8		Supplying and laying 25mm X 5mm G.I. strip at 0.5 meter below ground level as strip earth electrode including jointing etc. as required.	meter	107.00	500	53500
11.10		Providing & fixing 25mm X 5mm copper strip in 40mm dia G.I. pipe from earth electrode as required.	meter	1525.00	250	381250
		LIGHTNING CONDUCTOR				
11.20	11.20	Providing and fixing of lightning conductor finial made of 25mm dia 300mm long copper tube having single prong at top with 85 mm dia 3 mm thick copper base plate including holes complete as required.	Each	2762.00	5	13810
11.24	11.24	Providing and fixing copper tape 20mm X 3mm thick on parapet and surface of wall of lightening conductor as required (for Vertical runs)	meter	649.00	250	162250
11.28	11.28	Fixing of copper / G.I. Tape 20mm X 3mm thick on parapet and surface of wall for lightening conductor as required (for Vertical runs)	meter	34.00	250	8500
11.29	11.29	Providing and fixing " Testing Joint " made by 20mm X 3mm thick copper strip 125mm long with 4 Nos of tinned Brass bolts, Nut, check nuts and spring washers etc. complete as required.	Each	315.00	35	11025

	4.3	CIRCUIT WIRING IN EXISTING CONDUIT / PVC CASING CAPPING				
		Supplying and drawing single core PVC insulated cable FR with copper multi strand conductor ISI marked in existing rigid conduit in surface or concealed as per specification.				
	4.3.2	2.5 Sq mm cable				
	4	4 X 2.5 sq mm	meter	146.00	2500	365000
	9.14	Supplying, fixing, testing & commissioning wall / floor mounted LT Panel primer coated with two coat of enamel paint & provided with required gasket for dust/ vermin proof with degree of protection IP42 suitable for 415V 3 phase ,50 Hz ,4 wire system fabricated out of CRCA sheet up to 2 mm thick (1.6 mm for doors) with frame work of angle iron/ channel/ bolted type construction duly compartmentalised for incomer, bus section , outgoing ,cable alleys & CT,PT Ampere Meter ,Volt Meter , selector switches, Frequency Meter ,phase indicating lamps , energy Meter complete including cost of busbar supports, detachable cable gland plates,2 earthing terminals, internal wiring & fixing of separately supplied MCBs, MCCBs ,panel mounted Changeover switch/SFUs, etc. as required but excluding cost of busbar strips, Ampere Meter, Volt Meter, Selector switch as per approved design & specification	Kg	247.00	1500	370500
	9.15	Supplying and fixing of LT Panel accessories in existing LT Panel including connections etc.as required as per spechification				
	1	Digital Ampere Meter with CTs with selector switch	per set	2414.00	5	12070
	2	Digital Volt Meter with selector switch & HRC fuse	per set	2499.00	5	12495
	3	Frequency Meter	Each	1524.00	5	7620
	4	Multifunction Meter	Each	2865.00	5	14325
	5	Copper Bus bar strips with PVC sleeves	Kg	1036.00	50	51800
	6	Aluminium bus bar strips with PVC sleeves	Kg	317.00	150	47550
	7	LED lamps	each	256.00	30	7680
	20.3	Astro Time Switch-For lights On – Off based on Sunrise & Sunset timing Supply, installation, testing and commissioning of Astro - Time Switch based on Astro program i.e. calculation of sunrise and sunset times through date, time and Indian PIN Codes. It shall have an option of Astro ON period override by time switch and Offset function which allows programming of switching times Offset from the astronomic time. The 230 V AC operated Astro Time Witch shall have an operating range of 96...253V AC with 1 NO, 16 A, AgSnO2 Contact material with Starting current of 120A and 1 CO cadmium Free contacts, it shall have LCD status indication with back light display along with internal easily replaceable battery on the front side for set-up and programming. The electrical life at rated load AC1 shall be 1 Lakh cycles and shall work at an ambient temperature of -20 to +50 deg C. It shall have a dielectric strength between supply and open contacts of 4000V AC, between open contacts 1000V AC respectively and rated impulse voltage (between supply and contacts) of 6kV and rated impulse voltage (between open contacts) of 1.5kV. The mounting shall be on 35 mm DIN rail (EN 60715) and shall have necessary approvals like CE, IMQ and EAC.	Each	3408.00	5	17040
	8	Supplying of ISI Marked of Moulded Case Circuit Breaker (MCCB) suitable for 3 phases, 3 pole, 50 Hz, 415 Volts , AC supply with respective interrupting capacity (KA) at 415 Volts cited against their range standard conforming to IS - 8828				
	8.3	MCCB with Breaking Capacity 36 KA at 415 V				
	1	Current Rating -160 Amps & Adjustable: 80% -100% thermal & 5-10 times magnetic setting	Each	11348.00	5	56740
	2	Current Rating -200 Amps & Adjustable: 80% -100% thermal & 5-10 times magnetic setting	Each	13781.00	5	68905
	3	Current Rating -250 Amps & Adjustable: 80% -100% thermal & 5-10 times magnetic setting	Each	16685.00	5	83425
	8.6	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of ' C' series suitable for 240/415 Volts, 50 Cycle, 10 kA Value AC supply confirming to IS : 8828 : 1996, IEC : 60898 :2002 but without enclosures :-				
	8.6.1	SINGLE POLE (SP)				
	2	6 Amp to 32 Amp, 10kA Rating	Each	180.00	350	63000
	8.6.3	DOUBLE POLE (DP)				
	2	6 Amp to 32 Amp, 10kA Rating	Each	639.00	60	38340
	8.6.6	FOUR POLES(FP)				
	2	6 Amp to 32 Amp, 10kA Rating	Each	1423.00	40	56920
	3	For 40 Amps, 10kA Rating	Each	1951.00	30	58530
	4	50 Amp to 63 Amp, 10kA Rating	Each	2021.00	50	101050
	8.17	FIXING OF SFUs, DBs, BUSBAR, MCCBs, MCBs, ISOLATORS & RCBOs				

		Fixing of metal clad enclosure on 25 X 5 mm flat iron clamps including supplying and fixing of clamps as required duly embedded in masonry including cable connection and other required material as per specification :-				
	1	16 Amps SP/DP Switch /SPN DB up to 4 way	Each	202.00	15	3030
	2	32 Amps DP switch /SPN DB up to 8 way /16 Amp TPN DB up to 3 way per pole or 16 Amps TP or TPN switch / 16 Amps 415 V Isolator	Each	223.00	15	3345
	3	32 Amps TP or TPN switch/ 32 Amps 415 V Isolator / 16 Amps TPN DB up to 6 way per pole /32 Amps 415 Volt busbar 4 way	Each	245.00	10	2450
8.18		Fixing of metal clad enclosure on 25X 25 X 5 mm angle iron clamps including supplying and fixing of clamps as required duly embedded in masonry including cable connection and other required material as per specification :-				
	1	Fixing of 63 Amps TP or TPN main switches/ DB 63 Amps. 240/415 Volt 4 to 8 way or 63 Amps change over switch /63 Amps 415 Volt Isolator /30 Amps 415V TPN DB up to 6 way per pole and busbar 4 way	Each	396.00	10	3960
	2	Fixing of 100 Amps TP or TPN main switch or 100 Amps change over switch /100 Amps 415 Volt Isolators and busbar 4 way	Each	580.00	10	5800
	3	Fixing of 200 Amps TP or TPN main switch or 200 Amps change over switch /200 Amps 415 Volt Isolators and busbar 4 way	Each	809.00	10	8090
8.20		Fixing of MCB /MCCB/ Isolator				
	1	Fixing of MCB / Isolator SP/DP in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete (Labour only)	Each	33.00	350	11550
	2	Fixing of MCB /MCCB Isolator TP /TPN/FP in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete.	Each	66.00	50	3300
8.21		Labour charges for fixing sheet steel enclosure, MCB DB surface mounting type , as per accepted practice on 25x5mm flat iron clamps duly embedded in wall, cable connection etc. complete.				
		FOR S. No :-				
	1	8.5 (1) to 8.5 (4)	Each	202.00	150	30300
	2	8.5 (5) & 8.5 to 8.6 (2)	Each	223.00	160	35680
	3	8.6 (3), 8.6(4) & 8.7 (1)	Each	245.00	170	41650
8.22		Labour charges for fixing sheet steel enclosures, MCB DB surface mounting type , as per accepted practice on 25x25x 5 mm angle iron clamp, including supplying and fixing of clamps duly embedded in wall, cable connection etc. complete :-				
		FOR S. No :-				
	1	8.5(6) & 8.5(7), 8.6(5) to 8.6 (7) 8.7(2) & 8.7(3) & 8.8(1) to 8.8 (3)	Each	396.00	140	55440
8.23		Labour charges for fixing sheet steel enclosures, MCB DB flush mounting type , as per accepted practice, duly embedded and end plate completely flushed in wall, cable connection etc. Complete :-				
		FOR S. No :-				
	1	8.5(1) to 8.5(5), 8.6(1) to 8.6 (5) & 8.7(1)	Each	518.00	120	62160
	2	8.5(6) & 8.5(7), 8.6(6) to 8.6(7), 8.7(2) to 8.7(3) & 8.8(1) to 8.8(3)	Each	737.00	50	36850
17.4	17.4	Supplying and installing Double wall corrugated pipes (DWC) of HDPE (IS 14930 Part II -marked) for cable laid underground with necessary connecting sockets/ couplings, tees of same material and at required depth up to 90cm. below road/ground surface excluding excavation, back filling with excavated material with ramming and making the surface good.				
	1	50.00mm outside dia.	meter	130.00	3000	390000
	5	110.00mm outside dia.	meter	241.00	1500	361500
	10	200.00/210.00 mm outside dia.	meter	510.00	500	255000
16.1	16.1	Providing and erection of hot dipped galvanized octagonal poles in single section made from 3mm thick sheet having lockable weather proof flush door junction box, suitable size & type of foundation bolts 4 nos. 'J' type (EN8 grade) complete, erected in an approved manner on provided foundation.				
	7	9 meter height, 155 X 70mm A/F, 250x250x16mm base plate having weight 87 kg ± 3%, 4 nos. X 24 x 750mm bolt having weight 12 kg ± 3%.	Eac h	12260	50	613000
	16.1	Providing and fixing of bakelite sheet 10mm thick, one MCB 6Amp-32Amp SP & 16sq.mm stud type 4 way epoxy connector for decorative designer poles /octagonal pole box.	Eac h	326.00	50	16300
	16.1	Providing and fixing of sword canopy type single arm GI bracket upto 2 meter Long for 90mm A/F top octagonal pole	Eac h	2441.00	50	122050
	16.1	Providing and fixing of sword canopy type double arm GI bracket upto 2 meter Long for 90mm A/F top octagonal pole	Eac h	3791.00	10	37910

	16.1 9	Providing and fixing of ring carriage dia. not less than 750mm made of 50mm dia. GI pipe Light 'A' class for 70mm A/F top octagonal pole with required clamps, nut, bolt etc as required.	Eac h	2903.00	5	14515
	16.2 3	Designing and construction of footing foundation for octagonal/decorative designer pole of desired size including excavation in soil/soft rock, base concrete M-7.5 (1:4:8), 15mm thick and pedestal of RCC M-20 (1:1.5:3), required tar steel reinforcement for required size from base concrete, shuttering, curing etc. with existing foundation bolts complete as per specifications in an approved manner as per manufacturer drawing or engineer-in-charge.	Cu. Mt.	7785.00	50	389250
		Surge Overvoltage Protection Device				
	20.7	Supply, installation, testing and commissioning of SOVP Device should have Single High Capacity Varistor in the L- N Plug and Encapsulated Spark Gap for N-PE, L-N SOVP should have a Rated Voltage of Minimum 320V AC to handle Indian Power Supply conditions. SOVP Should have Visual indication on replaceable varistor and spark gap modules as well as a potential free contact on the socket for remote indication. SOVP device should be wired up as per TT configuration of wiring in accordance with EN 61643-11 Standards. Both the L-N and N-PE, SPDs should be rated for handling 30KA of nominal 8/20 μ s surge current.				
	(a)	SOVP for High Mast Light- Type 1+2 Pluggable SPD 3+1, Rating L-N/N-PE Uc 275/ 255 V AC, Iimp 12.5/50 KA, I _{max} 60/100 KA, Up 1.2/1.5 KV	Each	16771.00	1	16771
	(b)	SOVP for Pole Light Sub Feeder Panels - Type 2 Pluggable SPD 3+1, Rating L-N/N-PE Uc 255/320 V In 30/60KA KA, I _{max} 30Ka/60 KA, Up 1.5KV	Each	6311.00	10	63110
17		Supping & installing G.I. Pipe for protection of underground cable fixed on wall/support/in trench/fixd between two rigid existing support of wall/beam for erection of ceiling Fan/down rod for stiff pendent for light luminaries //fan/protective for earthing, lightening conductor down strip/ever head service line/for summer cable or centrifugal pump for water supply with necessary iron clamp coupler, bend, te, elbow, nuts and bolts etc. complete in an approved manner as required to complete the job excluding cost of excavation/dismantling & other finished masonry Item complete.				
17.1		For 'B' Class G.I. pipe ISI Marked (IS-1161-68)				
	9	100.00mm	meter	1102.00	150	165300
	11	150.00mm	meter	2017.00	100	201700
16.1		Providing and erection of 12.5 meter high mast lighting system suitable to install 8 No. 150 w LED flood light fitting and control gear with integral Power tool, weight 340 kg. comprising of 2 section of hot dipped galvanized materials as per BSEN ISO 1461 thickness 3 mm, dia 100mm & 360mm for top and bottom respectively, stress fitting arrangement on site with 350mm overlap dynamic loading to withstand max wind pressure as per -IS 875 part III, parameters for structural & foundation design must be taken from wind tunnel test. Lightning protection of GI single spike 800mm at top and at base inside compartment with double internal lock with adequate size of MCB erected on PVC board complete with base plate of 25mm thick 520mm dia. and foundation bolts having 4 nos. bolts of 24mm dia, 750mm long (EN8 grade), Anchor plate 445 PCD, including accessories viz. (1) Lantern carriage of 50 NB ERW class-B,MS pipe covered with PVC sleeve suitable to carry 250kg. load and upto 6 fittingsymmetrically. (2) Trailing copper cable 5x2.5 sq.mm,EPR insulated PCP sheathed. (3) Double drum/350kg winch having gear 53:1, oil bath (SAE90/140) arrangement. (4) 2 nos. stainless steel wire ropes 5mm dia (7/19) breaking load capacity 1450 kg.x2. (5) Integral power tool 3-phase, 0.75 HP2m/min single speed. (6) Feeder pillar fabricated out of 14 SWGCRCA sheet and comprise of incoming MCB 32 A TPN switch, HRC fuses, singledial timer, suitable size of contactors for lighting and power tool, 2 nos. outgoing, reversing switch for motor. (7) Foundation drawing, test certificate and guarantee certificate shall be provided by manufacturer. (without fixture and lamp)	eac h	159958	2	319916
16.6		Designing & casting of Open raft shallow footing foundation with M-20 cement concrete suitable for 12.5mtrs. High Mast considering the safe soil bearing cacapcity at site as 10 T/sqm at 2mtrs. Depth including excavation, foundation nut bolts in an approved manner.	eac h	40250	1	40250

	PWD-2025 21.270	Supply & Fixing of ARCHITECTURAL POLE made in combination of mild steel pipe sections (3mm). The pole to be provided with a suitable size steel base plate. This mounting steel base plate along with foundation bolts of suitable size to be used for ensuring firm grouting into the specially designed RCC foundation. After Fabrication, Entire Pole is hot dip galvanized (60 microns Minimum) for the effective corrosion resistance. The hot dip Galvanised pole should be provided with an inbuilt junction box to fix 32A connectors and 6A MCB, at the bottom - the inbuilt box should have a flush door of suitable size. Wind pressure calculation as per IS 875 (part-3) & structural calculation report as per EN40 should be submitted to verify the pole strength. Pole & it's parts are painted in 3 layer coating (coating thickness-100 microns minimum) in which 1st layer with etch primer, 2nd layer with epoxy primer & 3rd final layer with PU paint. Entire pole shall be made to provide pleasing aesthetics.				
	21.270.2	9 Meter Height (Bottom Dia 140mm) X (Middle Dia 114mm) x (Top Dia 60mm), 400x400x26mm Base Plate, 4 Nos X 24 x 750mm bolt.	Each	41750	0	0
	21.270.4	Single Arm bracket made in combination of MS pipe section of 60mm dia. (vertical) & gradually bent 60mm dia. & 27mm dia. - horizontal, to get pleasing aesthetics & arm length of 1000mm.	Each	3500	20	70000
	21.270.5	Double Arm bracket made in combination of MS pipe section of 60mm dia. (vertical) & Gradually bent 60mm dia. & 27mm dia. - horizontal, to get pleasing aesthetics & arm length of 1000mm (Each Side).	Each	6500	30	195000
	21.270.1	6 Meter Height (Bottom Dia 114mm) X (Middle Dia 89mm) x (Top Dia 60mm), 250x250x18mm Base Plate, 4 Nos X 16 x 600mm bolt.	Each	35480.00	50	1774000
19.8		Supplying of integral post top lantern LED fitting comprises of copper dust finish cast aluminium spigot and spun aluminium canopy fixed with opal polycarbonate, pipe arrangement for vertical mounting, open construction driver and accessories are wired up to terminal block. LED of 1 to 3W each assembled on single MCPCB, having colour temp up to 6500K & having 50000 burning hrs life with minimum @ L70, system lumen output should be minimum with efficacy>100lm/W. LED driver PF 0.95 & surge protection 10 2KV. The colour rendering index of LED light should be more than 70. Submission of LM 79-08/IS16106 (2012), IEC60598, IEC61347 connection wire, testing etc. to complete the job. 2 Yrs. Guarantee certificate from manufacturer.				
	19.8.1	40 watt.	Each	7314.00	100	731400
19.9		Supplying of street light with high power LED of 3 to 6 W each assembled on single MCPCB, system lumens output with efficacy> 120 lm/W. luminaire having colour temp up to 6500 K & 50000 burning hrs life with minimum @ L 70, The colour rendering index of LED light should be more than 70. Luminaire comprises of driver, PF 0.95 & surge protection 4-10 KV. Housing made of pressure die cast aluminium with heat resistant flat glass / Lens type, IP66 protection. Submission of LM 79-08/IS16106 (2012), IEC60598, IEC61347 i/c connection lead, testing etc to complete the job. 2 Yrs. Guarantee certificate from manufacturer.				
	19.9.7	150W	Each	12434.00	100	1243400
21.1	21.1	Supply, installation, testing and commissioning of ' Silent Type ' diesel generating set comprising with diesel engine water cooled, Synchronous alternator, AMF control panel single/three phase, acoustic enclosure, battery with charger and related accessories including incoming cable 10 mtr, exhaust pipe 'B' class with insulation as per CPWD specification and CPCB - IV Norms.				
		Note:- 1. Two No Cu plate (600mmx600mmx3mm) earthing and Two No GI plate (600mmx600mmx6mm) earthing with GI/Cu Strip to be done for each installation as per specification and will be separately paid. 2. Suitable size of PCC/RCC platform to be made separately as per requirement and instruction of Engineer-in-charge				
		Water Cooled				
	21.1.18	Supply, installation, testing and commissioning of diesel generating set three phase, water cooled with AMF control panel, 500 KVA, 415V. With electronic governor.	Each	5797072.00	1	5797072
MPEB SOR	MPEB(M0201661)	KV, 630A, 21 KA for 3 sec SF6 insulated, (Two Incomers + Two Outgoing) consisting of 2 nos remote operated motorised load break	Each	1101696	2	2203392
MPEB SOR	MPEB(E0201661)	Supply, installation, testing and commissioning of RMU 11 KV, 630A, 21 KA for 3 sec SF6 insulated, (Two Incomers + Two Outgoing) consisting of 2 nos remote operated motorised load break	Each	100495.5	2	200991
PWD-2024	(PWD-2024)41.1	Providing & Making cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 33 KV/11 KV 3 core XLPE alum. conductor cable as required as per specification and as per accepted standard including connection testing complete.				

