



Request For Proposal (RFP)

For

Remaining work of Rejuvenation of Bhairva Talab in Bhagalpur, Bihar including 5 years of Defect Liability period and Operation & Maintenance under Bhagalpur Smart City Limited, on Engineering, Procurement & Construction (EPC) contract basis.

Issued By:

Chief Executive Officer(CEO),

Bhagalpur Smart City Limited

DISCLAIMER

The information contained in this Request for Proposal (“RFP”) document or subsequently provided to bidders, verbally or in documentary or any other form by or on behalf of the Bhagalpur Smart City Limited (here forth referred to as BSCL in this document) or any of its employees or advisers, is provided to bidders on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is not an invitation by the Employer to the prospective Consultants or any other person. The purpose of this RFP is to provide interested bidders with information that may be useful to them in the formulation of their Proposals pursuant to this RFP.

This RFP includes statements, which reflect various assumptions and assessments arrived at by the Employer in relation to the Consultancy. Such assumptions, assessments and statements do not purport to contain all the information that each bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the Employer, its employees or advisers to consider the objectives, technical expertise and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in this RFP, may not be complete, accurate, adequate or correct. Each bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this RFP and obtain independent advice from appropriate sources. Information provided in this RFP to the bidder (consultant/contractor/developer/manufacturer/supplier etc.) is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law.

The Employer accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

The BSCL and its employees and advisers make no representation or warranty and shall have no liability to any person including any bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Selection Process.

The BSCL also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any bidder upon the statements contained in this RFP. The BSCL may in its absolute is creation, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this RFP. The issue of this RFP does not imply that the

Employer is bound to select a bidder or to appoint the selected bidder, as the case may be, for the Consultancy and the BSCL reserves the right to reject all or any of the Proposals without assigning any reasons whatsoever.

The bidder shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the BSCL or any other costs incurred in connection with or relating to its Proposal.

All such costs and expenses will remain with the bidder and the BSCL shall not be liable in any manner what so ever for the same or for any other costs or other expenses incurred by a bidder in preparation or submission of the Proposal, regardless of the conduct or outcome of the Selection Process.

Sd/

Chief Executive Officer (CEO),
Bhagalpur Smart City Limited

**INSTRUCTIONS TO BIDDERS
AND
QUALIFICATION INFORMATION**

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VOLUME - I

SECTION-1

INVITATION FOR BID (IFB)

NIT No:		BSCL/Bhairva Talab/2021/....
1.	(a) Name of the work	Remaining work of Rejuvenation of Bhairva Talab in Bhagalpur, Bihar including 5 years of Defect Liability period and Operation & Maintenance under Bhagalpur Smart City Limited, on Engineering, Procurement & Construction (EPC) contract basis.
	(b) Scope of Work	Details Scope of Work are as follows: As per Sheet – Scope of Work
2.	Mode of Bid Submission	e-tendering (http://www.eproc2.bihar.gov.in)
3.	Estimated Cost (Rs.)	Rs.9,61,61,964.75.00 /- (Rupees Nine Crores Sixty One Lakhs Sixty One Thousand Nine Hundred and Sixty Four) Only
4.	Online Tender Fee	https://www.eproc2.bihar.gov.in/
5.	EMD/Bid Security	As per NIT. (The EMD/Bid Security should be submitted through Internet Payment Gateway (IPG) / Challan / Bank Guarantee. Bank Guarantee shall be drawn in favour of “Chief Executive Officer, Bhagalpur Smart City Limited”.)
6.	Tender Document Fee	As per NIT
7.	Date / Time of Publication of Tender on e-Proc Website	As per NIT
8.	Last Date / Time for Bid Submission	As per NIT
9.	Last Date/Time of Submission of Tender Fee & EMD	As per NIT
10.	Date of Bid Opening	As per NIT
11.	Bid Submission Address	Bhagalpur Smart City Limited, Office: 4th Floor, Bhagalpur Smart City Building, ICC, Police line, Bhagalpur, Bihar-812001. India. Email- info@smartcitybhagalpur.org Website- www.smartcitybhagalpur.org

Note: Only e-Tenders shall be accepted.