PWD-2024	(PWD-2024)51775	Heat shrinkable joint, kit 11 KV XLPE, 3 core				
PWD-2024	(PWD-2024)41.10.1.1	Heat shrinkable Jointing kit 11 KV XLPE cable O.D. termination				
PWD-2024	(PWD-2024)41.10.1.1.4	3 x 240-400 sq. mm.	Each	11389	12	136668
PWD-2024	(PWD-2024)41.10.1.2	Heat shrinkable jointing kit 11 KV XLPE cable I.D. termination				
PWD-2024	(PWD-2024)41.10.1.2.4	3 x 240-400 sq. mm.	Each	9470	12	113640
PWD-2024	(PWD-2024)41.10.1.3	Heat shrinkable jointing kit 11 KV XLPE cable straight joint				
PWD-2024	(PWD-2024)41.10.1.3.4	3 x 240-300 sq. mm.	Each	23710	2	47420
Total External Electrical Amount						26527628

Sr No	SOR No UADD-2025	Sub Item No	Description.	Unit	Qty	Rate.	Amount.
1	30.17	30.17.3	Supply and fixing of LED RGB/RGBW Linear Wall Washer luminaire for Facade lighting with aluminium extruded housing, of following wattage. Luminaire shall be capable of producing dynamic colour changing light with 16 million colours by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at line voltage without any separate power supply from 100 to 270 V AC, 50 Hz, power factor > 0.9. Fixture shall be suitable to operate at ambient temperature range of -10°C to +50°C and shall be IP 65 and IK06 rated. Lifetime should be at least L70:50000 burning hours at 50°C. Luminaire shall be conforming to BIS and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc. as required. 60W	Each	20	32608	652160
2		30.17.4	Supply and fixing of LED RGB/RGBW Linear Wall Washer luminaire for Facade lighting with aluminium extruded housing, of following wattage. Luminaire shall be capable of producing dynamic colour changing light with 16 million colours by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at line voltage without any separate power supply from 100 to 270 V AC, 50 Hz, power factor > 0.9. Fixture shall be suitable to operate at ambient temperature range of -10°C to +50°C and shall be IP 65 and IK06 rated. Lifetime should be at least L70:50000 burning hours at 50°C. Luminaire shall be conforming to BIS and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc. as required. 40W	Each	10	27321	273210
3	30.18	30.18	RGB DMX controller having 24V/48V DC input maximum 300W.	Each	4	52651	210604
4	30.19	30.19	RGB DMX SLAVE having 24V/48V DC input	Each	20	32672	653440
5	30.16	30.16.6	Supply and fixing of LED RGB/RGBW flood lighting luminaire for facade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic colour changing light for with 16 million colours by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at line voltage without any separate power supply from 100-270 V AC, 50 Hz with power factor > 0.9. Fixture shall be suitable to operate at an ambient temperature range of -10°C to +50°C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50°C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc. as required.110W/115W	Each	20	43633	872660
6		30.16.3	Supply and fixing of LED RGB/RGBW flood lighting luminaire for facade lighting with Die-cast aluminium housing, powder-coated finish, of following wattage. Luminaire shall be capable of producing dynamic colour changing light for with 16 million colours by DMX/Ethernet based control. The beam angle of the fitting shall be narrow, medium, wide or asymmetric as per the requirement. Luminaire shall be complete with driver and capable of operating at line voltage without any separate power supply from 100-270 V AC, 50 Hz with power factor > 0.9. Fixture shall be suitable to operate at an ambient temperature range of -10°C to +50°C and shall be IP 65 and IK 06 rated. Lifetime shall be at least L70:50000 burning hours at 50°C. Luminaire shall be conforming to BIS (IS 10322) and shall be complete with all necessary accessories required for proper working of fixture including weather proof connection cables, water proof connectors etc. as required.250W	Each	20	87977	1759540
7	30.6	30.6.3	Supply and fixing of IP66 protected aluminium instant outline direct view diffuse 3000K-5000K with back profile with integrated cable alley for cable management with integrated IP rated cable connectors hidden within profile for additional protection from weather. Cross section of profile Silver anodized surface mounted aluminium profile 25 mm (W) x 20 mm (D) (minimum), with opal semi translucent sealed encapsulation, protection grade IP66, Minimum 85 lm/watt, DC 24 V, CRI>80Ra, standard length 2000 mm. excl. converter and end caps. The support is made of an anodized extruded aluminium frame which makes it possible to first fix SS the wall/ceiling. 15W per meter	Meter	2000	5783	11566000
8	30.1	30.1	Supply and fixing of IP 65, Surface wall mounted 9W LED up/downlighter decorative wall light fixture with anti glare beam angles 24deg - 36 deg as required. Fixture should be Aluminium with light reflectance surface, SS clamps, screws as required. CRI80+ NON DIM with led power supply built in colour tolerance: <MacAdam 4 SDCM LED.	Each	250	11887	2971750
9	30.3	30.3	Supply and fixing of IP65 of surface/recessed ceiling mounted 15W deep LED downlighter fixture. Fixture should be Aluminium die cast, ADC 12, cable gland, SS clamps, screws as required. Glare quotient to be minimum & black body surface for glare control, should have honeycomb louvers for anti-glare, 24deg-48 deg as required. working temperature-20°C +45°C IP rating IP65 (not for permanent immersion) insulation class III. Choice of three colour temperatures as standard 2700K-5700K and delivers 90CRI for excellent colour rendering, and with binning-free LEDs carefully selected from two-step Macadam's ellipse. fittings smart shield protected against polarity inversion, Protection class IP 65, safety class III. Safety glass, clear. Reflector made of pure anodised aluminium.	Each	100	11553	1155300
10	30.8	30.8.3	Supply and fixing of recessed/surface ground mounted 3000K-5500K, 10deg-15deg as required 1m long linear LED uplighter extrusion fixture with VISOR & Honeycomb Louver with & IK rating 06, IP 65 cable gland, SS Clamps, screws as required with swivel mounting.30W	Each	450	22861	10287450
11	30.9	30.9	Supply and fixing of decorative recessed wall mounted 6W Asymmetric LED step light 4"x4" 15-18 deg luminaire Aluminium die cast, ADC 12, IP 65 cable gland, SS clamps, screws as required	Each	40	8788	351520
12	30.11	30.11	Supply and fixing IP65 surface wall mounted 6W 4 way grazer 3"x3" LED fixture fitted with 700ma 8deg-15 deg 3000K-4000K . Luminary should be Aluminium die cast, CRI 80+ non-dimmable with led power supply , < 4 Macadam SDCM LED.	Each	20	13817	276340
13	30.13	30.13.3	Supply and fixing of decorative surface wall mounted LED 3"x3" fixture fitted with 700ma LED, 10deg-15deg 3000K-4000K . Fixture should be Aluminium die cast, CRI 80+, IP65, non-dimmable led power supply , < 4 Macadam SDCM LED with 10 deg/15 deg optics PMMA,9W LED	Each	40	9527	381080
14	30.14	30.14	Supply and fixing of IP 65 surface ground mounted luminary fitted with 700ma 11W LED bollard with 8deg-24deg 3000K-4000K CRI80+ nondimmable LED power supply built in Colour tolerance <MacAdam 4 SDCM LED similar Optics PC lens. Fixture should be IK rating 07, Aluminium die cast, SS clamps, screws as required. The finish should be stainless steel.	Each	100	17453	1745300
15	19.16	19.16.4	Supplying, fixing & testing of approved make flexible LED strip comprising of 60 LED per meter W/O driver for direct mounting complete with all accessories including connection lead, fixing, connection as required. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347/c connection wire, testing etc. to complete the job.	Each	600	1719	1031400
16	19.17	19.17.6	Supplying, fixing & testing of approved make Power supply for LED strip	Each	600	1609	965400
17	31.8	31.8.5	supply and fixing of recessed mounting LED swivel type COB downlighter, having color temp upto 6500K & having 20000 burning hrs life with minimum @ L 70, system lumen output should be minimum with efficacy>80lm/W. LED driver PF > 0.9, THD < 20% & surge protection SKV. The colour rendering index of LED light should be more than 70. Housing made of pressure die cast aluminium / CRCA powder coated frame with glare free diffused polycarbonate cover. Submission LM 80-08 Form LED Source Manufacturer & LM79-08 / IS16106 from NABL approved lab.Manufacturer mandatory. i/c connection wire, testing etc. to complete the job. Guarantee as per tender agreement condition.	Each	400	2925	1170000
18	31.7	31.7.4	Supply and fixing surface mounting LED down lighter, LED of 1 to 3Watt each assembled on single MCPCB, having color temp upto 6500K & having 50000 burning hrs. life with minimum @ L 70, system lumen output should be minimum with efficacy>100 lm/Watt. LED driver PF > 0.95, THD < 20% & surge protection 4KV. The colour rendering index of LED light should be more than 70. Housing made of pressure die cast aluminium/CRCA powder coated frame with glare free diffused polycarbonate cover. Submission LM 79- 08/IS16106 (2012), IEC60598, IEC61347/c connection wire, testing etc. to complete the job..	Each	200	1400	280000
19	28.42	28.42	Communication Cable :-Control cable: - Supply and laying, testing & commissioning of following sizes of shielded copper conductor Communication cables on existing tray including fixing clamps & proper connections to equipment etc. complete as required.	Each	2000	186	372000

20	19.10	19.10.7	Supplying of flood light with high power LED of 3 to 6 W each assembled on single MCPCB, system lumens output with efficacy >120 lm/W. luminaire having colour temp up to 6500K & 50000 burning hrs life with minimum @ L 70. The colour rendering index of LED light should be more than 70. Luminaire comprises of driver, PF 0.95 & surge protection 10 KV. Housing made of pressure die cast aluminium with heat resistant flat glass, IP66 protection. Submission of LM 79-08/IS16106 (2012), IEC60598, IEC61347 i/c connection lead, testing etc to complete the job. 2 Yrs. Guarantee certificate from manufacturer i/c connection lead, testing etc to complete the job. 2 Yrs. Guarantee certificate from manufacturer.200W	Each	200	13165.00	2633000
21	pwd 56.4	56.4	Supply and fixing of IP 65 surface ground mounted luminary fitted with 700ma 11W LED bollard with 8deg-24deg 3000K-4000K CRI80+ nondimmable LED power supply built in Color tolerance <MacAdam 4 SDCM LED similar Optics PC lens. Fixture should be IK rating 07, Aluminium die cast, SS clamps, screws as required. The finish should be stainless steel.	Each	100	12196	1219600
22	pwd 56.10	56.1	Supply and fixing of IP 65 surface ground mounted product fitted with 700ma 20W LED with snoot 8deg-24deg 3000K-4000K CRI80+ nondimmable led power supply built in Color tolerance: <MacAdam 4 SDCM LED similar optics PC lens. Fixture should be IK rating 07, Aluminium die cast, SS clamps, screws as required. The finish should be stainless steel.	Each	40	21952	878080
						Total Amount	41705834

Sub Item.No.	Item Name	Description.	Unit	Qty	Rate.	Amount.
25.16	2 MP IP 30X zoom PTZ camera	Supply, installation testing and commissioning of outdoor PTZ IR ultra low light IP cameras with full HD 1080p resolution, 25/30 fps image with a 1/1.9 in. 2 MP sensor, true WDR 120 dB ensures glare-free images, 6.0-180 mm, F1.6-F4.8, 30x optical zoom lens with 360° continuous rotation for the flexibility to clearly view the target area with desired width and depth, H.264 and MJPEG codec, triple stream support, IR LEDs provide up to 200 m, waterproof (IP67) and IK10 vandal resistant camera housing, ONVIF profile S compliant supports up to 128 GB micro SDHC (Class 10) card for local video storage when network is interrupted.	Each	5	124660.00	623300
25.14	4MP IP varifocal MFZ dome camera IP67	Supply, installation testing and commissioning of outdoor WDR IR rugged IP dome cameras shall be equipped with 1/2.7" or 1/2.8" 2 MP progressive scan imager or 1/3" 4 MP progressive scan imager to capture 1080p resolution at 25/30 fps or 4 MP at 20 fps images, 2.7–12 mm or 7–22 mm, F1.4, motorized focus/zoom len, H.264 and MJPEG codec, triple stream support, 50 m (150') IR distance, depending on scene reflectance, waterproof (IP67) and IK10 vandal resistant camera housing, ONVIF profile S and G compliant, built-in PoE (Power over Ethernet) eliminates, separate power supply and associated wiring, 24 V AC/12 V DC inputs where PoE power is unavailable, supports up to 128 GB micro SDHC (class 10) card for local video storage when network is interrupted. Card not included.	Each	20	26818.00	536360
25.15	4MP IP varifocal MFZ bullet camera IP67	Supply, installation testing and commissioning of Outdoor WDR IR rugged IP bullet cameras shall be equipped with : 1/2.7" 2 MP progressive CMOS imager to capture 1080p resolution at 25/30 fps or 4 MP at 20 fps images, 1: 2.7-12 mm, MFZ, F1.4, H.264 and MJPEG codec, triple stream support, 60 m (150') IR distance, depending on scene reflectance, waterproof (IP67) and IK10 vandal resistant camera housing, ONVIF profile S and G compliant,, built-in PoE (Power over Ethernet) eliminates, separate power supply and associated wiring, 24 V AC/12 V DC inputs where PoE power is unavailable, Supports up to 128 GB micro SDHC (class 10) card for local video storage when network is interrupted. Card not included, True WDR: up to 140 dB	Each	45	29866.00	1343970
9.36		Supplying and drawing 4 pair shielded twisted pair (STP), 0.5 mm PVC insulated copper conductor un-armoured Cat-6 computer cable FR in existing surface/concealed, steel/PVC. conduit/casing-n-capping as required.	Metre		76.00	
9.37		Supply, installation testing and commissioning of patch cord as mentioned below :-				
	2	CAT 6 RJ45 patch cord UTP 2 metre	each	45	403.00	18135
	3	CAT 6 RJ45 patch cord UTP 3 metre	each	45	537.00	24165
9.38		Supply, installation testing and commissioning of High-Speed HDMI corrosion-resistant connector & braided cable, Supports Ethernet, 3D, 4K video, computers and other HDMI-enabled devices Black as required to complete the job as mentioned below:-				
	2	2 Metre, HDMI cord	each	5	2019.00	10095
	3	5 Metre, HDMI cord	each	10	4037.00	40370
	4	10 Metre, HDMI cord	each	5	6728.00	33640
25.23	32 channel NVR with 4 SATA	32 channel NVR with 4 SATA				
25.23	32 channel NVR with 1080p	Supply, installation testing and commissioning of 32 channel NVR with 1080p real-time live view H.265/H.264 MJPEG dual codec decoding Up to 12 MP resolution preview & playback max 320 MBPS incoming bandwidth support 4 SATA HDDs up to 32TB, supports fisheye video de-warping in local and web user interface, supports visual or auditory notifications(a flashing light, bell, or siren) complete with UL certification	EACH	3	112148	336444
	Workstation with client license	Workstation with client license				
25.29	Workstation	The work station shall have the following specifications:- Processor Intel @ i5 (latest) min 2.66 GHz with internal memory of 4 GB RAM. Operating system window 10 professional 64-bit or better (WOW 64mode) or window 10 professional or better 32-bit NVIDIA 1 GB independent graphic card. Resolution support for cameras 2560x1600 display resolution capable and direct X true colour 32 bit. Dual link VDI outputs. Client software shall support Dual monitors each displaying 16 cameras simultaneously. A maximum of 32 cameras viewing per workstation at a time. Programmable to sequence.	Each	4	120681	482724
	Hard Disk	Hard Disk				
25.30.2	4 TB	Providing & fixing of 4 TB hard disk	Each	4	9721	38884
	CCTV colour monitor	CCTV colour monitor				
	32" flat LED colour monitors	Supply, installation, testing and commissioning of 32" flat LED colour monitors	Each	4	20257	81028
9.36	cctv cable	Supplying and drawing 4+1 core shielded, 0.5 mm PVC insulated copper conductor un-armoured CCTV cable FRLS in existing surface/concealed, steel/PVC. conduit/ casing-n-capping as required.	Mtr	2500	76	190000
	Concealed PVC conduit HMS	Supply and fixing PVC conduit ISI marked FRLS along with the accessories in concealed system etc. as required				

1.8	25 mm. HMS	PVC. conduit 25 mm (HMS)	mtr	2500	52	130000
(PWD-2024)3 8.19.5. 2	12 Core OS-2 SM Cable	SITC of 12 Core OFC Cable with Armored Uni-Tube, 9/125µm, OS 2 Type, . Complying to ISO/IEC 11801, EN50173, ANSI/TIA 568-C.3, Telcordia GR-20, Uni-tube construction, Water Blocking Thixotropic Gel (Tube) Petroleum Jelly (Interstices) in indoor / outdoor ducts, direct burial and backbone cabling	Metre	500	148.00	74000
38.19.6 .2	2 Mtr OFC Patch Cord	SITC of 2Mtr OFC SM Patch Cord with 9/125 µm, OS2 , Duplex Zipcord , SC-LC/LC-LC / SC-SC connector , 900µ tight buffer, ISO/IEC 1108:2008, ANSI/TIA/ EIA 568.C.3, ANSI/TIA/EIA-492, TELECORDIA GR-409, ICEA-597	Each	20	3140.00	62800
38.19.7 .2	12 Port LIU	SITC, Splicing, Termination of 12 Port Full loaded LIU with SC-LC/LC-LC / SC-SC adopter, Splicing tray, Pigtails, Termination, 1U 19" / ETSI versions available, Sliding Drawer for easy access of back side of connector, Fiber guides, radius controls & secure tie downs provided	Each	2	28141.00	56282
22.3		UPS (3 phase input & 3 phase output) Supply, installation, testing and commissioning of UPS with isolation transformer & battery for backup, having three phases input three phase output. Online double conversion VFI-SS-111 technology, with sinusoidal wave form, architecture (standalone of distributed parallel up to 8 units), having input characteristics i.e. input voltage (380v, 400v, 415v, 3Ph+N+PE), input frequency (45 - 65 Hz), input voltage range (Ph - Ph) : (half load 208v - 467v/full load 312v - 467v), total harmonic distortion of input current < 3% (at full linear load), compatibility with diesel generators configurable for synchronization between the input and output frequencies even for high frequency variations, input power factor > 0.99, having output characteristics i.e. output voltage (380v, 400v, 415v, 3Ph+N (adjustable from front panel), efficiency up to 96%, efficiency in ECO mode up to 98.5%, output frequency (nominal) 50 /60 Hz 0.01% free run (adjustable from front panel), crest factor 3 : 1, total harmonic distortion of output voltage < 2 % (at full linear load), output power factor 0.9, output voltage tolerance ± 1%, built in automatic and maintenance bypass, inbuilt isolation transformer, battery type (VRLA - AGM maintenance free). Communication & management i.e. LCD display (touch screen, LED bar status, live synoptic view for real time), communication ports (RS 222, gense, programmable 4 relay contacts, modbus), Audible alarm (acoustic alarms and warnings), Net interface slot (SNMP card (optional)), having emergency power off (EPO) & remote management. Ambient conditions i.e. operating temperature °C (0°C - 40°C), relative humidity % (20% - 95% not condensing), protection index (IP20), noise at 1 m dBA < 55. UPS installation with all required material arrangements as required as per IS specification				
	22.3.1	10 KVA (3 phase input & 3 phase output)				
	22.1.2.1	For 60 minute backup, min. 16000 VAH	Each	2	361063.00	722126
25.27		8 port PoE switch with 2 SFP ports Supply, installation testing and commissioning of 8 port PoE switch with 2 SFP ports, having security features like port security supports 64 MACs per port, auto surveillance VLAN, loopback detection automatically disables a port when a loop is detected, cable diagnostics allows administrators to determine cable status, UTP cat. 5, cat. 5e (100 m max.), full/half-duplex for 10/100 MBPS, full-duplex for 1000 MBPS, auto MDI/MDIX adjustment for all twisted-pair ports, switching capacity, 40 GBPS, maximum 64 bytes packet forwarding rate, 14.88 MBPS, ports 1 to 8 compliant with 802.3at	Each	2	20480.00	40960
25.28		24 port PoE switch with 4 SFP ports Supply, installation testing and commissioning of 24 port PoE switch with 4 SFP ports, having security features like port security supports 64 MACs per port, auto surveillance VLAN, loopback detection automatically disables a port when a loop is detected, cable diagnostics allows administrators to determine cable status, UTP Cat. 5, Cat. 5e (100 m max.), full/half-duplex for 10/100 MBPS, full-duplex for 1000 MBPS, auto MDI/MDIX adjustment for all twisted-pair ports, switching capacity, 56 GBPS, maximum 64 bytes packet forwarding rate, 41.7mbps, Ports 1 to 24 compliant with 802.3 at	Each	2	46322.00	92644
9.41		Supply, installation testing and commissioning of wall mounting rack , for computer switches/Patch Panel etc complete as mentioned below :-				
	1	6U cabinet with min. Dimensions 366X600X600, wall mounting with 6-point 5 Amp. socket power supply strip, and fan, cable manager, tray as per Site requirement	each	4	6055.00	24220
	2	9U cabinet with min. Dimension 488X600X600, wall mounting with 6 point 5 Amp. socket power supply strip, and fan, cable manager, tray as per Site requirement	each	4	8746.00	34984
	3	12U cabinet with min. Dimension 590X600X600, wall mounting with 6 point 5 Amp. socket power supply strip, and fan, cable manager, tray as per Site requirement	each	2	12783.00	25566

9.42		Supply installation, testing and commissioning of floor mounting rack , base frame, top & bottom, front glass door with perforation, rear vented door, lockable & detachable side panels, 2 pairs 19" rail with depth members. fixed shelf, complete as mentioned below:-				
	1	22U cabinet with min. Dimensions 1150X600X600, floor mounting with power supply and fan, tray. Equipment support angle, vertical cable manager, 12-point 5Amp. vertical power strip, earthing continuity kit, castors (1 set of 4 nos.), captive H/W set of 10, fan tray with 4 fan, for computer .	each	2	33638.00	67276
Total of Carried over to summary.						5089973

BOQ FOR FIRE FIGHTING SYSTEM FOR SANDIPANI ASHRAM

SR. NO.	ITEM DESCRIPTION	UNIT	QTY	RATE	AMOUNT
(A)	PUMP ROOM				
UADD 2025 (23.4.2)	Horizontally mounted coupled motor (Eff-1) 75hp (Main Hydrant Pump)				
	Supplying, installation, testing & commissioning of approved make horizontally mounted coupled motor (Eff-1) 75hp, 2900 RPM, 3 Ph 415 V with mechanical seal pump delivery of 2850 litres per minute against total head of 70 meter so as to ensure a minimum pressure of 3.5 Kg/Cm2 at the highest. The impeller shall be closed type and accurately balanced dynamically. The pump shall be of cast iron, impeller shall be of bronze and shaft shall be of stainless steel, automatic air release valve, pressure gauges (combination suction gauge, 3½" dial type with ¼" cock and lever handle - 1 no, discharge gauge, 3½" dial type with ¼" cock and lever handle - 1 no.) i/c coupling, coupling guard, base channel foundation & matching flanges etc. as required as per specifications. The fire pump set as per NFPA -20 specifications.	Each	1.0	₹ 4,05,495.00	₹ 4,05,495.00
UADD 2025 (23.4.6)	Diesel engine driven firefighting pump water cooled 105 BHP				
	Supplying & installation of approved make diesel engine driven firefighting pump water cooled 105 BHP 2150 RPM engine, fuel tank 200 litre (empty), accessories, matching flanges, base frame, ARV, fuel gauge, exide 12 Volt battery & charger, lugs & cable between battery & charger. The pump capacity of 2850 litres per minute at total head 70 meters, automatic air release valve, pressure gauges (combination suction gauge, 3½" dial type with ¼" cock and lever handle - 1 no, discharge gauge, 3½" dial type with ¼" cock and lever handle - 1 no.) as required. All above equipment's are mounted on common base plate. The fire pump set as per NFPA -20 specifications.	Each	1.0	₹ 7,32,524.00	₹ 7,32,524.00
UADD 2025 (23.4.4)	Jockey pump horizontally mounted coupled motor (Eff-2) 5.5hp				
	Supplying, installation, testing & commissioning of approved make jockey pump horizontally mounted coupled motor (Eff-2) 5.5hp, 2900 RPM, 3 Ph 415 V with mechanical seal pump, delivery of 180 litres per minute against total head of 70 / 88 meter so as to ensure a minimum pressure of 3.5 Kg/Cm2 at the highest. The impeller shall be closed type and accurately balanced dynamically. The pump shall be of cast iron, impeller shall be of bronze and shaft shall be of stainless steel. i/c coupling, coupling guard, base channel foundation & matching flanges etc. as required as per specifications.	Each	1.0	₹ 1,71,980.00	₹ 1,71,980.00
MPPWD 2024 (26.18)	Air vessel				
	Providing and fixing air vessel made of 250mm dia, 8mm thick MS sheet, 1200mm in height with air release valve on top and flanged connection to riser, drain arrangement with 25 mm dia Gunmetal wheel valve, with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required.	Each	1.0	₹ 10,150.00	₹ 10,150.00
UADD 2025 (23.4.9)	Fire pumps electrical panel : Cubical type floor mounted electrical control panel				
	Supplying, installation, testing & commissioning of cubical type floor mounted electrical control panel of 2.0 mm thick CRCA sheet suitable for 380-415 Volt, 50 Hz, 3 Ph supply, NEMA type 2 (IP 31) drip proof metal free standing enclosure for firefighting pumps with suitable star-delta starter including indicating lamps, ammeter, voltmeter, selector switches for each, incoming and outgoing feeder, auxiliary switches, dry suction cut off, single phase preventer, alu. bus bar etc. The panel shall be provided with interlocking arrangement between electric motor driven and diesel engine driven pumps so that only one pump can operate at one time and in case of any failure in electric motor driven pump the diesel engine driven pump shall operate automatically. The installation shall include all control wiring, accommodation for battery charger etc. and connections as required.				

BOQ FOR FIRE FIGHTING SYSTEM FOR SANDIPANI ASHRAM

SR. NO.	ITEM DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Incoming : 1.No. 250 Amp 4 Pole MCCB, 35 KA 1 Set 300 Amp, 500V capacity 4 Nos. aluminium bus bar with epoxy insulator, heat shrink sleeve, required hole , nut bolt etc. 1 No. 96x 96 mm 0 to 500 Volt voltmeter selector switch and HRC fuse with base. 1 No. 96x 96 mm 0 to 300 Amp ammeter, selector switch and CT 1Set -3 nos. indicating lamp with HRC fuse and base Out goings : 2 Nos. 200 Amp 4 Pole MCCB,25 KA 2 Nos. 63 Amp 4 pole MCCB,10 KA. 1 No. fully automatic star delta starter suitable for main pump motor I/C CT, ammeter with selector switch & control with pressure switch, pump ON indicating lamp. 1 No. DOL starter suitable for jockey pump motor I/C CT, ammeter with selector switch. & control with pressure switch complete with auto/manual selector switch inter connecting wiring, control wiring from pressure switch to panel, pump ON indicating lamp. etc. complete as required.	Each	1.0	₹ 2,93,890.00	₹ 2,93,890.00
SUB-TOTAL OF PUMP & VESSELS					₹ 16,14,039.00
(B)	HYDRANT SYSTEM				
MPPWD 2024 (19.46)	UNDERGROUND HDPE PIPE				
	Providing, laying and jointing HDPE Double Wall corrugated (DWC) pipes (excavation to be paid seperately)				
19.46.3	200 mm dia	metre	670.0	₹ 608.00	₹ 4,07,360.00
MPPWD 2024 (26.2)	C' class heavy duty MS pipe on wall				
	MS pipe in on wall/ ceiling Providing laying, testing and commissioning of 'C' class heavy duty MS pipe conforming to IS 1239/3589 i/c fittings like elbows, tees, flanges, reducer, jointing with nuts bolts, gaskets and welding etc. and fixing the pipe on wall/ceiling with suitable hangers, clamps, supports, as required and painting with two or more coats of synthetic. Enamel paint of required shade complete as directed by Engineering-in-Charge.				
26.2.1	200 mm dia	metre	80.00	₹ 3,086.00	₹ 2,46,880.00
26.2.2	150 mm dia	metre	250.00	₹ 2,203.00	₹ 5,50,750.00
26.2.3	100 mm dia	metre	400.00	₹ 1,527.00	₹ 6,10,800.00
26.2.4	80mm dia	metre	350.00	₹ 1,060.00	₹ 3,71,000.00
DSER 2025	Pipes of sizes 150mm & below shall be M.S. 'C' class as per IS : 1239 and pipes size above 150mm shall be welded black steel pipe heavy class as per IS: 3589, from minimum 6.35mm thick M.S. Sheet for pipes upto 350 mm dia. and from minimum 7mm thick MS sheet for pipes of 400 mm dia and above.				
3003	M.S. Pipe 300 mm dia	metre	50.00	₹ 5,026.50	₹ 2,51,325.00
3004	M.S. Pipe 250mm dia	metre	80.00	₹ 4,217.40	₹ 3,37,392.00
3014	M.S. Pipe 25 mm dia	metre	150.0	₹ 296.10	₹ 44,415.00
MPPWD 2024 (18.14)	Ball valve				
	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
18.14.3	25 mm dia	each	10.0	₹ 499.00	₹ 4,990.00
MPPWD 2024 (26.6)	Butterfly valve				
	Providing, fixing, testing and commissioning of butterfly valve PN 1.6, with Bronze/Gunmetal seat duly ISI marked complete with Nuts, Bolts, washers, gaskets, confirming to IS 13095, of following sizes as required.				
26.6.1	200 mm dia	each	5.0	₹ 8,530.00	₹ 42,650.00
26.6.2	150 mm dia	each	4.0	₹ 6,815.00	₹ 27,260.00
26.6.3	100 mm dia	each	6.0	₹ 4,500.00	₹ 27,000.00
26.6.4	80mm dia	each	16.0	₹ 3,400.00	₹ 54,400.00
MPPWD 2024 (26.8)	Dual plate non- return valve				

BOQ FOR FIRE FIGHTING SYSTEM FOR SANDIPANI ASHRAM

SR. NO.	ITEM DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Providing, installation, testing and commissioning of dual plate non- return valve of following sizes confirming to IS 5312 complete with rubber gasket, GI bolts, nuts, washers etc. as required.				
26.8.1	200 mm dia	each	2.0	₹ 9,775.00	₹ 19,550.00
26.8.2	150 mm dia	each	2.0	₹ 7,350.00	₹ 14,700.00
26.8.3	100 mm dia	each	2.0	₹ 4,900.00	₹ 9,800.00
MPPWD 2024 (26.7)	Orifice plate				
	Providing and fixing orifice plate made of 6mm thick stainless steel with orifice of required size in between flanged and landing valve of external and internal hydrant to reduce pressure to working pressure of 3.5 kg/cm complete as per specification required.	each	15.0	₹ 1,195.00	₹ 17,925.00
MPPWD 2024 (26.9)	Stainless steel strainer				
	Providing, installation, testing and commissioning stainless steel strainer fabricated out of 1.6 mm thick stainless steel sheet with 3 mm dia holes with stainless steel flange.				
26.9.1	100 mm dia	each	2.0	₹ 6,631.00	₹ 13,262.00
MPPWD 2024 (26.1)	Gun metal valves				
	Providing, installation, testing and commissioning of gun metal valves of following sizes as required.				
26.10.3	65mm dia	each	15.0	₹ 2,106.00	₹ 31,590.00
DSER 2025	NON - RETURN VALVE with dual plate of C I body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating for chilled / hot water circulation including insulation as specified.				
3042	125mm dia	each	2.0	₹ 4,074.40	₹ 8,148.80
DSER 2025	Y - STRAINER of Ductile CI Body flanged ends with stainless steel strainer for chilled / hot water circulation including insulation as specified.				
3046	200mm dia	Each	2.0	₹ 35,614.00	₹ 71,228.00
3047	150mm dia	Each	2.0	₹ 18,992.00	₹ 37,984.00
UADD 2025 (23.4.10)	Supplying & installation of approved make pressure switch with 15 mm dia brass check nut for automatic operation on required pressure including necessary wiring up to control panel.	Each	5.0	₹ 2,898.00	₹ 14,490.00
UADD 2025 (23.4.11)	Supplying & installation of pressure gauges with 15 mm dia brass check nut & capable of showing pressure reading from 0. to 30 kg.	Each	8.0	₹ 1,913.00	₹ 15,304.00
MPPWD 2024 (26.11)	RRL hose pipe				
	Supplying and fixing dia,15m long, RRL hose pipe with following diamale and female gun metal couplings duly binded with GI wire, rivets etc. confirming to IS 636 (type-A) as required.				
26.11.2	65mm dia	each	25.0	₹ 5,510.00	₹ 1,37,750.00
MPPWD 2024 (26.12)	First -Aid hose reel				
	Providing and fixing first -Aid hose reel with MS construction spray painted in post office red, confirming to IS 884 with up to date amendments, complete with the following as required.) (a) 30-36m long 20mm (nominal internal) dia water hose thermoplastic (textile reinforced) type -2 as per IS 12585 (b) 20mm (nominal internal) dia gun metal globe valve and nozzle. (c) Drum and brakets for fixing the equipments on wall. (d) Connections from riser with 40 mm dia stop valve (gun metal) and M.S. pipe	each	5.0	₹ 6,065.00	₹ 30,325.00

BOQ FOR FIRE FIGHTING SYSTEM FOR SANDIPANI ASHRAM

SR. NO.	ITEM DESCRIPTION	UNIT	QTY	RATE	AMOUNT
MPPWD 2024 (26.14)	Hose cabinet size 700x600x300mm				
	Providing and fixing hose cabinet of size 700x600x300mm made of 16 gauge thick MS sheet with 4 mm thick float glass doors in front painted "FIRE" in red paint i/c necessary locking arrangement suitable to accommodate external hydrant with butterfly valve 2 nos. 15m Long hose pipe, 1 no branch pipe mounted on wall or raised brick platform& duly painted with post office red externally and white internally with synthetic enamel paint complete in all respects for external hydrant, as directed by Engineer-in-Charge.	each	15.0	₹ 4,000.00	₹ 60,000.00
MPPWD 2024 (26.15)	4 way fire brigade connection				
	Providing and fixing 4way fire brigade connection (FBC)of cast iron body with 4 nos. gun metal male instantaneous inlet couplings complete with cap and chain as required. For 150mm dia MS pipe connection, confirming to IS 904 as required.	each	2.0	₹ 14,150.00	₹ 28,300.00
MPPWD 2024 (26.17)	2 way fire brigade connection				
	Providing and fixing 2 way fire brigade connection (FBC) of CI body with2 nos. gun metal male instantaneous inlet couplings complete with cap and chain as required. For 150mm dia MS pipe connection, confirming to IS 904 as required.	each	2.0	₹ 6,000.00	₹ 12,000.00
MPPWD 2024 (26.27)	Carbon-di-oxide type fire extinguishers				
	Providing and fixing of carbon-di- oxide type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating gauge internal discharge tube 30 cm long high pressure discharge hose, discharge nozzle, suspension bracket conforming to IS : 15683 finished externally with red enamel paint and fixed to wall with brackets complete with internal charge.				
26.27.3	Capacity 4.5 kg	each	20.0	₹ 11,351.00	₹ 2,27,020.00
MPPWD 2024 (26.28)	ABC Power type fire extinguishers				
	Providing and fixing of ABC Power type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating gauge internal discharge tube 30 cm long high pressure discharge hose, discharge nozzle, suspension bracket. Conforming to IS: 15683 finished externally with red enamel paint fixed to wall with brackets complete with internal charge.				
26.28.3	Capacity 4.0 kg	each	20.0	₹ 4,091.00	₹ 81,820.00
UADD 2025 (15.5)	Supplying & fixing of Fire Extinguisher/Refills as per IS specification: -				
7	4 bucket set with stand and sand dully painted red	each	24.0	₹ 2,488.00	₹ 59,712.00
MPPWD 2024 (26.3)	Single headed hydrant valve				
	Providing and fixing single headed hydrant valve with instantaneous female Gun metal couplings of required dia with cast iron wheel ISI marked conforming to IS 5290 (Type - A) with blank gunmetal cap and chain, adopter as required complete as directed by Engineer-in-Charge.				
26.3.1	63mm dia	each	15.0	₹ 6,700.00	₹ 1,00,500.00
SUB-TOTAL OF HYDRANT SYSTEM & ACCESSORIES					₹ 39,67,630.80
TOTAL FOR FIRE FIGHTING SYSTEM					₹ 55,81,669.8

Fire Alarm System						
Item No.	Sub item no.	Description of Items	Unit	Rates (in Rs.)	QTY.	Amount
23.1		ADDRESSABLE FIRE ALARM SYSTEM				
	23.1.1	2 Loop microprocessor				
		Supply, installation, testing and commissioning of 2 loop microprocessor based intelligent and electronically addressable, modular, loop capacity of 159 detectors. Fire alarm control panel with 5.7 inch touch screen LCD display, multiple access levels, 10,000 event history logs in the nonvolatile memory (EEPROM). The panel should be modular microprocessor based in nature. The panel shall have 240V AC power supply, automatic battery charger, 24 V, ceiled lead acid maintenance free batteries sufficient for 24 hours normal working and then be capable of operating the system for 30 mints during emergency condition. The panel shall be EN 54/UL certification.	Each	157872.00	1	157872
	23.1.2	4 Loop microprocessor				
		Supply Installation, testing & commissioning of 4 loop microprocessor based intelligent and electronically addressable, modular, with networking card & printer port- loops panel (expandable) with each loop capacity of 159 detectors. Fire alarm control panel with 5.7 inch touch screen LCD display, multiple access levels 10,000 event history logs in the nonvolatile memory (EEPROM). The panel should be modular microprocessor based in nature and should be expandable from single loop to up to 32 loops. The panel shall have 240V AC power supply, automatic battery charger, 24 V, ceiled 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. Provision for integration to BMS back net software. The panel shall be EN 54/UL certification.	Each	412620.00	1	412620
	23.1.3	Supply installation, testing and commissioning of loop card LSN 0300 A LSN module.	Each	39332.00	2	78664
	23.1.4	Supply, installation, testing and commissioning of active and networkable repeater panel with LCD display complete system function keys for programming and control like system reset, alarm acknowledgement, alarm silence, trouble acknowledgement UL/EN54 certified.	Each	115877.00	1	115877
	23.1.7	Supply, installation, testing and commissioning of addressable-automatic dual LED smoke detector with two integrated light-scattering smoke sensors using LEDs with different colours/wavelengths (blue/infrared) to avoid false alarm & should comply to test fire 1, Inbuilt Isolator, automatic addressing shall be UL/EN54 certified	Each	5263.00	250	1315750
	23.1.1	Supply, installation, testing and commissioning of indoor addressable manual break glass unit (double action) with inbuilt isolators, with flexible network structures & necessary fixing arrangements with key complete as required shall be UL/EN54 certified	Each	4450.00	10	44500
	23.1.11	Supply, installation, testing and commissioning of outdoor addressable manual break glass unit (double action) with inbuilt isolators, with flexible network structures & necessary fixing arrangements with key complete as required, shall be UL/EN54 certified	Each	8386.00	20	167720
	23.1.12	Supply, installation, testing and commissioning of Indoor Standalone Loop Powered detector base sounder with inbuilt isolators & with 32 different tone variants selection options & adjustable sound pressure by 5 levels, the sound pressure 92.1 dB(A), shall be UL/EN54 certified	Each	7176.00	10	71760
	23.1.13	Supply, installation, testing and commissioning of outdoor standalone loop powered detector base sounder with inbuilt isolators & with 32 different tone variants selection options & adjustable sound pressure by 5 levels, the sound pressure 92.1 dB(A), shall be UL/EN54 certified	Each	9808.00	5	49040
	23.1.14	Supply, installation, testing and commissioning of strobe for base sounder red with inbuilt isolators, shall be UL/EN54 certified	Each	5024.00	5	25120
	23.1.15	Supply, installation, testing and commissioning of beam detector including mounting base along with interface module to direct connect to the loop, having a coverage area with a distance of min. 10 m and max. 100 m with extra width of up to 14 m ,operating temperature range: -20 C to +55 C, response sensitivity of 40% UL/EN54 certified	Each	86471.00	1	86471

	23.1.16	Supply, installation, testing and commissioning of addressable control relay module with inbuilt isolators & with flexible network structures with a maximum switching current of 1A @ 30V DC, shall be UL/EN54 certified	Each	15044.00	2	30088
	23.1.17	Supply, installation, testing and commissioning of addressable output module with inbuilt isolators, shall be UL/EN54 certified	Each	16972.00	4	67888
	23.1.18	Supply, installation, testing and commissioning of 1output+1input interface module with inbuilt isolator UL/EN54certified	Each	15941.00	4	63764
	23.1.19	Supply, installation, testing and commissioning of response Indicator shall be UL/EN54certified	Each	282.00	50	14100
	PWD-2024(41.28)	Supply ofXLPE insulated 1.5 sq.mm. Armoured 2 core FRLSZH fire alarm cable (RED) Fire Survival Cable conforming IS-7098 (Part-1) 1988, 1100 Voltgrade,2/3/4/8/10/12core ISI marked with copper stranded/solid conductor.	Meter	154	2500	385000
			Total of Fire Alarm System			3086234

LIFT / ELEVATORS						
Item No.	Sub Item No.	Description of Item	Unit	Rates (in Rs.)	QTY.	Amount
27.1	27.1	Supply, installation, testing, commissioning, and final testing of automatic lift complete in the shaft well and pit already constructed as per CPWD specification including automatic rescue device (ARD), All standard equipment's, accessories and control equipment's as per manufacturer's design and as per CPWD specification (Part III LIFTS) on turnkey basis, Conforming to NBC/statutory norms and fulfilling following requirements. (i) Type: Passenger lift. (ii) Load: As specified elsewhere from 4 passengers (272Kg) to 26 passengers (1768Kg) (for each person standard weight 68Kg). (iii) Speed: 1.00 metre/sec. or less as required. (iv) Control: ACV3F, 32bit microprocessor integrated serial communication control system with RMS (remote monitoring system)/BMS (building monitoring system) supporting software. (v) Motor/machine: Permanent magnetic synchronous gearless motor.				
		(vi) Operation: Simplex collective selective with/without lift attendant. (vii) Total rise: About 3 m. (approx) two stops only. (viii) Landings: All floors on same side. (ix) Floors served: G+1. (x) Signals: Digital car position indicator, car travel direction indicator inside car & at all landings, voice annunciator with suitable music shall be provided in the lift car. (xi) Shaft size: As per manufacturer's design and as per CPWD specification (Part III LIFTS), Shaft to be constructed separately. (xii) Guide rail: As per manufacturer's specification. (xiii) Lift & car size: As per manufacturer's design and as per CPWD specification (Part III LIFTS). (xiv) Car entrance: As per manufacturer's design and as per CPWD specification (Part III LIFTS). (xv) Landing entrance: As per manufacturer's design and as per CPWD specification (Part III LIFTS).				
		(xvi) Car door: S.S. (stainless steel) hairline finish centre/telescopic opening door with vision panel.(xvii) Landing door: S.S. (stainless steel) hairline finish centre/telescopic opening door with vision panel.(xviii) Door operation: Automatic electric power operated door, full height infrared curtain with multiple criss/cross light beams.(xix) Car interior: S.S. (stainless steel) panel with hair line finish on all sides.(xx) Car floor: Anti skid PVC flooring on heavy duty M S				
		(mild steel) platform.(xxi) Car ceiling & lighting: S. S. (stainless steel) finish with aesthetic appearance with LED ceiling lights (xxii) Car ventilation: Pressure fan/blower fan (car fan with automatic sleep timer shall be provided).(xxiii) Emergency lighting in car: Battery operated emergency lighting in the lift car.(xxiv) Intercom system: Battery operated intercom system in lift car, machine room and ground floor/control room.				
		(xxv) Emergencyalarm: Battery operated alarm bell system in lift car & control room / ground floor. (xxvi) Position of machine room: Directly above the hoist-way. (xxvii) Electric power supply: AC 415 V, 3 phases 50 Hz & AC 230 V 1phase 50Hz terminated in machine room. (xxviii) Fire man switch : Fire man switch at machine room/terminal landing (xxix) All car panel buttons and all floor switches must be with Braille language as per lift act. (xxx) Audio visual indication in the lift car showing overloading shall be provided such that doors keep open till excess load is removed. (xxxi) Spring buffer/hydraulic buffer shall be provided (xxxii) Spring buffer/hydraulic buffer shall be provided (xxxiii) Mechanical over speed governor, door key holes in the floor doors shall be provided.(xxxiii) Lift machine hoisting arrangement in the lift machine room and monkey ladder for lift pit should be provided by the lift agency, along with the other steel structure works, foundations for the machines etc. (xxxiv) In the hoist way fascia plate shall be provided. (xxxv) Permanent wiring in lift machine room and lift well with proper no. of light points, with fixtures, exhaust fan, plug points and 3 phase 440V power supply shall be made in lift shaft by the department, machine room or at desired level. (xxxvi) Car top safety barricade shall be provided. (xxxvii) ARD (automatic rescue device): Solid state inbuilt automatic rescue device (ARD) automatically rescues passengers trapped in the lift car in between floors in the event of power failure. Automatic operation and immediate action in the event of mains failure, capable of moving the lift to the nearest landing, opens the automatic door of the lift car and floor. Sealed maintenance free battery backup with automatic charging unit and auto changeover device on mains failure.				
		(xxv) Emergencyalarm: Battery operated alarm bell system in lift car & control room / ground floor. (xxvi) Position of machine room: Directly above the hoist-way. (xxvii) Electric power supply: AC 415 V, 3 phases 50 Hz & AC 230 V 1phase 50Hz terminated in machine room. (xxviii) Fire man switch : Fire man switch at machine room/terminal landing (xxix) All car panel buttons and all floor switches must be with Braille language as per lift act. (xxx) Audio visual indication in the lift car showing overloading shall be provided such that doors keep open till excess load is removed. (xxxi) Spring buffer/hydraulic buffer shall be provided (xxxii) Spring buffer/hydraulic buffer shall be provided (xxxiii) Mechanical over speed governor, door key holes in the floor doors shall be provided.(xxxiii) Lift machine hoisting arrangement in the lift machine room and monkey ladder for lift pit should be provided by the lift agency, along with the other steel structure works, foundations for the machines etc. (xxxiv) In the hoist way fascia plate shall be provided. (xxxv) Permanent wiring in lift machine room and lift well with proper no. of light points, with fixtures, exhaust fan, plug points and 3 phase 440V power supply shall be made in lift shaft by the department, machine room or at desired level. (xxxvi) Car top safety barricade shall be provided. (xxxvii) ARD (automatic rescue device): Solid state inbuilt automatic rescue device (ARD) automatically rescues passengers trapped in the lift car in between floors in the event of power failure. Automatic operation and immediate action in the event of mains failure, capable of moving the lift to the nearest landing, opens the automatic door of the lift car and floor. Sealed maintenance free battery backup with automatic charging unit and auto changeover device on mains failure.				
		8 Passenger (544Kg.)G+1	Each	1498335.00	1	1498335
		8 Passenger (544Kg.)G+2	Each	1567335	1	1567335
				Total Amount		3065670

ESTIMATE OF CONSERVATION OF MAHARISHI SANDIPANI ASHRAM AT UJJAIN (MP)										
Installations and Non Sor Items										
Sr. No.	NON SOR	Descriptions	Unit	Qty.	Rate	Amount				
							A	Installations in Brass		
							a	108 ft height Tall Installation		
1	NON SOR	Designing, sculpting, providing, fabricating, supplying, transporting and installing a 108 ft Architectural alloy metal statue (Vishnu Virat Swarop) as per approved design, including 3D modelling (atleast two minutes of minimum 4ft and 8fts), structural engineering (vetted from any prominent institution) and preparation of fabrication drawings; bronze casting in segmented panels (6–12 mm thick) using high-grade bronze alloy (approx. 85–88% Cu, 7–10% Sn) with complete sculptural finishing, chasing, joint blending and polishing; fabrication and erection of an internal MS structural core in IS 2062 E250/E350 grade steel with central column, ring beams, stiffeners and bracings, coated with zinc-rich primer and PU topcoat; application of approved patina and protective clear coats; factory trial assembly, rectification and dismantling; safe packing, transportation by specialised trailers with all lifting/crane arrangements; on-site erection using heavy-duty cranes, scaffolding and safety systems, including installation of core structure, alignment of bronze panels, welding/sealing of joints and final finishing; provision of lightning protection and earthing integrated with structural core; and complete testing, inspection, and submission of as-built drawings and certificates. The rate shall include all materials, labour, equipment, tools, plants, machinery, safety measures, transportation (including imports, if any, FOR-Ujjain) and incidental works required to deliver the statue fully installed and completed, as per detailed scope of work and specifications.	Job	1.00	₹	-				
							b	40 ft height Tall Installation		
2	NON SOR	Providing, fabricating, supplying, transporting and installing a 40 ft alloy metal statue (Krishna with flute) as per approved design, including 3D modelling, structural engineering and preparation of fabrication drawings; bronze casting in segmented panels (6–12 mm thick) using high-grade bronze alloy (approx. 85–88% Cu, 7–10% Sn) with complete sculptural finishing, chasing, joint blending and polishing; fabrication and erection of an internal MS structural core in IS 2062 E250/E350 grade steel with central column, ring beams, stiffeners and bracings, coated with zinc-rich primer and PU topcoat; application of approved patina and protective clear coats; factory trial assembly, rectification and dismantling; safe packing, transportation by specialised trailers with all lifting/crane arrangements; on-site erection using heavy-duty cranes, scaffolding and safety systems, including installation of core structure, alignment of bronze panels, welding/sealing of joints and final finishing; provision of lightning protection and earthing integrated with structural core; and complete testing, inspection, and submission of as-built drawings and certificates. The rate shall include all materials, labour, equipment, tools, plants, machinery, safety measures, transportation and incidental works required to deliver the statue fully installed and completed.	Job	1.00	₹	-				
							c	20ft height Tall Installation		
3	NON SOR	Providing, fabricating, supplying, transporting and installing a 20 ft alloy metal statue (Krishna with sudarshana chakra) as per approved design, including 3D modelling, structural engineering and preparation of fabrication drawings; bronze casting in segmented panels (6–12 mm thick) using high-grade bronze alloy (approx. 85–88% Cu, 7–10% Sn) with complete sculptural finishing, chasing, joint blending and polishing; fabrication and erection of an internal MS structural core in IS 2062 E250/E350 grade steel with central column, ring beams, stiffeners and bracings, coated with zinc-rich primer and PU topcoat; application of approved patina and protective clear coats; factory trial assembly, rectification and dismantling; safe packing, transportation by specialised trailers with all lifting/crane arrangements; on-site erection using heavy-duty cranes, scaffolding and safety systems, including installation of core structure, alignment of bronze panels, welding/sealing of joints and final finishing; provision of lightning protection and earthing integrated with structural core; and complete testing, inspection, and submission of as-built drawings and certificates. The rate shall include all materials, labour, equipment, tools, plants, machinery, safety measures, transportation and incidental works required to deliver the statue fully installed and completed.	Job	1.00	₹	-				
							B	Installations in Stone		
							a	8 ft height Tall Installation		
4	NON SOR	Providing, carving, supplying and installing a 8 ft high statue of Sandipani Rishi in seated posture, executed in natural sandstone as per approved design, drawings, and artistic references. The work includes conceptual artwork development, preparation of 2D/3D sculpting models, clay/POP maquettes for approval, and detailed carving drawings indicating posture, proportions, drapery, facial expressions, and ornamentation. The statues shall be carved from single or multiple blocks of high-quality natural sandstone (as specified—Dholpur / Jaisalmer / Agra / Bansī Paharpur, etc.) with uniform grain, free from cracks, veins or discoloration. Minimum block thickness shall be suitable to achieve full sculptural depth, ensuring structural integrity. Carving shall be executed using CNC rough-cutting followed by hand-finishing by skilled artisans, achieving accurate human proportions, anatomical correctness, facial detailing, hair/beard texture, garment folds, symbolic features, and expressions appropriate to Gurukul narrative. Student statues shall be carved to the correct scaled height matching the 8 ft Rishi statue, maintaining visual harmony and composition. Surface finishing shall include fine chiselling, smoothing, edge refinement and natural stone polish as per approved sample. The item includes fabrication and installation of a stone or RCC pedestal (height, size, and design as specified), finished in matching sandstone cladding with mouldings, corner detailing, inscriptions (if any), and proper anchoring arrangements for statues. All statues shall be installed using SS dowels, anchor bolts, epoxy grouts, and anti-vibration bedding to ensure stability and long-term performance. Work includes complete surface preparation, alignment, joint filling, sealing, and final finishing of the pedestal and sculptures. Scope also includes transportation of stone blocks and finished sculptures, loading/unloading, protective packing, scaffolding, lifting equipment, site preparation, positioning of statues, cleaning, polishing, and application of breathable stone preservative/sealant. All works shall be executed with strict adherence to artistic quality, proportional accuracy, safety, and site conditions.	Job	1.00	₹	-				
5	NON SOR	Providing, carving, supplying and installing a 4 ft high statue of gurukul students in seated posture, executed in natural sandstone as per approved design, drawings, and artistic references. The work includes conceptual artwork development, preparation of 2D/3D sculpting models, clay/POP maquettes for approval, and detailed carving drawings indicating posture, proportions, drapery, facial expressions, and ornamentation. The statues shall be carved from single or multiple blocks of high-quality natural sandstone (as specified—Dholpur / Jaisalmer / Agra / Bansī Paharpur, etc.) with uniform grain, free from cracks, veins or discoloration. Minimum block thickness shall be suitable to achieve full sculptural depth, ensuring structural integrity. Carving shall be executed using CNC rough-cutting followed by hand-finishing by skilled artisans, achieving accurate human proportions, anatomical correctness, facial detailing, hair/beard texture, garment folds, symbolic features, and expressions appropriate to Gurukul narrative. Student statues shall be carved to the correct scaled height matching the 8 ft Rishi statue, maintaining visual harmony and composition. Surface finishing shall include fine chiselling, smoothing, edge refinement and natural stone polish as per approved sample. Scope also includes transportation of stone blocks and finished sculptures, loading/unloading, protective packing, scaffolding, lifting equipment, site preparation, positioning of statues, cleaning, polishing, and application of breathable stone preservative/sealant. All works shall be executed with strict adherence to artistic quality, proportional accuracy, safety, and site conditions.	Job	8.00	₹	-				
							Total	₹	-	
							C	Installations in GFRC		
							a	8 ft height Tall Installation		

				6	NON SOR	<p>Providing, fabricating, supplying, transporting and installing a complete 8-ft tall thematic statue of "Krishna and Sudama" executed in premium-grade Glass Fibre Reinforced Concrete (GFRC), including preparation of detailed 3D sculptural model, scaling, refinement and approval, fabrication of high-resolution multi-part FRP/GFRP moulds with gel-coat inner surface and stiffened backing supports, casting of the statue using GFRC of minimum 60-70 MPa compressive strength comprising white/grey cement, silica sand, additives and alkali-resistant glass fibres (zirconia >16%) with face-coat and fibre-reinforced back-coat achieving a uniform shell thickness of 25-35 mm, forming all fine details, textures, folds and ornaments as per approved design; providing and fixing a complete internal structural framework made of MS/GI square sections (50x50x3 mm, 40x40x3 mm, and 32 mm pipes) including fabrication, welding, base plate (10-12 mm thick), bracing, anti-rust treatment and epoxy primer coating for long-term stability; assembling and jointing all GFRC parts over the internal frame using stainless steel fasteners, chemical anchors and GFRC putty to achieve seamless joints and monolithic appearance, machine sanding, hand finishing and sculptural detailing; applying exterior-grade finishing including stone/metallic texture, hand-painted detailing and two coats of UV-resistant PU protective coating; transporting the statue components to site with protective packing, providing all tools, tackles, skilled labour, scaffolding and lifting equipment, installing the statue on the RCC/MS foundation pedestal with approved anchor bolts, non-shrink grout and alignment checks, ensuring complete structural stability, verticality, final polishing, touch-ups, cleaning and making good the entire work, all complete as per design, specification and directions of the Engineer-in-Charge.</p>	Job	1.00	₹	-
				a	8 ft height Tall Installation					
				7	NON SOR	<p>Providing, fabricating, supplying, transporting and installing a complete 8-ft tall thematic statue of "Krishna and Balaram" executed in premium-grade Glass Fibre Reinforced Concrete (GFRC), including preparation of detailed 3D sculptural model, scaling, refinement and approval, fabrication of high-resolution multi-part FRP/GFRP moulds with gel-coat inner surface and stiffened backing supports, casting of the statue using GFRC of minimum 60-70 MPa compressive strength comprising white/grey cement, silica sand, additives and alkali-resistant glass fibres (zirconia >16%) with face-coat and fibre-reinforced back-coat achieving a uniform shell thickness of 25-35 mm, forming all fine details, textures, folds and ornaments as per approved design; providing and fixing a complete internal structural framework made of MS/GI square sections (50x50x3 mm, 40x40x3 mm, and 32 mm pipes) including fabrication, welding, base plate (10-12 mm thick), bracing, anti-rust treatment and epoxy primer coating for long-term stability; assembling and jointing all GFRC parts over the internal frame using stainless steel fasteners, chemical anchors and GFRC putty to achieve seamless joints and monolithic appearance, machine sanding, hand finishing and sculptural detailing; applying exterior-grade finishing including stone/metallic texture, hand-painted detailing and two coats of UV-resistant PU protective coating; transporting the statue components to site with protective packing, providing all tools, tackles, skilled labour, scaffolding and lifting equipment, installing the statue on the RCC/MS foundation pedestal with approved anchor bolts, non-shrink grout and alignment checks, ensuring complete structural stability, verticality, final polishing, touch-ups, cleaning and making good the entire work, all complete as per design, specification and directions of the Engineer-in-Charge.</p>	Job	1.00	₹	-
				a	6 ft height Tall Installation					
				8	NON SOR	<p>Providing, fabricating, supplying, transporting and installing a complete 6-ft tall thematic statue of "Krishna and Yashoda maa in seating posture" executed in premium-grade Glass Fibre Reinforced Concrete (GFRC), including preparation of detailed 3D sculptural model, scaling, refinement and approval, fabrication of high-resolution multi-part FRP/GFRP moulds with gel-coat inner surface and stiffened backing supports, casting of the statue using GFRC of minimum 60-70 MPa compressive strength comprising white/grey cement, silica sand, additives and alkali-resistant glass fibres (zirconia >16%) with face-coat and fibre-reinforced back-coat achieving a uniform shell thickness of 25-35 mm, forming all fine details, textures, folds and ornaments as per approved design; providing and fixing a complete internal structural framework made of MS/GI square sections (50x50x3 mm, 40x40x3 mm, and 32 mm pipes) including fabrication, welding, base plate (10-12 mm thick), bracing, anti-rust treatment and epoxy primer coating for long-term stability; assembling and jointing all GFRC parts over the internal frame using stainless steel fasteners, chemical anchors and GFRC putty to achieve seamless joints and monolithic appearance, machine sanding, hand finishing and sculptural detailing; applying exterior-grade finishing including stone/metallic texture, hand-painted detailing and two coats of UV-resistant PU protective coating; transporting the statue components to site with protective packing, providing all tools, tackles, skilled labour, scaffolding and lifting equipment, installing the statue on the RCC/MS foundation pedestal with approved anchor bolts, non-shrink grout and alignment checks, ensuring complete structural stability, verticality, final polishing, touch-ups, cleaning and making good the entire work, all complete as per design, specification and directions of the Engineer-in-Charge.</p>	Job	1.00	₹	-
				9	NON SOR	<p>Providing, fabricating, supplying, transporting and installing GFRC gates of overall size approx. 12 mt in height and 7 mt in width with a central arched opening of 3 mt clear width, executed in minimum 40 mm thick high-strength Glass Fibre Reinforced Concrete (GFRC), including preparation of detailed moulds, carving and sculpting of theme-based murals, motifs and façade ornamentation as per approved design; fabrication of high-resolution multi-part moulds with gel-coat lining and stiffened supports; casting of GFRC panels using high-grade cement matrix with alkali-resistant glass fibres (zirconia content >16%), silica sand, polymer additives and plasticizers, ensuring uniform thickness, sharp detailing and controlled curing; providing an internal SS/GI structural framework using IS-grade square hollow sections (minimum 40x40x3 mm or as required), including fabrication of frame members, stiffeners, anchor plates, welding, rust-preventive treatment and epoxy coating; assembling GFRC panels on the structural frame using stainless steel connectors, chemical anchors and GFRC putty for seamless integration of joints; surface finishing with approved texture/colour scheme, including primer, exterior-grade paint and UV-resistant PU/sealer coating; transportation to site with protective packing, lifting and erection of gate components, fixing on RCC/structural foundation with anchor bolts, grouting, alignment checks, touch-ups, cleaning and handing over the complete installation, including all labour, materials, tools, tackles and incidental works required to execute the GFRC gate in all respects as per design and engineer-in-charge.</p>	Job	4.00	₹	-
					D	Painting work				
					a	stone inlay work around the corridor				
				10	NON SOR	<p>Providing, preparing, carving, inlaying and finishing thematic stone inlay work on hard sandstone surfaces, depicting storyline figures, scenes and symbolic motifs related to Shri Krishna and the Sandipani Ashram narrative, including complete surface preparation, cleaning, marking and engraving of recess profiles in sandstone to a uniform depth of 30 mm for receiving the inlay stones; supplying, carving and shaping contrasting natural stones (such as dhokpur, Jaisalmer,) into required figurative forms, motifs, line-art elements and narrative patterns, executed through hand chiselling, contour shaping, sanding and fine detailing; fixing and embedding the 30 mm thick carved stone inlay pieces into the engraved sandstone recess using approved stone adhesives or lime-based mortar, ensuring flush finish, tight joints, correct alignment and seamless integration with the parent stone; carrying out edge refinement, surface chiselling, texture correction and polishing as required to achieve a unified aesthetic; followed by washing and application of approved clear breathable stone sealer or PU-based exterior protective coating to enhance colour, resist dust, protect against moisture ingress and ensure long-term durability; including all materials, tools, labour, templates, artwork preparation, scaffolding, finishing, curing and incidental works required to complete the stone inlay work in all respects as per approved design and direction of the Engineer-in-Charge.</p>	Sqft	800.00	₹	-
				11	NON SOR	<p>Providing, commissioning and executing 3D art painting work on approved ceiling/wall surfaces through an empanelled artist/studio of national or international recognition, including concept adaptation, refinements, detailed layout, shading, rendering and creation of a three-dimensional visual effect using high-grade, UV-resistant premium paints. The scope includes complete surface preparation, application of high-quality primer, multilayer artistic painting with controlled gradients, depth detailing, highlights, shadow modulation, textural refinement, and final protective clear coat to ensure durability and colour fastness.</p> <p>The work shall be carried out strictly under the supervision of the selected national/international artist or their authorised team, ensuring fidelity to the approved concept and achieving museum-grade artistic quality. The item shall include all materials, specialised artistic tools, airbrush systems, scaffolding, protection of surrounding areas, mockups, sampling, transportation, artist fees, technical support team, consumables, and all labour required to deliver the artwork complete in all respects to the satisfaction of the Engineer-in-Charge.</p>	Sqft	800.00	₹	-
						Total		₹	-	

Grand Total							₹	
			B	Conservation Work				
		1.00	NSR	For Stone facade cleaning - Gently cleaning the surface of the stone masonry with Water by gentle brushing with soft nylon brushes as specified. Item to include using water misting employing an water jet using a fine nozzle sprinkling system calibrated to spray a fine mist along the stone surface, without over-wetting, followed up by gentle brushing with soft nylon brushes as specified and mild pH balanced surfactants as specified for indicated areas to remove surface dirt, grit, sulphate accretions, lime wash etc. complete. - For the items like Grooves, moulding, decorative portions, keystones, architrave plain area will be measured under this item only. This includes preparing a sample patches for the cleaning as directed by the Design Architect for their approval.	Sqm	100.00		
		2.00	NSR	Water repellent treatment associated with long lasting biogrowth protection with Organosiloxane based and wide spectrum biocides mixture, ready to use product in deaeromatised White Spirit, applied by brush on double coating wet on wet Note: for porous substrates consider to increase the quantity of product accordingly. Repeat coats if required.	Sqm	100.00		
			C	External Electrical Works				
				NSR Items				
				Supply, Installation, Testing and Commissioning 11kV, 315 KVA, Outdoor Package / compact Sub-Station (in compliance IEC- 62271-202) shall beconsisting of following:-	Each	2	0	
				HT SWITCHGEAR				
				11kV 200Amps 21kA for 3 sec. SF6 insulated Copper Brusher Non- Extensible Ring Main Unit (Type CVC) consisting of Two Nos. of remote operated motorised Load Break Switches and One No. of Fixed remotely motorised operated vacuum Circuit Breaker unit with robotically welded having IP67 in SF 6 encapsulated stainless steel enclosure of thickness minimum 2.0, with series trip, self powered microprocessor based 3 Ph numerical over current relay (DMTL - Int.) protection. 1 no., Protection CT of ratio-25/1A 2.5VA SPI0... 3 nos. gas pressure gauge etc. It should have metering unit complete with CTs, PTs. The SCADA system should communicate all faults, and electrical parameters like voltage, current, KW, Kvar, kwh, kvarh, pf etc.				
				TRANSFORMER				
				Three Phase, 50 Hz, Core type, two winding, 315 KVA 11kV/433V DYn11 cast resin dry type, AN type transformer. The transformer be copper wound and class F insulated. The off site tap changer should be +5 % to 5 % in step of 2.5% each. The transformer shall be suitable for operation at full rated power on all tapings without exceeding the applicable temperature rise. It should be possible to operate the transformer satisfactorily, with the loading guide specified in IS-6600. There shall be no limitations imposed by bushings, tap changers, auxiliary equipment to meet this requirement.				
				LT PANEL				
				433V LT Indoor panel with 630 Amps Al Busbars 100% for Phase and 50% for Neutral , Current Density of AL- 0.8 Amp/sqmm , Fabrication using 1.5/2mm CRCA sheet steel , Ingress protection IP4X , complete with internal wiring consisting of following.				
				INCOMER FROM TRANSFORMER				
				630 Amps 433V 4P 50Hz 50KA remote wireless signal based electrically operated Type Moulded Case Circuit Breaker (MCCB) with microprocessor based overcurrent, short circuit Fault & earth fault Release, Digital Load Manager meter having SCADA communication facility and accuracy class 0.5, complete with required CTs and protection.				
				OUTGOINGS				
				250 Amps 433V 3P 50Hz 36KA, TPN Moulded Case Circuit Breaker (MCCB) with microprocessor based release release for over current and magnetic short circuit. Multi function meter of accuracy class.				
				100 Amps 433V 3P 50Hz 36KA, TPN Moulded Case Circuit Breaker (MCCB) with thermal magnetic release for over current and magnetic short circuit. Multi function meter of accuracy class.				
				OUTDOOR ENCLOSURE				
				Outdoor type enclosure having construction of Galvanised Sheet Steel of thickness minimum 2mm & Base plate should be 4mm thick. The Enclosure shall have IP54 degree of protection for HT & LT switchgear compartment & IP23 degree of protection for Transformer compartment. The enclosure exterior shall be Powder coated. Each compartment will be provided with the door and pad locking arrangement. The Compartment illumination lamp with door operated switch shall be provided for each compartment. It should be internal a/c test compliant for 20KA for 1 sec.				
				Interconnection & Earthing				
				Interconnection Between HT switchgear & Transformer using 40x 10 Cu busbar or 1Cx30x55sqmm XLPE Single core cable & Interconnection between Transformer & LT switchgear using Al Busbars. Internal earthing connections by using 50x60mm GI Steps.				
				The entire packaged / compact substation should be equipped with state of art SCADA system which will communicate with central command and control centre of mppkvccl and smart city Ujjain's control centre and should also communicate event / fault alerts on mobile application. The SCADA system should have all hardware like RTU, power supply, analog and digital I/O devices, battery, charger, software, modems, antenna, sensors, transducers, control wiring, PC/laptop etc.				
			NSR	NSR	PCV junction box 250*250	Each	100	0
			NSR	NSR	PCV junction box 450*450	Each	60	0
			NSR	NSR	Supply, installation, testing and commissioning of double pole structure comprising of 2 nos, 13 mtrs H-beam poles(37.1 kg/mtr) having 3-ph 11kV isolator , complete with 11kV pin / disc / post insulators, LA, 100x60 mm, MS cross channels, stay sets, coil earthing, ACSR 075 conductor etc. concreting etc complete in all respects suitable for terminating two nos 11kV, 3Cx240 sqmm XLPE insulated al. conductor arm. cables for tapping existing overhead line 11kV line feeder.	Each	2	0
			NSR	Feder Panel	Supply installation testing and commissioning of outdoor type feeder pillar panels suitable for AC, 440V, 50HZ supply, fabricated with 14 gauge galvanized steel sheet duty pre-treated and pure polyester thick powder coated and pure polyester thick powder coated 80 micron thickness using siemens grey colour shade no.RAL-7032/any other colour shade no.RAL-7032/any other colour shade required by cubical formation, compartmentalized in form with front open able doors. The door shall be provided with concealed hinges and with brazing wherever required to avoid deformation and shall be earthed. All the door shall have heavy duty door locks, and shall be sealed with neoprene gaskets. the feeder pillar shall be IP 55, outdoor type weather, dust and vermin proof having canopy type tapered top self-standing type as per approved GA Diagram. Panels shall have lifting hooks and base channel of size 50x40x6 mm The feeder pillar shall be complete with bus bars, wiring cabling of proper ratings (not less than 1.5 times the rating of respective switchgears, control gear etc.) for inter connection between switch gear, control gear, metering, safety relays, indicators etc. as per the approved single line diagram. the feeder pillar shall have proper arrangement for termination of all incoming and outgoing cables. all the bus bars shall be supported on epoxy supports and shall be insulated with colour coded heat shrinkable sleeves. Feeder pillar shall be as per the space available at site. It shall have earthing bolts at both sides inter connected with 50x5 mm al earthing bus along width of feeder pillar. NOTE :- The GA drawing for panel should be approved by consultant/ engineer in charge before fabrication. The feeder pillar shall have space and proper arrangements for installation of incoming and outgoing MCCBs with RYB LED type indicating lamps.HRC fuse bases, MCBs etc. Complete with interconnection provisions with providing wiring and bus bars with required hardware,sleeves,ferrules,supporters,locks etc. Panel shall have proper space and arrangements for termination of incomer loop in loop out cables, outgoing service cables, with proper offsets in bus bars for cable terminations. The feeder pillar should have anti theft tamper proof feature to automatically send SMS alert if door opening is attempted by unauthorised person. Feeder pillar shall be comprising of following items:			
				TYPE - A				
			NSR	NSR	Rating of incomer MCCB TPN 63A, 25 KA (Adjustable thermal O/L with less=100% Icu).Outgoings 32A 25KA SP MCCB 12Nos. & 25A 25KA SP MCCB 18Nos.Note: The width of feeder pillar should be as minimum as possible,preferably not more than 800mm.	EACH	4	0
				TYPE - B				
			NSR	NSR	Rating of incomer MCCB TPN 100A, 25 KA (Adjustable thermal O/L with less=100% Icu).Outgoings 32A 25KA SP MCCB 24Nos. & 25A 25KA SP MCCB 24Nos.Note: The width of feeder pillar should be as minimum as possible,preferably not more than 800mm.	EACH	4	0
				D	Facade Lighting			
			NSR	Inground Mono	Supply and fixing of recessed ground mounted deep 30w LED uplighter fixture with Honeycomb Louver, protected Uno PATHFINDER IP66 2700K-5500K 10deg-24deg as required, stainless steel body hard anodized aluminium finishes stainless steel & IK rating 08. Installation housing box power supply cables35 cm NS20N PCP 2x0,5 mm2 power supply 24V DC power consumption max 30 Watt lumen output 240-680lm working temperature-20°C +45°C IP rating IP66 (not for permanent immersion) insulation class III Weight upto 500gm. and delivers 90CRI for excellent colour rendering, PATHFINDER is smart shield protected against polarity inversion, an integrated super fast diode prevents accidental damage to the luminaire during installation on due to reverse polarity. Smart shield protects against 'hot-plugging'. Fully integrated spike-reducer on protects the constant-current driver and prevents damage to the LED die surface. With housing	Each	60	0

			NSR	Inground RGBW	Supply and fixing of recessed ground mounted deep 30w LED uplighter fixture with Honeycomb Louver, protected Usa PATHFINDER IP66 RGBW with DMX Driver to carry DMX 512 signal, 10deg:24deg as required, stainless steel body hard anodized aluminium finishes stainless steel & IK rating 08. Installation housing box power supply cables 35 cm NS20N PCP 2x0.5 mm2 power supply 24V DC power consumption max 30 Watt lumen output 240-680lm working temperature:20°C +45°C IP rating IP66 (not for permanent immersion) insulation class III Weight upto 500gm, and delivers 90CRI for excellent colour rendering. PATHFINDER is smart shield protected against polarity inversion, an integrated super fast diode prevents accidental damage to the luminaire during installation on due to reverse polarity. Smart shield protects against "hot-plugging". Fully integrated spike-reduce on protects the constant-current driver and prevents damage to the LED die surface. With housing	Each	20		0
			NSR	GOBO Projector	SITC of Pole Mounted dynamic Image Gobo Projector: Material - Aluminium die-cast, Protection / Strength - The fixture shall be minimum IP66 compliant & with a mechanical strength of minimum IK07, Finish -As Black/ White. Electrical Parameters: The fixture shall have an in-built LED light source with non-integral control gear/System capable with control from DMX 512 protocol. Main controller DMX, Sub-Controllers, 12v 16 port DMX, Addressing Kit, DMX Amplifiers, Splitters, Boosters, Jumper and Leader Cables, etc. for Controlling Media Pixels is also in scope of the vendor as a complete system. The electronic power supply shall have protection against overvoltage /short circuit /power surge. THD < 7-10 Percent, PF > 0.9, Complete operation over a centralized DMX Controller or individually controlled by hand-held remote. International Electrotechnical Commission (IEC) standard IEC 60598, Indian standards - IS 10322, IS 16103:2012 (Parts 1 & 2), IS 16105: 2012, IS 16106: 2012, IS 16108: 2012. Mandatory BIS certification. Optical and Lighting Parameters: The fixture shall be capable of delivering between 7500 lumens (system lumens) in 3000K, (System efficacy ≥ 65lm/watt), Color Rendering Index ≥ 85, SDCM ≤ 4, The fixture shall be adjustable beam within the range of 15-30 degrees. Zoom able optics enabling to focus projection basis distance of projection. Zoomable optics enabling to focus projection basis distance of projection. Zoom from 15-30 deg to remove distortion if any. The Flood / Gobo should have a capacity of storing Minimum 4 Gobos which can be projected in repeated sequence or as per recall/ program of the software. Should have capability to control the speed of rotation as well as make it static by stopping rotation whenever required. Rated life of the fixture with control gear should be > 30,000 operation hours. The LED shall be compliant to LM-79 and LM-80 standards with published Type Test Reports Note: This includes all the required hardware for the successful installation and operation of the luminaire. (All the technical parameters of the luminaire need approval from the architect / lighting designer)	Each	10		0
			NSR	pixel	FAÇADE LIGHTING SITC of Round Shape RGBW Pixel Light (system) Physical Parameters: The Fixture shall be in diameter ≤ 55 mm and height ≤ 20 mm, Material - UV resistant polycarbonate body and outer Cover shall be made of PC, Protection / Strength - The fixture shall be minimum IP67 and ANSI 3G Vibration test compliant & with a mechanical strength of minimum IK06, The fixtures shall be in-built with IP67 male-female connectors, Finish - Standard White 9003 Color, Colour resolution - 16-Bit Grayscale, Gamma 2.0, Pixel Pitch: 300mm Electrical Parameters: The fixture shall have an in-built RGBW LED light source(4 addresses per pixel) with non integral control gear/System capable with control from DMX protocol - Main controller DMX, Sub-Controllers, 12v 16 port DMX, Addressing Kit, DMX Amplifiers, Splitters, Boosters, Jumper and Leader Cables, etc. for Controlling Media Pixels is also in scope of the vendor as a complete system. The electronic power supply/ Controls shall have protection against overvoltage /short circuit /power surge, THD < 7-10 Percent, PF > 0.9, Non-Dimmable, International Electrotechnical Commission (IEC) standard IEC 60598, Indian standards - IS 10322, IS 16103:2012 (Parts 1 & 2), IS 16105: 2012, IS 16106: 2012, IS 16108: 2012. Mandatory BIS certification. Optical and Lighting Parameters: The Pixel shall ≥ 2W in RGBW(W4000K) with lumen efficacy of 37.6lm/W, Color Rendering Index ≥ 80, SDCM ≤ 5. The fixture shall deliver symmetrical optics FWHM of 100-110 degrees, Rated life of the fixture with control gear should be > 50,000 operation hours. The LED shall be compliant to LM-79 and LM-80 standards with published Type Test Reports Note: This includes all the required hardware for the successful installation and operation of the luminaire. (All the technical parameters of the luminaire need approval from the architect / lighting designer)	Each	1000		0
			NSR	Trick light	SITC of Round Surface Mounted Trick Light Material - Aluminium die-cast, Protection / Strength - The fixture shall be minimum IP66 compliant & with a mechanical strength of minimum IK07,The fixtures shall be installed with IP67 connectors. Finish - Rust Brown and powder coated Electrical Parameters: The fixture shall have an in-built LED light source with an integral control gear capable of running at a line voltage of 200-250 VAC. The electronic power supply shall have protection against overvoltage /short circuit /power surge. THD < 7-10 Percent, PF > 0.9, Non-Dimmable, International Electrotechnical Commission (IEC) standard IEC 60598, Indian standards - IS 10322, IS 16103:2012 (Parts 1 & 2), IS 16105: 2012, IS 16106: 2012, IS 16108: 2012. Mandatory BIS certification. Optical and Lighting Parameters: The fixture shall be capable to deliver between 60 lumens (system lumens) in 2700K, (System efficacy ≥ 25lm/watt), Color Rendering Index ≥ 85, SDCM ≤ 4, The fixture shall be with optics of 5° x180° degree. Rated life of the fixture with control gear should be > 50,000 operation hours. The LED shall be compliant to LM-79 and LM-80 standards with published Type Test Reports Note: This includes all the required hardware for the successful installation and operation of the luminaire. (All the technical parameters of the luminaire need approval from the architect / lighting designer)	Each	40		0
			NSR	Decorative Indoor Ring Light	SITC-LED Pendant Ring 600 dia 40W Efficacy: 90lm Lumen: 1800 CRI >80 Color Temperature: 3000K SDCM ≤ 3 Life Time: L70 50,000hrs 230V Light Throw: Direct light emission Optics: Prismatic Diffuser Finish: White/ GOLD/ Bronze Control Gear: Electronic Control Protection Class: I IP 20 - Note: This includes all the required hardware for the successful installation and operation of the luminaire. (All the technical parameters of the luminaire need approval from the architect / lighting designer)	Each	10		0
			NSR	Decorative Indoor Disc Light	SITC-Pendant luminaire Disk type with 530 dia with HPE (High-Performance Efficiency) LED (Light Emitting Diode) system power: 45W luminous flux of luminaire 4500lm, Colour temperature of 3000K, Warm white, CRI>80, 230V constant current driver, 70 Percent of luminous flux after 50,000 operating hours; Energy efficientLEDs, Direct light emission, luminaire housing in aluminium, Polyester powder Grey coloured coat applied over a 5-stage pre-treatment, pre-wired backplate luminaire, Prismatic diffuser for homogenous light distribution, ZHLS (ZERO HALOGEN LOW SMOKE) internal wiring, Electronic control gear, Pendant tube with a ball joint, for self-levelling (+/-20deg.). Protection class I, IP20 . Note: This includes all the required hardware for the successful installation and operation of the luminaire. (All the technical parameters of the luminaire need approval from the architect / lighting designer)	Each	10		0
			NSR	Master Controller DMX	Supply, installation, testing and commissioning of main DMX Controller for controlling RGBW luminaires for powerful show storage and work as playback device capable of delivering light with each show to installations with up to 8 DMX512 universes, complete all as specified and directed by the engineer-in-charge.	Each	1		0
			NSR	Programming Charges	Complete Programming of RGBW DMX Based Fixtures and Scenes as required by Executive Engineer	Each	1		0
			NSR	Chandelier	SITC of Traditional Chandelier with K9 Crystals and minimum 1500mm dia and 1500 mm Height without hanging unit. It should have minimum of 120 e14 lamps holders in it. It should be hanged by SS Chain covered by suitable cloth. Lamp should be of 4w Led of reputed Make. Finish should have a warranty of atleast 5 years from manufacturer and any color damage or shade variation of glass shall be replaced by contractor during the DLP period without any cost to client. It should have not weight less than 90 kgs	Each	0		0
			NSR	Chandelier	SITC of Traditional Chandelier with K9 Crystals and minimum 1000mm dia and 1200 mm Height without hanging unit. It should have minimum of 60 e14 lamps holders in it. It should be hanged by SS Chain covered by suitable cloth. Lamp should be of 4w Led of reputed Make. Finish should have a warranty of atleast 5 years from manufacturer and any color damage or shade variation of glass shall be replaced by contractor during the DLP period without any cost to client. It should have not weight less than 30 kgs	Each	4		0
			NSR	Decorative Metal Pendant	Supply, Installation, Testing and Commissioning of Custom Pendant Light with Hammerstone finish and PVD treatment (Allow60V) Fixture structure should be made of brass and may be given matt copper plating and effect and protected with PVD treatment. Custom Height suspension should be provided as per site requirement, including all other mounting and installation accessories. Luminaires with Line Voltage loadtype LED shall be provided with power supply and control unit. Color of light shall be determined during mockup by the interior design, architect and lighting designers. LED lamps shall have CRI >80 and SDCM ≤4, preferably R9 > 70. Distribution of light shall be up and down. Contractor to provide shop drawing and material samples for design approval then do proto type at site/ at factory, do final mockup at site and get approval of designers and client prior to supply of actual pieces. Contractor to obtain aesthetic approval of lighting designer, architect and engineer in-charge after review of shop drawing, material sampling, proto type review and mockup at site.	Each	40		0

			NSR	Track Light	Supply of IP20 30W LED 30 degree distribution track mounted spotlight with Antiglare louvers, Monochrome white CCT (Exact CCT to be determined by Lighting designer, Architect and Engineer in-charge on site after mock-up) Load type 220-240V AC, Minimum delivered lumen output 1500 lm, Minimum Efficacy 65 lm/W, CRI > 90 Lamp life 50,000hrs L90/B10, MacAdam s3, CRI > 9, R9 range is 50-70, Fixture Housing and luminaire head made of die-cast aluminium with powder-coated surface finish. Luminaire head should be tiltable from 0° to 90°. Screw for fixing the inclination angle. Housing can be rotated through 360° on the adapter. : polymer, white. LED module: high-power LEDs on metal-core PCB. Finish to match with adjoining mounting surface finish color. Final Optics to be determined after mockup and to be confirmed with lighting designer prior to order. Provision of beam shaping accessory to be kept and provided as required. Vendor to Supply fixture with LED, all mounting and installation accessories.	Each	50	0
				E	Access Control System			
			NON-SOR	BAGGAGE SCANNER	Supply, Installation, Testing & Commissioning of X-ray Baggage Inspection System(X-BIS) equipment including control table as per technical specification. Tunnal Size: 640(W)×500(H) mm. Conveyor Speed: 0.22m/s, Conveyor Max Load:170 kg. Leakage radiation: < 0.1µCi/yh. Single inspection dosage: < 1.0µCi/yh, Wire Resolution 40AWG, Steel Penetration: 36mm, Film Safety: For ISO 1600. X-Ray having following details: Beam Direction: Upward; Tube Current: 0.6mA; Anode voltage: 160KV; X-ray divergence angle: 80°; Cooling: Sealed oil bath with forced air; Sealed oil bath with forced air 100%; Detector: L-shaped Array. Operating environment: Power Requirement: 220V AC (±10%) 0.3Hz, Power consumption: 1.0KW(Max), Noise level: <58dB, Spatial Resolution: 1.0mm Horizontal and, Vertical Operating temperature/humidity: 0 deg.C - 45 deg.C 20% - 95% (Non-condensing); Storage temperature/humidity: -20degC - 60degC/20% - 95% (Non-condensing)	Nos.	1	
			NON-SOR	DFMD	Supply, Installation, Testing & Commissioning of 9-Zone Door Frame Metal Detector (DFMD) equipment of external size 870x2165x278mm (WxHxD) and internal size 720x2017x278mm (WxHxD), working on electromagnetic principles, made of ABS raw materials, frequency 0-100 Hz, Working humidity : 99%, non-condensing, Working temperature : - 20°C- 65°C, Input : AC 100 V- 240 V/ Frequency 50HZ-60HZ, IP rating : 54 [Dust proof coating], Sensitivity adjustable : 0 - 400, Volume adjustable: 0-50, Alarm volume : 0 - 3 sec, Alarm tones : 15 different tone, Detection : Ferrous metals <75gm as per technical specification.	Nos.	2	
			NON-SOR	FRISKING BOOTH	Provision and fixing of frisking booth including but not limited to canopy, female frisking booth, cloak room shelves, frisking table, revolving chairs, frisking pedestals etc. Item to include all material, labor, scaffolding and carriage in all leads, scaffolding and lifts complete as per satisfaction of engineer in charge.	Nos.	1	
			NON-SOR	HMD	Supply, Installation, Testing & Commissioning of Hand-Held Metal Detector (HMD) equipment as per technical specification. Working frequency: 0-25 KHz; Net weight: ~400 gms; Power supply: Standard 6F22/1SF8H, 9V battery or rechargeable battery; Temperature: - 15°C to +55°C; Detection Range: Pin : 25-70mm ; Type 64 pistol: 0-350mm; Six inch dagger 200-300mm; 20mm diameter steel balls 150mm; One 4 coin 120-180 mm ; TF card, staples, 8-pin chip 10-40 mm. Having Two alarm modes: audible and vibration mode, high-brightness LED light indicator. Rugged, impact, free-fall drop height of 2 meters without damage. Light weight, large detection area fast detection speed. Continuous alarm function with low sound or vibration at the same time. After installing the equipment, the user should be trained to use the equipment properly.	Nos.	20	
			NON-SOR	Ticketing Platform Onboarding	Ticketing Platform Onboarding & Account Setup (BookMyShow / Paytm Insider) Vendor onboarding, account creation, KYC, event/venue listing, Scheduled Booking System Development + (Backend Database). Payment Integration, API Integration with Ticketing Platform. Additionally 2% Platform Fee + 2.5% to 5% of ticket sales, based on the payment medium for RazorPay	Lot	1	
				Counter System	Ticket Counter System, Validation Device	Nos.	4	
				F	FIRE FIGHTING BOO			
			NON-SOR		Providing and fixing of flexible Connection/Rubber Bellow.			
				a)	200MM	each	2.0	
				b)	150MM	each	4.0	
				a)	100MM	each	4.0	
				b)	80MM	each	2.0	
			NON-SOR		Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :			
				a)	32 mm dia	each	6.0	
			NON-SOR		Providing and fixing Float Valve :			
				a)	25 mm dia	each	2.0	
			NON-SOR		Providing fixing, including testing and commissioning the following size of flanged type check valve of cast iron body and bronze/ gun metal seat conforming to class PN 1.6 of IS: 14846/IS: 780 complete with bolts and nuts, rubber insertions etc. as per specification complete as required.			
				a)	250MM	each	3.0	
			NON-SOR		Supply installation of Tank sleeve mounted suction strainer with the filter media is a woven stainless mesh of pleated construction supported on the inside by a perforated steel tube. The pleats provide a generous area of filtration in relation to the overall size. The pleated element and perforated steel tube are bonded to the end caps with epoxy resin. One end blind and the other is threaded. Fluid flow is radially inwards through the pleated element so that contaminants are deposited on the outside of the strainer where they may be removed easily by immersing in cleaning solution. The Strainer is mounted with SS Flange bolted with SS 304 Bolt inside tank to avoid rusting. The strainer is made up of Perforated SS 304 Sheet the thickness of sheet will not be less the 16 Gauge with 40-45% Perforation and internally mounted fine SS wiremesh 140- 262 micron.			
				a)	Suction Strainer Sleeve and SS flanged coupled 250 MM Diameter	each	4.0	
			NON-SOR		SITC of Combination Air Release Valve for fire water mains, ductile iron/SS body with large-orifice and small-orifice mechanism, flanged ends ANSI Class 150, epoxy-coated internal/external. Installed at pipeline high points and at split-case fire pump casing (as applicable). Includes isolation sluice/butterfly valve, bypass, fittings, testing, and commissioning per NFPA 20			
				a)	25 mm dia	each	8.0	
				b)	32 mm dia	each	4.0	
			NON-SOR		Providing and fixing of Fire Extinguisher Clean Agent HCFC 123 Providing 6Kg Stored Pressure Type, Pressure Gauge, Gross Weight 9.4kg, empty weight 3.4 kg Can Height 480MM, Diameter 160 MM, Discharge Time less than 13 Secs, Controllable discharge mechanism (Squeeze grip with easy snap safety seal), Range minimum 4 Meters, applicable on Class A,B,C and electrically started Fire, A Rating 2A, B Rating 21B Can Construction: Deep drawn & CO ₂ Mig welded, Valve Construction: Forging & Machining, Internal Coating of Can: Epoxy Powder coating, External Coating of Can : Epoxy Polyester Powder coating, Sheet metal thickness: 1.60MM, Helium Leak Detection Tested, EN Approved, 5 years warranty with instalert system with Superior quality EPDM Rubber Hosepipe etc., complete	each	4.0	
			NON-SOR		Supply, installation, testing and commissioning of Fire Axe of approved make, conforming to IS: 926 (or equivalent standard), with insulated handle and suitable mounting arrangement inside the Fire Box / Fire Station cabinet, complete as required.	each	15.0	
				G	Public Address			
Area Name	Area Name	Application Name	Application Type	Type	Item Description	Unit	Qty	

Zone 1	Visitor Entry, Service Area, All Pathway	BGM	BGM	Outdoor Pole Mounted Speaker	Supply, installation, testing and commissioning of Full range 4-inch or better IP55 rated surface mounted music loudspeaker. The loudspeaker shall meet the following performance criteria: Frequency range (-10dB) of 70Hz to 19kHz; Power handling of 160 Watt peak; Nominal dispersion of 90°(H) × 80°(V); Sensitivity of 87 dB SPL and Max SPL of 109 dB SPL peak or better; Nominal impedance of 8 ohms and Integral multi-tap Transformer with selectable tap settings of 5/10/20/40W@70V & 100V. The loudspeaker system shall be enclosed in engineered-plastics and a powder-coated steel grille. UL-1480 rated and EN54-24 compliant for Life safety/VA applications.	Each	30		
					Supply, installation, testing and commissioning of Custom Fabricated bracket for Pole Mounting of speaker	Each	30		
				Power Amplifier LMT Based	SITC of Class D configurable amplifier with a digital signal processing architecture running at 48 kHz / 24 bit .The Amplifier shall have 600 watts output power asymmetrically distributed across 4 output channels with selectable 4/8ohms, 70/100 Volt or mixed use operation.The amplifier shall have four analog and dante channels ; Frequency Response : 20Hz - 20kHz ; S/N Ratio > 100db and THD < 0.04% at rated output. Built in DSP for Matrix routing, Speaker EQs, delays etc. Phoenix Input and output terminals,Built in DSP for Matrix routing, Speaker EQs,PEQ ,bandpass, delays etc	Each	3		
Zone 2	Introduction to Sandipani Aashram	Sandipani Statue	Informative, BGM	Outdoor Floor Mounted - Landscape	Supply, installation, testing and commissioning of Full-range environmental loudspeaker with one downward firing 4.5-inch (114 mm) IP55-rated advance composite environmental full-range driver for in-ground or above-ground mounting The loudspeaker shall meet the following performance criteria: Frequency range (-10dB) of 60Hz to 15kHz or better; Power handling of 64 Watt peak or more; Nominal dispersion of 360° (H) X 50° (V) or better; Sensitivity of 87 dB SPL or more and Max SPL of 106 dB SPL peak or better; Nominal impedance of 8 ohms and Integral multi-tap Transformer with selectable tap settings of 10/20/40/80 watts@70V & 100V. The loudspeaker system shall be enclosed in Glass-reinforced polypropylene, textured.	Each	4		
				Near Statue - Mount on tree for narative	Supply, installation, testing and commissioning of IP55 Rated for Indoor and Outdoor installations, Full range drivers (8 or better) in an articulated Array design. Minimum eight 4.5" full-range cone transducers or better. Frequency Range (-10db) of 52 Hz - 15 kHz or better; Continuous power (AES) : 300W & Peak Power (AES) : 1200W @ 8 Ohms or better; Nominal dispersion of 120H X 100V or better; Sensitivity of 91 dB or better; Max SPL Peak of 121 dB or better; Powder coated steel grille.	Each	4		
				Power Amplifier LMT Based	SITC of Class D configurable amplifier with a digital signal processing architecture running at 48 kHz / 24 bit .The Amplifier shall have 400 watts output power asymmetrically distributed across 4 output channels with selectable 4/8ohms, 70/100 Volt or mixed use operation.The amplifier shall have four analog and dante channels ; Frequency Response : 20Hz - 20kHz ; S/N Ratio > 100db and THD < 0.04% at rated output. Built in DSP for Matrix routing, Speaker EQs, delays etc. Phoenix Input and output terminals,Built in DSP for Matrix routing, Speaker EQs,PEQ ,bandpass, delays etc	Each	1		
					SITC of class D amplifier with 4 x 300 W Load-independent outputs deliver full channel power to either low-impedance (4-8 Ω) or high-impedance (70/100V) loads without bridging .Amplifier shall have frequency response of 20 Hz to 20 kHz (+/- 1 dB) for LZ mode,with THD+N at rated power less than 0.04%.The amplifier shall meet or exceed the following performance specifications: channel separation (crosstalk) greater than 80 dB below rated power at 1 kHz. . The amplifier shall have 2 line-level inputs with selectable input sensitivity settings (-10 dBV, 4 dBu and 14 dBu) for balanced line-level inputs (6-pin Euroblock connector) and possibility of 4 or more no .of digital Audio channels . The amplifier shall offer a master mute connection for use with external dry contacts, normally open or normally closed, to mute all outputs of the amplifier.	Each	1		
		Sandipani Book mural	Informative	Indoor Wall Mounted Speakers surrounding the Mural	Supply , installation , testing and commissioning of full range 2.25-inch or better pendant ceiling mounted music and PA loudspeaker. The loudspeaker shall meet the following performance criteria: Usable Frequency range (-10 dB) of 83Hz to 19kHz or better; Power handling of 64 Watt peak or more; Nominal dispersion of >=90° Conical or better; Sensitivity of 86 dB SPL or better and Max SPL of 104 dB SPL peak or more; Nominal impedance of 16 ohms and Integral multi-tap Transformer with selectable tap settings of 2/4/8/16W@70V & 100V or better. The loudspeaker shall be enclosed in engineered-plastics and a powder-coated steel grille.	Each	6		
				Power Amplifier Ohms/LMT Based	SITC of Class D configurable amplifier with a digital signal processing architecture running at 48 kHz / 24 bit .The Amplifier shall have 400 watts output power asymmetrically distributed across 4 output channels with selectable 4/8ohms, 70/100 Volt or mixed use operation.The amplifier shall have four analog and dante channels ; Frequency Response : 20Hz - 20kHz ; S/N Ratio > 100db and THD < 0.04% at rated output. Built in DSP for Matrix routing, Speaker EQs, delays etc. Phoenix Input and output terminals,Built in DSP for Matrix routing, Speaker EQs,PEQ ,bandpass, delays etc	Each	1		

		GuruDakshina Story Mural	Informative	Indoor Wall Mounted Speakers surrounding the Mural	Supply , installation , testing and commissioning of full range 2.25-inch or better pendant ceiling mounted music and PA loudspeaker. The loudspeaker shall meet the following performance criteria: Usable Frequency range (-10 dB) of 83Hz to 19kHz or better; Power handling of 64 Watt peak or more; Nominal dispersion of >=90° Conical or better; Sensitivity of 86 dB SPL or better and Max SPL of 104 dB SPL peak or more; Nominal impedance of 16 ohms and Integral multi-tap Transformer with selectable tap settings of 2/4/8/16W@70V & 100V or better. The loudspeaker shall be enclosed in engineered-plastics and a powder-coated steel grille.	Each	4		
				Power Amplifier Ohms/LMT Based	SITC of Class D configurable amplifier with a digital signal processing architecture running at 48 kHz / 24 bit .The Amplifier shall have 400 watts output power asymmetrically distributed across 4 output channels with selectable 4/8ohms, 70/100 Volt or mixed use operation.The amplifier shall have four analog and dante channels ; Frequency Response : 20Hz - 20kHz ; S/N Ratio > 100db and THD < 0.04% at rated output. Built in DSP for Matrix routing, Speaker EQs, delays etc. Phoenix Input and output terminals,Built in DSP for Matrix routing, Speaker EQs,PEQ,bandpass, delays etc	Each	1		
		Common AV Rack Backend - ZONE 2		Local Audio playback device	Supply, installation, testing and commissioning of 6-zone, 12-channel Class D streaming amplifier delivering featuring AirPlay 2, Chromecast, Spotify Connect, and Alexa Cast for seamless wireless audio, plus traditional analog/optical inputs, 7-band EQ, and integration with 3rd party control processors for multi zone audio control. It should be capable of work with a NAS (Network Attached Storage) drive. Should be capable of accessing and play local music files stored on a NAS through the VSSL system using compatible streaming apps.	Each	1		
				Control System Processor	Automation Controller Control Engine 4-Series multicore CPU, 2GB SDRAM, 8GB Flash ProgrammingModular Architecture (up to 10 simultaneous programs) Network 1x Gigabit Ethernet (802.1X, SSH, TLS, XiO Cloud ready) Serial Ports 3x RS-232/422/485 COM ports Control I/O 8x IR/Serial outputs, 8x isolated relays, 8x Versiports System Bus 1x Cresnet® master port Security FIPS 140-2 compliant, Active Directory, SNMP V3 Form Factor 1 RU rack-mount chassis Compliance UL Listed, CE, FCC Part 15 Class B, Apple HomeKit compatible	Each	1		
				Control System wired Keypad / wireless ipad	Handheld wifi Tablet for controlling AV . Display 10.1" to 10.9" IPS/LCD or AMOLED; Resolution: 1920 x 1200 (WUXGA) or higher; Brightness: 400+ nits. Processor Octa-core CPU (minimum 2.0 GHz); 4nm or 6nm architecture for power efficiency. Operating System Android 14.0/15.0 or iPadOS 18; must support multi-year security patches. Memory & Storage RAM: 4 GB (minimum) to 8 GB; Internal Storage: 64 GB to 128 GB (expandable via microSD up to 1 TB). Connectivity Wi-Fi 6 (802.11ax), Bluetooth 5.3, and optional 4G LTE/5G (Nano SIM/eSIM support). Camera Rear: 8 MP with Auto-Focus; Front: 5 MP (minimum) for video conferencing. Battery 6,000 mAh to 8,000 mAh; support for 15W+ fast charging via USB-C. Security Biometric (Face Unlock or Fingerprint); support for Mobile Device Management (MDM) enrollment (e.g., Knox, Apple Business Manager).	Each	1		
				24 Port 1 gig POE+ Network Switch	L3 Network Switch with specification Port Density 26 x 1G ports (24 PoE+) + 4 x 10G SFP+ Uplinks PoE Power 480W total budget (802.3at PoE+ up to 30W/port) Switching Fabric 132 Gbps non-blocking; Layer 2/Layer 3 Lite (Static/PIM) AV Optimization Pre-configured profiles for Dante, Q-SYS, NDI, and AES67 Multicast IGMP Plus™ for instant out-of-the-box AVoIP setup Form Factor 1 RU, rear-facing ports with reversible rack-mount options AcousticsSoftware-controlled fans for "Quiet Mode" operation	Each	1		
Zone 3	Educ ation and Study Traditi ons	64 Vaidyas	Informative	Indoor Wall Mounted Speakers surrounding the Murals	Supply , installation , testing and commissioning of full range 2.25-inch or better pendant ceiling mounted music and PA loudspeaker. The loudspeaker shall meet the following performance criteria: Usable Frequency range (-10 dB) of 83Hz to 19kHz or better; Power handling of 64 Watt peak or more; Nominal dispersion of >=90° Conical or better; Sensitivity of 86 dB SPL or better and Max SPL of 104 dB SPL peak or more; Nominal impedance of 16 ohms and Integral multi-tap Transformer with selectable tap settings of 2/4/8/16W@70V & 100V or better. The loudspeaker shall be enclosed in engineered-plastics and a powder-coated steel grille.	Each	132		
				Power Amplifiers	SITC of Class D configurable amplifier with a digital signal processing architecture running at 48 kHz / 24 bit .The Amplifier shall have 400 watts output power asymmetrically distributed across 4 output channels with selectable 4/8ohms, 70/100 Volt or mixed use operation.The amplifier shall have four analog and dante channels ; Frequency Response : 20Hz - 20kHz ; S/N Ratio > 100db and THD < 0.04% at rated output. Built in DSP for Matrix routing, Speaker EQs, delays etc. Phoenix Input and output terminals,Built in DSP for Matrix routing, Speaker EQs,PEQ,bandpass, delays etc	Each	16		

		Common AV Rack Backend - ZONE 3		Local Audio playback device	Supply, installation, testing and commissioning of 6-zone, 12-channel Class D streaming amplifier delivering featuring AirPlay 2, Chromecast, Spotify Connect, and Alexa Cast for seamless wireless audio, plus traditional analog/optical inputs, 7-band EQ, and integration with 3rd party control processors for multi zone audio control. It should be capable of work with a NAS (Network Attached Storage) drive. Should be capable of accessing and play local music files stored on a NAS through the VSSL system using compatible streaming apps.	Each	3		
				Control System Processor	Automation Controller Control Engine 4-Series multicore CPU, 2GB SDRAM, 8GB Flash Programming Modular Architecture (up to 10 simultaneous programs) Network 1x Gigabit Ethernet (802.1X, SSH, TLS, XiO Cloud ready) Serial Ports 8x RS-232/422/485 COM ports Control I/O 8x IR/Serial outputs, 8x isolated relays, 8x Versiports System Bus 1x Cresnet® master port Security FIPS 140-2 compliant, Active Directory, SNMP V3 Form Factor 1 RU rack-mount chassis Compliance UL Listed, CE, FCC Part 15 Class B, Apple HomeKit compatible	Each	1		
				Control System wired Keypad / wireless ipad	Handheld wifi Tablet for controlling AV . Display 10.1" to 10.9" IPS/LCD or AMOLED; Resolution: 1920 x 1200 (WUXGA) or higher; Brightness: 400+ nits. Processor Octa-core CPU (minimum 2.0 GHz); 4nm or 6nm architecture for power efficiency. Operating System Android 14.0/15.0 or iPadOS 18; must support multi-year security patches. Memory & Storage RAM: 4 GB (minimum) to 8 GB; Internal Storage: 64 GB to 128 GB (expandable via microSD up to 1 TB). Connectivity Wi-Fi 6 (802.11ax), Bluetooth 5.3, and optional 4G LTE/5G (Nano SIM/eSIM support). Camera Rear: 8 MP with Auto-Focus; Front: 5 MP (minimum) for video conferencing. Battery 6,000 mAh to 8,000 mAh; support for 15W+ fast charging via USB-C. Security Biometric (Face Unlock or Fingerprint); support for Mobile Device Management (MDM) enrollment (e.g., Knox, Apple Business Manager).	Each	1		
				24 Port 1 gig POE+ Network Switch	L3 Network Switch with specification Port Density 26 x 1G ports (24 PoE+) + 4 x 10G SFP+ Uplinks PoE Power 480W total budget (802.3at PoE+ up to 30W/port) Switching Fabric 132 Gbps non-blocking; Layer 2/Layer 3 Lite (Static/PIM) AV Optimization Pre-configured profiles for Dante, Q-SYS, NDI, and AES67 Multicast IGMP Plus™ for instant out-of-the-box AVoIP setup Form Factor 1 RU, rear-facing ports with reversible rack-mount options Acoustics Software-controlled fans for "Quiet Mode" operation	Each	1		
Zone 4	Lifestyle and Daily Cycle Experience	Krishnaji Kund Installation	Light and Sound show	Outdoor Pole Mounted Arrayable/powerful speakers	Supply, installation, testing & Commissioning of a Bi-amplified, 2 Way Progressive directivity Loudspeaker Array. Individual loudspeaker modules within the array shall meet the following criteria: Usable Frequency Range (-10dB) of 55 Hz - 18 kHz and Continuous Power Handling of >=600W LF + 150W MF-HF. There shall be LF driver of at least 14" in each module, and 6 compression drivers of 2" voice coil or better in a CADS Manifold. The Loudspeaker shall have a Max. SPL (Peak) of >=128 dB or better for LF and 133dB for MF-HF. It should have suitable Drivers for LF and MF/HF with Horizontal dispersion pattern of 90° or better (with multiple waveguide options, Vertical dispersion of the array shall be 60 degrees or better. The loudspeaker module shall be comprised of a shall be of Baltic birch plywood construction with IP55 weather rating	Each	8		
				Outdoor Subwoofers	Supply, installation, testing & Commissioning of a single 18" subwoofer. The loudspeaker shall meet the following criteria: usable Frequency Range (-10 dB) of 28 Hz - 300Hz or better. It should have an axial Sensitivity of >= 92dB (1W/1m) or more delivering a free field Max. Calculated SPL(peak) of >=127 db or better. The loudspeaker should have a nominal impedance: 4 ohm or more and continuous Power Handling of 600W or more; Complete with installation as per the site requirement.	Each	4		
				Power Amplifiers	SITC of Digital Dante Amplifier with Max output power of 4x1200W@4-80hms, 70V or 100V or bridged mode output power of 2x3000W@4ohms. Frequency response of 20 Hz - 20 kHz, SNR of >110 dB(A and THD+N < 0.1%. With Multiple channel metering LED and attenuation controls. PEQ, band pass, Spkr EQ, limiter, delay. Maximum input level 20 dBu. 4 Digital channels via Dante, with Euroblock, 8-pin connectors for Analog outputs. Software and hardware controlled. Sample rate 24-bit, 44.1 kHz – 192 kHz.	Each	2		
				Power Amplifiers	SITC of Digital Dante Amplifier with Max output power of 4x1200W@4-80hms, 70V or 100V or bridged mode output power of 2x3000W@4ohms. Frequency response of 20 Hz - 20 kHz, SNR of >110 dB(A and THD+N < 0.1%. With Multiple channel metering LED and attenuation controls. PEQ, band pass, Spkr EQ, limiter, delay. Maximum input level 20 dBu. 4 Digital channels via Dante, with Euroblock, 8-pin connectors for Analog outputs. Software and hardware controlled. Sample rate 24-bit, 44.1 kHz – 192 kHz.	Each	2		

		Common AV Rack Backend - ZONE 4		Local Audio playback device	Supply, installation, testing and commissioning of 6-zone, 12-channel Class D streaming amplifier delivering featuring AirPlay 2, Chromecast, Spotify Connect, and Alexa Cast for seamless wireless audio, plus traditional analog/optical inputs, 7-band EQ, and integration with 3rd party control processors for multi zone audio control. It should be capable of work with a NAS (Network Attached Storage) drive. Should be capable of accessing and play local music files stored on a NAS through the VSSL system using compatible streaming apps.	Each	1		
				DSP	SITC of Integrated Digital Sound Processor with following functionalities and specifications; Signal Processor shall be CPU-32-bit fixed/floating-point DSP + ARM, 456 MHz. The DSP shall have 8 Mic/Line inputs & 8 analog outputs, 8 Additional digital Outputs; 24 Bit A-D and D-A Converters; Sampling Rate : 48 kHz; THD : < 0.002 % ; Channel Separation (Crosstalk) : < 105 dB ; Frequency Response 20 Hz - 20 kHz ; Dynamic Range : > 115 dB; 5 Control Inputs and Outputs; RS-232 and Ethernet Port for third party Control and Monitoring; inbuilt DSP features like automatic mic mixing, multiband graphic and parametric EQs, signal generators, routers, mixers, AGCs, duckers, gates, compressors, source selectors, and delays. etc. Shall Support at least 15 remote Zone controllers	Each	1		
				Control System Processor	Automation Controller Control Engine 4-Series multicore CPU, 2GB SDRAM, 8GB Flash Programming Modular Architecture (up to 10 simultaneous programs) Network 1x Gigabit Ethernet (802.1X, SSH, TLS, XiO Cloud ready) Serial Ports: 3x RS-232/422/485 COM ports Control I/O 8x IR/Serial outputs, 8x isolated relays, 8x Versiports System Bus 1x Cresnet® master port Security FIPS 140-2 compliant, Active Directory, SNMP V3 Form Factor 1 RU rack-mount chassis Compliance UL Listed, CE, FCC Part 15 Class B, Apple HomeKit compatible	Each	1		
				Control System wired Keypad / wireless ipad	Handheld wifi Tablet for controlling AV . Display 10.1" to 10.9" IPS/LCD or AMOLED; Resolution: 1920 x 1200 (WUXGA) or higher; Brightness: 400+ nits. Processor Octa-core CPU (minimum 2.0 GHz); 4nm or 6nm architecture for power efficiency. Operating System Android 14.0/15.0 or iPadOS 18; must support multi-year security patches. Memory & Storage RAM: 4 GB (minimum) to 8 GB; Internal Storage: 64 GB to 128 GB (expandable via microSD up to 1 TB). Connectivity Wi-Fi 6 (802.11ax), Bluetooth 5.3, and optional 4G LTE/5G (Nano SIM/eSIM support). Camera Rear: 8 MP with Auto-Focus; Front: 5 MP (minimum) for video conferencing. Battery 6,000 mAh to 8,000 mAh; support for 15W+ fast charging via USB-C. Security Biometric (Face Unlock or Fingerprint); support for Mobile Device Management (MDM) enrollment (e.g., Knox, Apple Business Manager).	Each	1		
				24 Port 1 gig POE+ Network Switch	L3 Network Switch with specification Port Density 26 x 1G ports (24 PoE+) + 4 x 10G SFP+ Uplinks PoE Power 480W total budget (802.3at PoE+ up to 30W/port) Switching Fabric 132 Gbps non-blocking; Layer 2/Layer 3 Lite (Static/PIM) AV Optimization Pre-configured profiles for Dante, Q-SYS, NDI, and AES67 Multicast IGMP Plus™ for instant out-of-the-box AVoIP setup Form Factor 1 RU, rear-facing ports with reversible rack-mount options Acoustics Software-controlled fans for "Quiet Mode" operation	Each	1		
Zone 5	Sensory Kiosk	Informative	Small Speakers hidden inside kiosk	Supply, installation, testing and commissioning of Full range 2.25-inch or better IP55 rated surface mounted music and PA loudspeaker. The loudspeaker shall meet the following performance criteria: Frequency range (-10dB) of 83Hz to 19kHz or better; Power handling of 64 Watt peak or more; Nominal dispersion of 100°(H) x 80°(V) or better; Sensitivity of 84 dB SPL or more and Max SPL of 103 dB SPL peak or better; Nominal impedance of 16 ohms and Integral multi-tap Transformer with selectable tap settings of 2/4/8/16W@70V & 100V. The loudspeaker system shall be enclosed in engineered-plastics and a powder-coated steel grille. UL-1480 rated and EN54-24 compliant for Life safety/VA applications.	Each	2			
				Micro Amplifier	mixer/amplifier with 48 kHz, 24-bit digital signal processing architecture. The mixer/amplifier shall include protection from shorted loads and general overheating. The mixer/amplifier shall have one output channel and drive 70/100 V distributed audio systems. The output power shall be 100 watts. The loudspeaker output connections shall be one 3-pin Euroblock connector. The auxiliary line output shall be two RCA connectors. The digital signal processor shall include selectable EQ presets to be applied to the loudspeaker outputs and the auxiliary output. The mixer/amplifier shall have two line-level inputs (two RCA stereo pairs), one Bluetooth wireless signal input, one front-panel mic/line input (one XLR/¼-inch connector), and one paging microphone input (one 4-pin Euroblock connector). The line-level inputs and Bluetooth signal input shall be selectable via a switch on the front panel. All inputs shall have individual input gain controls except for the Bluetooth signal. The frequency response of the mixer/amplifier shall be 70 Hz	Each	2		

		Jyotish Shastra	Informative	Wall Mounted 5.1 surround sound system with surround effect	Supply, installation, testing and commissioning of two-way 5.25-inch or better high SPL IP55 rated surface mount loudspeaker. The loudspeaker shall meet the following performance criteria: Frequency Range (-10 dB) of 90Hz - 18 kHz or better; Nominal Dispersion : 90°H x 80°V or better; Power handling of 400W peak or more; Sensitivity : 86 dB or better and the Max SPL : 116dB Peak or more with a Nominal impedance of 8 ohms and Integral multi-tap Transformer with selectable tap settings of 10/20/40/80W@70V & 100V; Standard wall mount brackets shall be included	Each	5		
				Subwoofer	Supply, installation, testing and commissioning of compact powered portable Subwoofer . The loudspeaker shall meet the following criteria: built-in amplifier with a system power of 1000W ; Frequency Range (-10 dB) of 38 Hz - 250 Hz; Normal dispersion shall be omni-directional; The loudspeaker shall have a Max SPL : 130 dB SPL. The loudspeaker system shall be comprised of a powder-coated perforated steel grille; two 10" high-excursion drivers; Shall have 2 balanced line level inputs and 2 balanced line level outputs; Shall have built-in protection for signal overload. shall include necessary arrangement mounting a Mid/high loudspeaker on the subwoofer.	Each	1		
				Power Amplifier	<p>mixer/amplifier with 48 kHz, 24-bit digital signal processing architecture.</p> <p>The mixer/amplifier shall include protection from shorted loads and general overheating.</p> <p>The mixer/amplifier shall have two output channels and drive 4–8 Ω low-impedance systems. The output power shall be 160 watts per channel at 4 Ω and 80 watts per channel at 8 Ω. The loudspeaker output connections shall be two 2-pin Euroblock connectors. The auxiliary line output shall be two RCA connectors. The digital signal processor shall include selectable EQ presets to be applied to the loudspeaker outputs and the auxiliary output.</p> <p>The mixer/amplifier shall have four line-level inputs (two RCA stereo pairs, two 5-pin Euroblock connectors), one Bluetooth wireless signal input, and one paging microphone input (one 4-pin Euroblock connector). The line-level inputs and Bluetooth signal input shall be selectable via a switch on the front panel. The frequency response of the mixer/amplifier shall be 20 Hz to 20 kHz (+0/-3 dB). The THD+N at rated power shall be less</p>	Each	2		
				Power Amplifier	<p>mixer/amplifier with 48 kHz, 24-bit digital signal processing architecture.</p> <p>The mixer/amplifier shall include protection from shorted loads and general overheating.</p> <p>The mixer/amplifier shall have two output channels and drive 70/100 V distributed audio systems with a rear-panel switch to select 70 V or 100 V. The output power shall be 160 watts per channel. The loudspeaker output connections shall be two 2-pin Euroblock connectors. The auxiliary line output shall be two RCA connectors. The digital signal processor shall include selectable EQ presets to be applied to the loudspeaker outputs and the auxiliary output.</p> <p>The mixer/amplifier shall have four line-level inputs (two RCA stereo pairs, two 5-pin Euroblock connectors), one Bluetooth wireless signal input, and one paging microphone input (one 4-pin Euroblock connector). The line-level inputs and Bluetooth signal input shall be selectable via a switch on the front panel. The frequency response of the mixer/amplifier shall be 20 Hz to 20 kHz (+0/-3 dB). The THD+N at rated power shall be less</p>	Each	1		
				AVR along with power amplifier	<p>Amplification: 7.2 Channels; 100W per channel (8 ohm, 20Hz–20kHz, 0.08% THD) Video Support: 4K/60Hz and 4K/120Hz pass-through; HDR10+, Dolby Vision, Dynamic HDR Audio Formats: Dolby Atmos, DTS:X, and DTS Virtual:X HDMI Connectivity: 4 HDMI inputs (3 supporting 8K) and 2 HDMI outputs (eARC support) Streaming: HEOS® Built-in (Spotify, Amazon Music HD, Tidal), AirPlay 2, Bluetooth Audio Tech Discrete HDAM amplifier modules and Current Feedback circuitry Calibration: Audyssey MultEQ XT room correction built-in Voice Control: Alexa, Google Assistant, and Apple Siri compatible</p>	Each	1		
		Digital Tactile Table	Informative	Indoor Wall Mounted speakers surrounding the murals giving directional sound	Supply, installation, testing and commissioning of Full range 2.25-inch or better IP55 rated surface mounted music and PA loudspeaker. The loudspeaker shall meet the following performance criteria: Frequency range (-10dB) of 83Hz to 19kHz or better; Power handling of 64 Watt peak or more; Nominal dispersion of 100°(H) x 80°(V) or better; Sensitivity of 84 dB SPL or more and Max SPL of 103 dB SPL peak or better; Nominal impedance of 16 ohms and Integral multi-tap Transformer with selectable tap settings of 2/4/8/16W@70V & 100V. The loudspeaker system shall be enclosed in engineered-plastics and a powder-coated steel grille. UL-1480 rated and EN54-24 compliant for Life safety/VA applications.	Each	2		

				Power Amplifier	mixer/amplifier with 48 kHz, 24-bit digital signal processing architecture. The mixer/amplifier shall have two output channels and drive 4–8 Ω low-impedance systems. The output power shall be 50 watts per channel at 4 Ω and 25 watts per channel at 8 Ω. The mixer/amplifier shall have two line-level inputs (two RCA stereo pairs), one Bluetooth wireless signal input, one front-panel mic/line input (one XLR/¼-inch connector), and one paging microphone input (one 4-pin Euroblock connector). The line-level inputs and Bluetooth signal input shall be selectable via a switch on the front panel. The frequency response of the mixer/amplifier shall be 40 Hz to 18 kHz (+0/-3 dB). The THD+N at rated power shall be less than or equal to 0.3%. The channel separation (crosstalk) shall be less than or equal to -60 dBV below rated power at 1 kHz. The dynamic range shall be 88 dB. The nominal input sensitivity shall be -10 dBV for line-level inputs and -58 dBV for paging microphone inputs. Various settings of the mixer/amplifier shall be configurable by a front-panel OLED display and a rotary encoder to navigate the menu/interface and adjust settings.	Each	2		
				Dante Input Adapter	Supply, installation, testing and commissioning of 2 Channel Dante AVIO Analog Input Adapter with RJ45 and 2 XLR females	Each	4		
				Dante Output Adapter	Supply, installation, testing and commissioning of 2 Channel Dante AVIO Analog Output Adapter with RJ45 and 2 XLR females	Each	4		
		Common AV Rack Backend - ZONE 5		Local Audio playback device	Supply, installation, testing and commissioning of 6-zone, 12-channel Class D streaming amplifier delivering featuring AirPlay 2, Chromecast, Spotify Connect, and Alexa Cast for seamless wireless audio, plus traditional analog/optical inputs, 7-band EQ, and integration with 3rd party control processors for multi zone audio control. It should be capable of work with a NAS (Network Attached Storage) drive. Should be capable of accessing and play local music files stored on a NAS through the VSSL system using compatible streaming apps.	Each	1		
				Control System Processor	Automation Controller Control Engine 4-Series multicore CPU, 2GB SDRAM, 8GB Flash Programming Modular Architecture (up to 10 simultaneous programs) Network 1x Gigabit Ethernet (802.1X, SSH, TLS, XiO Cloud ready) Serial Ports 8x RS-232/422/485 COM ports Control I/O 8x IR/Serial outputs, 8x isolated relays, 8x Versiports System Bus 1x Cresnet® master port Security FIPS 140-2 compliant, Active Directory, SNMP V3 Form Factor 1 RU rack-mount chassis Compliance UL Listed, CE, FCC Part 15 Class B, Apple HomeKit compatible	Each	1		
				Control System wired Keypad / wireless ipad	Handheld wifi Tablet for controlling AV . Display 10.1" to 10.9" IPS/LCD or AMOLED; Resolution: 1920 x 1200 (WUXGA) or higher; Brightness: 400+ nits. Processor Octa-core CPU (minimum 2.0 GHz); 4nm or 6nm architecture for power efficiency. Operating System Android 14.0/15.0 or iPadOS 18; must support multi-year security patches. Memory & Storage RAM: 4 GB (minimum) to 8 GB; Internal Storage: 64 GB to 128 GB (expandable via microSD up to 1 TB). Connectivity Wi-Fi 6 (802.11ax), Bluetooth 5.3, and optional 4G LTE/5G (Nano SIM/eSIM support). Camera Rear: 8 MP with Auto-Focus; Front: 5 MP (minimum) for video conferencing. Battery 6,000 mAh to 8,000 mAh; support for 15W+ fast charging via USB-C. Security Biometric (Face Unlock or Fingerprint); support for Mobile Device Management (MDM) enrollment (e.g., Knox, Apple Business Manager).	Each	1		
				24 Port 1 gig POE+ Network Switch	L3 Network Switch with specification Port Density 26 x 1G ports (24 PoE+) + 4 x 10G SFP+ Uplinks PoE Power 480W total budget (802.3at PoE+ up to 30W/port) Switching Fabric 132 Gbps non-blocking; Layer 2/Layer 3 Lite (Static/PIM) AV Optimization Pre-configured profiles for Dante, Q-SYS, NDI, and AES67 Multicast IGMP Plus™ for instant out-of-the-box AVoIP setup Form Factor 1 RU, rear-facing ports with reversible rack-mount options Acoustics Software-controlled fans for "Quiet Mode" operation	Each	1		
Zone 6	Chanting Ambience	Ambient		Outdoor Pole Mounted Speaker	Supply, installation, testing and commissioning of Full range 4-inch or better IP55 rated surface mounted music loudspeaker. The loudspeaker shall meet the following performance criteria: Frequency range (-10dB) of 70Hz to 19kHz; Power handling of 160 Watt peak; Nominal dispersion of 90°(H) x 80°(V); Sensitivity of 87 dB SPL and Max SPL of 109 dB SPL peak or better; Nominal impedance of 8 ohms and Integral multi-tap Transformer with selectable tap settings of 5/10/20/40W@70V & 100V. The loudspeaker system shall be enclosed in engineered-plastics and a powder-coated steel grille. UL-1480 rated and EN54-24 compliant for Life safety/VA applications.	Each	40		
				Power Amplifier LMT Based	SITC of Class D configurable amplifier with a digital signal processing architecture running at 48 kHz / 24 bit .The Amplifier shall have 600 watts output power asymmetrically distributed across 4 output channels with selectable 4/8ohms, 70/100 Volt or mixed use operation.The amplifier shall have four analog and dante channels ; Frequency Response : 20Hz - 20kHz ; S/N Ratio > 100db and THD < 0.04% at rated output. Built in DSP for Matrix routing, Speaker EQs, delays etc. Phoenix Input and output terminals,Built in DSP for Matrix routing, Speaker EQs,PEQ,bandpass, delays etc	Each	4		

		Content	Gurudev Sandipani	Granth Animation Design	High-resolution projection mapping animation simulating page-turn effects, slokas, illustrations, guided narrative on Gurudev Sandipani. Custom creation of mythological visuals, shloka typography, textured parchment effects, animated cues and Voiceovers. Includes script, illustration, motion graphics, VFX.	Lot	1		
		Content	Gurudev Sandipani	Mapping, Masking & Calibration	Providing and fixing of 3D Projection mapping software, Playback control System to manage, schedule and control the media servers. It should have direct control on inputs and media timelines. It should have an option of being controlled by an external unit integrated with the software, to complete the job with all respects. Approved makes: Dataton/Coolux/Pixera/Resolume or equivalent etc.	Lot	1		
		Narrative Mural							
		Software	Narrative Mural Wall	Web-AR Experience Development	End-to-end development of a browser-based AR experience triggered by mural. Includes AR scene setup, 3D overlays, animation, hotspot interactions. Platform: 8thWall / Zappar / Niantic Lightship WebAR / custom Three.js.	Lot	1		
		Software	Narrative Mural Wall	Marker-based Mural Tracking	Development of image tracking tied to mural artwork enabling precise AR alignment in visitor's mobile camera.	Lot	1		
		Content	Narrative Mural Wall	3D & Character Models	Creation of 3D models (Garg Muni, Ujjain skyline, mythological scenes) optimised for mobile AR rendering. Animation sequences showing city expansion, knowledge dissemination, characters interacting, etc.	Lot	1		
		The Guru Dakshina							
		AV/IT	The Guru Dakshina Story	High-Brightness Laser Projector	Supply, installation, testing, and commissioning of a high-performance multi-projector system configured for seamless wide-format or curved-surface projection using advanced edge blending and geometric warping. The system shall consist of high-brightness laser projectors with a minimum output of 7,000 ANSI lumens, native WUXGA (1920x1200) or higher resolution, and a minimum contrast ratio of 2,500,000:1, suitable for both flat and complex surfaces under ambient lighting. Projectors shall be equipped with short-throw or fisheye interchangeable lenses (0.4:1 to 0.8:1 throw ratio) to support close-distance wide coverage. Suggested Makes: Panasonic / Epson / Christie or equivalent.	Nos.	2		
		AV/IT	The Guru Dakshina Story	Custom Projector Mount	MS fabrication mount with micro-adjustments (tilt, yaw, roll). Concealed design for visitor-facing aesthetics. Powder-coated black.	Nos.	2		
		AV/IT	The Guru Dakshina Story	Media Server	Supply and commissioning of high-performance media server with licensed interactive projection software capable of real-time sensor integration. The media server shall be GPU-accelerated (minimum NVIDIA RTX 5060ti 12GB or equivalent), with 64 GB DDR4 RAM, 1 TB NVMe SSD for system operations, and 1 TB SSD RAID-0 array for high-speed media playback. It shall support at least 4x 4K video outputs.	Nos.	1		
		AV/IT	The Guru Dakshina Story	Mapping, Masking & Calibration	Providing and fixing of 3D Projection mapping software, Playback control System to manage, schedule and control the media servers. It should have direct control on inputs and media timelines. It should have an option of being controlled by an external unit integrated with the software, to complete the job with all respects. Approved makes: Dataton/Coolux/Pixera/Resolume or equivalent etc.	Lot	1		
		Content	The Guru Dakshina Story	Scene Animation & Projection Mapping Content	2D/3D animated visuals including Krishna, Gautami, Maharishi Sandipani, emotional beats, and the return of Madhumangala. Designed specifically to overlay on physical diorama contours. Script for Guru Dakshina story with cultural accuracy and educational clarity. Studio-grade narration recorded by male/female VO artist, including atmospheric SFX.	Lot	1		
		Lighting	The Guru Dakshina Story	Theatrical Spotlights	10-20 W LED warm spotlight for highlighting static portions of diorama without interfering with projection. Beam angle: 15-25°, dimmable.	Nos.	30		
		Lighting	The Guru Dakshina Story	Lighting control	Lighting control for fade-in/out synced to narration and projection.	Nos.	1		
		Special Installation	The Guru Dakshina Story	Animatronic Mechanism	Integration of servo/linear actuators enabling subtle programmed movements such as head turn, hand/arm gesture, gaze shift, breathing effect. Motion control to be smooth, low-noise (<45 dB), and suitable for close-range museum viewing.	Nos.	4		
		64 Vidyas Tech							
		Software	64 Vidyas	Design & Development	Design, development, installation, testing & commissioning of an interactive multi-touch "64 Vidyā Navigator Table". 43"-65" commercial touch display, 20 point touch, 4K resolution.	Nos	1		
		Software	64 Vidyas	Knowledge Map Software Engine	Interactive browser for 64 art forms, animations, storytelling UI, info layers, quizzes on transparent screen.	Nos	1		
		Software	64 Vidyas	Micro-Interactions Package	Gesture responses, skill demonstrations, dynamic content cards, audiovisual triggers.	Nos	1		
		Software	64 Vidyas	Narrative Simulation Software	Story-based modules where each Vidyā is explained through animated sequences and scenario-based learning.	Nos	1		
		Software	64 Vidyas	Gesture Recognition Software	Enables visitor to "perform" actions related to Vidyās such as archery stances, dance mudrās, crafting motions, reasoning puzzles.	Nos	5		

		Software	64 Vidyas	Skill Challenge Scenarios	Gamified modules showcasing visitor performance, scoring, and comparison with ancient ideal techniques.	Nos	5		
		Software	64 Vidyas	Scroll Simulation Software	Visitors unroll digital scrolls by sliding hands, reveals teachings, mantras, diagrams of Vidyās.	Nos	10		
		AV/IT	64 Vidyas	Audio-Visual Systems, IT Infrastructure, Integration & Commissioning	Supply, installation, configuration, testing and commissioning of the complete AV/IT systems for 64 Vidyas zone galleries, including displays, projectors, LED walls, interactive touch systems, audio systems, networking hardware, control processors, and content delivery platforms. Scope includes complete cabling, terminations, mounting, programming and handover.	Nos	1		
		Interiors	64 Vidyas	Overall Interiors for 64 Vidyas	Complete execution of interior finishes including wall treatments, ceiling works, illumination, acoustic enhancement, exhibit integration support and all associated interior works required to create an immersive environment as per approved design intent.	Nos	1		
		Krishna Installation							
		AV/IT	Krishna Installation	High-Brightness Laser Projector	Supply, installation, testing, and commissioning of a high-brightness 30,000- lumens professional laser projector featuring 3-chip DLP technology and WUXGA (1920x1200) resolution, designed for large-venue and mapping applications. The projector delivers 29,000 center lumens, 27,000 ANSI lumens, and 31,000 ISO lumens, with up to 20,000:1 dynamic contrast. or equivalent.	Nos.	4		
		AV/IT	Krishna Installation	Projector Housing	SITC Projection housing enclosure Interface for setup and monitoring of temperature, humidity and status indicators. Power control circuit with PID Management system compatible with the projection housing unit and display unit. Assembly and mounting of projector as per site plan with cables, mounting brackets and tilt/pan arrangement systems for projection layout.	Nos.	4		
		AV/IT	Krishna Installation	Projector Mount System	Heavy-duty adjustable mount with vibration isolation pads. Weatherproof installation.	Nos.	4		
		AV/IT	Krishna Installation	Media Server	Supply, installation, and configuration of a dedicated high-performance media server designed to manage multi-layer projection mapping, interactive content playback, and show control. Server shall be equipped with licensed projection mapping software such as Dataton WATCHOUT, Resolume Arena, or equivalent. Hardware specifications to include minimum Intel Core i9 or AMD Ryzen 9 processor, 32 GB DDR4 RAM (expandable), 1 TB NVMe SSD (OS & software), and additional 2 TB SSD for media storage. Graphics processing to be handled by NVIDIA RTX A2000 or higher, supporting at least 2 simultaneous video outputs (DisplayPort/HDMI/SDI) at 4K resolution.	Nos.	2		
		AV/IT	Krishna Installation	Networking Hardware	Switches, Cat-6 cables, control wiring for mapping, lighting, laser sync.	Lot	1		
		Content	Krishna Installation	Projection Mapping Visuals	3D animations of Krishna's divine routine, ashram life, teachings, stepwell scenes. Visual Storyboard, Storytelling, 2D 3D animation, Graphics, Art Works, Archival Imagery, Video-timeline, Sfx, Vfx, Voiceovers and Music etc for the show. Design and development of pictures, digital illustration, sketch, characters, etc for the show. The Artwork should be created by professional Artist and Illustrator. Programming visual cues matching narration, beats, divine moments. Authenticated storyline capturing daily life, divine routine, teachings. Professional narration, orchestral background score, atmospheric SFX. Duration: 15 Mins	Lot	1		
		AV/IT	Krishna Installation	Mapping, Masking & Calibration	Providing and fixing of 3D Projection mapping software, Playback control System to manage, schedule and control the media servers. It should have direct control on inputs and media timelines. It should have an option of being controlled by an external unit integrated with the software. to complete the job with all respects. Approved makes: Dataton/Coolux/Pixera/Resolume or equivalent etc.	Lot	3		
		AV/IT	Krishna Installation	Equipment Rack	Supplying, Installation, Testing, and commissioning of Equipment Rack 42 U Steel Doors - plain, vented at bottom, fully perforated and dual perforated, Glass Doors - with optional vented side trims for front-to-back air flow. President/ Netrack/ Dynamic/ Rittal/ equivalent make approved by Authority.	Nos.	2		
		Lighting	Krishna Installation	Laser & Lights	SITC Laser 20000 mW power Graphics capable - 45kpps @ 8° ILDA Full colour mixing - analog modulation Link multiple units with linking Power, DMX and ILDA, Create custom content, store it inside the laser and play it back in different modes including programming and playback software.	Nos.	5		
		Lighting	Krishna Installation	Laser & Lights	SITC Laser housing enclosure with assembly and mounting of projector as per site plan with cables, mounting brackets and tilt/pan arrangement systems for projection layout.	Nos.	6		
		Lighting	Krishna Installation	Laser & Lights	Software solution to control the laser with all controls and effects.	Nos.	1		
		Lighting	Krishna Installation	Laser & Lights	Moving Head with Rated power: 330-400W@220V, Light angle: 2 °. Input voltage: AC100-250V 50/60Hz Light source specifications: 280W high CRI lamp, Colour temperature: 8000K, Colour plate: a colour wheel, 13 is colour + white, half color effect & DMX Control.	Nos.	15		
		Lighting	Krishna Installation	Laser & Lights	Weather proof dome housing for beam lights of suitable size with heat dissipation unit and acrylic covering to pass the beam.	Nos.	15		
			12 Large Sculptures						

		Lighting	12 Large Sculptures	Lighting with Programming		Nos	12		
		Sensory Kiosk							
		AV/IT	Sensory Kiosk	Hand Hover Sensors	Multi-zone IR or Time-of-Flight sensors for tracking hand distance (5-25 cm) above the digital scroll. Make: Ultraleap/Optex/Benewake or equivalent.	Nos.	3		
		Software	Sensory Kiosk	Gesture Controller	Embedded microcontroller interpreting gestures.	Nos.	1		
		AV/IT	Sensory Kiosk	75" Commercial Display	Full HD/4K display, 24/7 rated, embedded signage OS optional, high-brightness 500 nits. Make: Samsung/LG/BenQ	Nos.	1		
		AV/IT	Sensory Kiosk	Display Mounting System	Heavy-duty plate and adjustable frame for kiosk integration.	Nos.	1		
		AV/IT	Sensory Kiosk	Media Server	Supply and commissioning of high-performance media server with licensed interactive projection software capable of real-time sensor integration. The media server shall be GPU-accelerated (minimum NVIDIA RTX 5060ti 12GB or equivalent), with 64 GB DDR4 RAM, 1 TB NVMe SSD for system operations, and 1 TB SSD RAID-0 array for high-speed media playback. It shall support at least 4x 4K video outputs.	Nos.	1		
		Software	Sensory Kiosk	Control Software Development	Custom control scripts linking gestures.	Lot	1		
		Content	Sensory Kiosk	Arrow-Making Craft Animation	2D/3D visualisation: selection of wood, carving, shaft straightening, feather fletching, arrow-head forging. Segmented scroll zones responding to hand hover (reveal text, highlight step, animate). Clear prompts, hover-based selection, animated icons. Layered narration + subtle ambient sounds (wood scraping, forging, polishing).	Lot	1		
		Jyotish Shastra							
		AV/IT	Jyotish Shastra	LED Wall	Supply, installation, testing and commissioning of a high-resolution indoor LED Video Wall with P1.9 pixel pitch, suitable for close-range museum viewing and immersive storytelling applications. LED wall must deliver seamless display, high contrast, wide viewing angle, and extended operational reliability for continuous use in exhibition environments.	Sq.ft	240		
		AV/IT	Jyotish Shastra	Switch	Networking Switch. Make: Netgear AV Line M4250 or equivalent	Nos.	1		
		AV/IT	Jyotish Shastra	Processor	4K Prime Pro LED Processor	Nos.	1		
		AV/IT	Jyotish Shastra	Media Server	Supply and commissioning of high-performance media server with licensed interactive projection software capable of real-time sensor integration. The media server shall be GPU-accelerated (minimum NVIDIA RTX 5060ti 12GB or equivalent), with 64 GB DDR4 RAM, 1 TB NVMe SSD for system operations, and 1 TB SSD RAID-0 array for high-speed media playback. It shall support at least 4x 4K video outputs.	Nos.	1		
		AV/IT	Jyotish Shastra	Touchscreen Kiosk - Chandrama Station	32" interactive display to explore moon position, phases, and mind-body connection.	Nos.	2		
		Software	Jyotish Shastra	Planetary Motion Software	Motion-simulation UI where visitors rotate celestial bodies to see orbit effects. Explains ancient cosmic principles (e.g., Rashi, Nakshatra cycles, Pancha Mahabhutas alignment) with touch/gesture triggers. Unity/Unreal-based visualisation.	Nos.	1		
		Content	Jyotish Shastra	Planetary Motion Animations	2D/3D scientific animations showing orbital paths, retrograde motion, day- night cycles. Explainer visualisation on lunar influence on emotions and vitality. Interactive content explaining cosmic balance, Panchang, Nakshatra system. Culturally aligned to Jyotish Shastra.	Lot	1		
		Special Installation	Jyotish Shastra	Suspended Planets on Winches	Design, engineering, fabrication, installation, testing and commissioning of a Kinetic Planet System consisting of ten (10) suspended planetary models, each independently controllable using motorized winch mechanisms to simulate orbital movement and astronomical motion.	Nos.	10		
		Special Installation	Jyotish Shastra	Rigging & Suspension System	Stainless steel cables, swivels, safety bonds, cable clamps, pulleys, and overhead track layout. Ceiling-mounted MS structure with load-bearing certification.	Nos.	1		
		Special Installation	Jyotish Shastra	Motion Control System	Centralized controller capable of managing 10 winches independently or in grouped choreography. DMX/Art-Net/Ethernet control, programmable motion curves, planetary motion presets, synchronization with projection/LED content.	Nos.	1		
		Interiors	Jyotish Shastra	Wall fabrication with LED Mount	Black/dark gradient skin panels with vinyl cosmic print or coated paint finish. MS Frame for LED	Nos.	1		
		Ayurveda &							
		AV/IT	Ayurveda & Chikitsa	UST Projector	4000 lumens, 4K PRO-UHD Laser, UST projector Capable of edge-blending and warping for curved surfaces. Throw ratio 0.16 - 0.40. Make: Panasonic / Christie / Epson or Equivalent	Nos.	3		
		AV/IT	Ayurveda & Chikitsa	Ceiling/Floating Mounts	Adjustable projector mounts for alignment & keystone-free projection.	Nos.	3		
		AV/IT	Ayurveda & Chikitsa	Media Server	Supply and commissioning of high-performance media server with licensed interactive projection software capable of real-time sensor integration. The media server shall be GPU-accelerated (minimum NVIDIA RTX 5060ti 12GB or equivalent), with 64 GB DDR4 RAM, 1 TB NVMe SSD for system operations, and 1 TB SSD RAID-0 array for high-speed media playback. It shall support at least 4x 4K video outputs.	Nos.	1		

		AV/IT	Ayurveda & Chikitsa	Mapping, Masking & Calibration	Providing and fixing of 3D Projection mapping software, Playback control System to manage, schedule and control the media servers. It should have direct control on inputs and media timelines. It should have an option of being controlled by an external unit integrated with the software, to complete the job with all respects. Approved makes: Dataton/Coolux/Pixera/Resolume or equivalent etc.	Lot	1		
		Software	Ayurveda & Chikitsa	RFID Tags for Objects	Passive RFID tags embedded in objects (herbs, gems, instruments, vials). Unique ID per object.	Nos.	10		
		Software	Ayurveda & Chikitsa	RFID Readers under Pods	Short-range readers installed beneath table surface; detect placed objects instantly.	Nos.	10		
		Software	Ayurveda & Chikitsa	Microcontroller Hub	Arduino/STM32/ESP32-based I/O controller reading sensor logic and sending triggers to server. Custom programming included.	Nos.	5		
		Content	Ayurveda & Chikitsa	Content Development	Interactive Content Development for the Zone	Nos.	1		
		Digital Tactile Table							
		AV/IT	Digital Tactile Table	Commercial Touch Display	86" Stretch Display with Touch panel, 4K UHD, 24/7 rated. >400 nits brightness. LG / Samsung / ViewSonic.	Nos.	2		
		AV/IT	Digital Tactile Table	High-Performance Mini PC	Extreme i7 12th gen, 32 GB RAM, 1TB SSD, Nvidia RTX 5060 GPU	Nos.	2		
		Content	Digital Tactile Table	64 Art Form	High-quality illustrated/animated representations of historic art forms (teaching, magic, metallurgy, gem crafting, strategy, problem-solving, combat sciences, etc.). Short animations explaining each art form's key techniques.	Lot	1		
		Software	Digital Tactile Table	Application Engine	Built using Unity/Unreal/HTML5 for smooth touch interactivity. Multi-touch optimized.	Lot	1		
		Control & Automation	General	Control & Automation	Design, supply, installation, programming, testing and commissioning of a fully integrated Museum Control & Automation System covering all AV equipment, lighting systems, interactive exhibits, kinetic installations, show control servers, environmental sensors, and gallery-wide power sequencing. System to allow centralized, reliable, operator-friendly control of the entire museum experience.	Nos	1		
				1	Furniture				
				1	Providing & installation of the Bed frame with 4 storage boxes, brown/Lurøy, 180x200 cm (70 7/8x78 3/4 ")	Nos	8.00		
				2	Providing & installation of the Bed frame with 2 storage boxes, brown, 90x200 cm (35 3/8x78 3/4 ")	Nos	10.00		
					Providing & installation Chavez Triple Twin/Twin/Twin Size Metal Triple (3Bed) Bunk Bed (Metal - Black Powdercoated)	Nos	20.00		
				3	Providing & installation of the Foam mattress, firm/white, 180x200 cm (63x78 3/4 ")	Nos	8.00		
				4	Providing & installation of the Foam mattress, firm/white, 80x200 cm (31 1/2x78 3/4 ")	Nos	80.00		
				5	Providing & installation of Wardrobe with 2 doors, black-brown, 79x176 cm (31 1/8x69 1/4 ")	Nos	90.00		
				6	Providing & installation of Cabinet with doors, dark grey indoor/outdoor, 80x44x182 cm (31 1/2x17 3/8x71 5/8 ")	Nos	10.00		
				7	Providing & installation of Room darkening curtains, 1 pair, yellow-beige/with heading tape, 135x250 cm (53x98 ")	Nos	80.00		
				8	Providing & installation of Desk, beige/anthracite, 120x60 cm (47 1/4x23 5/8 ")	Nos	90.00		
				9	Providing & installation of Chair, white/Tibbleby beige-grey	Nos	90.00		
				10	Providing & installation of 1 Seater Sofa in Walnut; Size: H 30 x W 22 x D 22 inches	Nos	10.00		
				11	Providing & installation of 3 Seater Sofa in Walnut; Size: H 30 x W 63 x D 24.5; Seating Height: 18.5 inches	Nos	5.00		
				12	Providing & installation of Solid Wood Coffee Table; Size: H 16 x W 40 x D 20 inches	Nos	5.00		
				13	Providing & installation of Wood Full Length Mirror; Size: H 70 x W 20 x D 1 inches	Nos	40.00		
				14	Providing and installation solid wood and metal chair table outdoor patio seating (set including 4 chair and 1 table)	Nos	25.00		
				15	Providing and installation Children's picnic table, light brown stained	Nos	10.00		
				16	Providing and installation LG 8 Kg 5 Star Smart Inverter Technology Fully Automatic Top Load Washing Machine (T80VMB4Z, Turbodrums, Auto Prewash, Stainless Steel drum, LED Display, Smart Diagnosis, Middle Black)	Nos	10.00		
				17	Providing and installation 30 Door Durable Metal Mobile Locker for Phones and Valuables, Lockable Storage Grey, 177.8x101.6x101.6x22.86 cm	Nos	2.00		
				18	Providing and installation 30 Door Durable Metal Mobile Locker for Phones and Valuables, Lockable Storage Grey, 177.8x101.6x101.6x22.86 cm	Nos	15.00		
				19	Providing and installation Samsung 189 L, 5 Star, Digital Inverter, Direct-Cool Single Door Refrigerator (RR21D2H259U/HL, Paradise Bloom Blue, Base Stand Drawer)	Nos	5.00		
				20	Providing and installation Table and 4 chairs, green green/green Tibbleby grey-green, 125x74 cm (49 1/4x29 1/8 ")	Nos	15.00		
				21	Providing and installation Storage comb w sliding glass doors, brown stained oak veneer/clear glass, 245x47x201 cm (96 1/2x18 5/8x78 7/8 ")	Nos	5.00		

				22	Providing and installation Rose Folding Chair with Writing Pad for Work from Home Cushion and Adjustable Writing Pad 44x39x81 cm	Nos	80.00		
				J	Internal Interior				
		Special Installation	Gurudev Sandipani	Granth Physical Book Structure (Life-sized)	Custom-fabricated curved open-book form using CNC-cut MDF sub-structure with FRP/clay finishing. Projection-friendly matt surface coating applied for accurate colour reproduction. Height/width approx. 8-10 ft wide.	Nos.	1		
		Interiors	Gurudev Sandipani	Back Support & Base Pedestal	MS frame structure for book support, pedestal cladding in laminate/duco finish, integrated cable channels and ventilation slots for projectors.	Nos.	1		
		Interiors	Gurudev Sandipani	Relief Wall Backdrop	Textured relief artwork panels depicting Gurukul inscriptions, symbols, maps, etc. Made using FRP/CNC-routed MDF with duco paint.	Sq M	20		
					Narrative Mural Wall (Augmented Reality)				
		Interiors	Narrative Mural Wall	Mural Wall	Mural wall depicting Gurukul inscriptions, symbols, Huts, etc. Made using FRP/CNC/HDF	Nos.	1		
					The Guru Dakshina Story (Projection mapping on the dioramas)				
		AV/IT	The Guru Dakshina Story	Mapping, Masking & Calibration	Providing and fixing of 3D Projection mapping software, Playback control System to manage, schedule and control the media servers. It should have direct control on inputs and media timelines. It should have an option of being controlled by an external unit integrated with the software. to complete the job with all respects. Approved makes: Dataton/Coolux/Pixera/Resolume or equivalent etc.	Lot	1		
		Special Installation	The Guru Dakshina Story	Silicone Statues	Design, sculpting, fabrication, installation, testing and commissioning of four (04) highly realistic silicone statues representing characters from the Guru Dakshina Story (Maharishi Sandipani, Gautami, Krishna, and child Madhumangala). Work includes complete anatomical modeling, silicone skin casting, internal armature, animatronic mechanisms, costumes, finishing, and integration with the diorama environment.	Nos.	4		
		Interiors	The Guru Dakshina Story	Background Relief Panels	Wall panels designed with engraved / bas-relief background elements, FRP/MDF routed design with matte duco finish.	Nos.	1		
					12 Large Sculptures				
		Sculpture	12 Large Sculptures	Sculptures	Design, modelling, fabrication, finishing, supply and installations of 10 feet high sculptures (12 Nos) depicting narrative scenes. Fabricated using FRP, resin, or stone-resin composite, reinforced with internal MS structure. Fine detailing of facial features, garments, ornaments and surface texture.	Nos	12		
		Interiors	12 Large Sculptures	Interiors	Supply & installation of carved wall panels running on all sides, featuring Sanskrit shloka inscriptions inspired by ancient manuscripts. Panels to be CNC-routed or hand-carved on MDF/FRP/Stone-resin sheets, mounted on MS subframe. Seamless jointing, hidden fixations, and edge detailing included.	Sq Feet	4843		
					Sensory Kiosk				
		Interiors	Sensory Kiosk	Kiosk Main Frame	CNC-cut 18-25 mm plywood structure, scroll-inspired form, ergonomic height (900-1000 mm). Matte laminated or duco-paint surface.	Nos.	1		
		Interiors	Sensory Kiosk	Overall Fabrication		Nos.	1		
					Ayurveda & Chikitsa – Pick-and-Place Interactive Zone				
		Interiors	Ayurveda & Chikitsa	Counter Fabrication (12-18 ft length)	Custom plywood/MS frame counter, veneer/laminate finish, internal bays for sensors and wiring. Top finished in matte, projection-friendly color.	Rft	1		
		Interiors	Ayurveda & Chikitsa	Object Pedestals / Placement Pods	6-10 small recessed platforms on counter, each with embedded sensing module (RFID/IR/weight).	Nos.	1		
		Interiors	Ayurveda & Chikitsa	Wall Surface for Projection	Smooth plaster, primer, matte projection paint (neutral white/grey). Projector-optimized paint like Screen Goo.	Nos.	1		
					Digital Tactile Table				
		Interiors	Digital Tactile Table	Digital Table Structure	Custom-built table using 25 mm plywood. Matte wooden veneer finish. Tapered edges, ergonomic height (900-1000 mm). Flush-mounted frame for touchscreen display with vent channels, service access panel, dust-proof edges. Concealed internal cable channel with removable hatch, cable grommets, cooling fans.	Nos.	2		
		Interiors	Digital Tactile Table	Fabrication		Nos.	1		

Sr. No.	Personnel	Yearly Rate	TOTAL
1	Operation, management and maintenance of the entire assests/facilities created under this contract for 5 years including following but not limited to:		
	a. Management Team - 3 Nos b. Trainer & Supervisor - 1 Nos c. Staff for Repair, Maintenance & Replacement of Interiors & Technicals - 4 Nos d. Software Upgrades & Online Updates - 2 Nos e. Ushers - 10 Nos f. Housekeeping and upkeep management staff, materials & other services - 8 Nos g. Internal Security - 10 Nos		
1.01	Year 1		₹0
1.02	Year 2		₹0
1.03	Year 3		₹0
1.04	Year 4		₹0
1.05	Year 5		₹0
		Total	₹0