Further details are available on Bihar Government e-Procurement website and select Bhagalpur Smart City and can be seen on the website <http://www.eproc2.bihar.gov.in>

Sd/-

Chief Executive Officer (CEO),
Bhagalpur Smart City Limited

Scope of Work

Scope of Work: Remaining work of Rejuvenation of Bhairva Talab in Bhagalpur, Bihar including 5 years of Defect Liability period and Operation & Maintenance under Bhagalpur Smart City Limited, on Engineering, Procurement & Construction (EPC) contract basis.

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost
1	Design & Drawing	lot	1	0.31%
1.1	Architectural, Structural Drawings			
1.2	MEP and Others Drawings			
1.3	As Build Drawings			
2	Pond soil cleaning & Filling including the Stone boulder pitching in pond side base etc.	lot	1	5.20%
2.2	Removing of water and Stone boulder pitching in pond side surface in blance area with the help of pile and girde beam etc.			
2.2	Making of boating platform with entrance gate & ss railing including ticket counter in all respect			
2.3	Work Completed in all respect as per agreement			
3	Dismantling Works	lot	1	0.09%
4	Making New Boundary Wall	lot	1	2.37%
4.1	Water proof painting in wall surface as per the approved shade			
4.2	Makinng of entry gate near in balnace mandir area and fencing work along the temple area all complete work			
5	Making of secondary emergency entry/Exit gate 2 Nos	lot	1	0.05%
5.1	Enamel paint in secondary emergency entry/Exit gate 2 Nos in all respect			
6	Making of Ghats (400 mts)	lot	1	31.64%
6.1	Removing of water, Excavation of soil and construction of ghat step foundation and back filling of local soil etc in all respectas per drawing			
6.2	Laying of PCC and RCC at ghat and ghat steps with stone bounder carating as per the drawing in all respect			

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost
6.3	Laying of Red Sand Stone/ Finishing Works and fixing of S.S. railing etc all complete work			
7	Storm Water Drainage and Drainage system in Campus (Apporx 100 meter)			3.02%
7.1	Construction of Inlet and out let RCC drain/RCC Pipe for the pound with required chamber as per the approved drawing in all respect			
8	Children Play area and Equipment	lot	1	5.14%
8.1	Earthwork and excavation at site, supplying and fillinng of plinth with sand, Brick masonry and making of all around fencing as per the approved drawing and design			
8.2	Preparation of EPDM floor area for children, by laying, Brick Soling, GSB, PCC and laying EPDM flooring over the surface with kerb stone casting the area as per design			
8.3	Preparation of beds for laying Mexican Turf Grass and through standard procedure of laying good earth mixed with sludge, manure and good earth			
8.4	Installation of Kids play equipments one number each from selected list of open play equipments with suitable benches and dustbin including ticket counter as per the approved list and make			
8.5	Work Completed in all respect as per agreement			
9	Toilet & public Utility (2 Nos.)	lot	1	1.86%
9.1	Construction of Toilet & public Utility -2 Nos. (Balance work of one no. existing and construction of one no. of toilet block at sutable location with water facility as per approved drawing) completed each in all respect			
10	Septic Tank (1 Nos.)	lot	1	0.62%
10.1	Septic Tank (1 Nos.) work completed in all respect			
11	Landscape works (5.00 Acres)	lot	1	9.90%

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost
11.1	Leveling & Dressing with required local soil, Providing and laying of Cement concrete paver blocks including both side kerb stone as per walkway drawing and installation of covered seating benches in sufficient numbers (25 nos.) wherever applicable/required in entire area all works complete in all respect.			
11.2	Preparation of Soil for Planting which includes: trenching in soil, supply and stacking of good earth, sludge, dump manure, spreading of sludge, dump manure, good earth and mixing, preparation of beds for hedges, shrubbery by uprooting weeds, laying of mixed manure, earth and sludge for plantation.			
11.2	Providing and stacking of species of plants, shrubs, trees and all horticulture work and laying of Mexican Turf grass in landscaping areas as per approved drawing and in all numbers			
12	Outdoor Playing Equipments/Gym Equipments			6.00%
12.1	Earthwork and excavation at site, supplying and filling of plinth with sand and construction of plat form with the help of brick masonry and making of all around fencing as per the approved drawing and design			
12.2	Preparation of EPDM floor area for outdoor gym, by laying, Brick Soling, GSB, PCC and laying EPDM flooring over the surface with kerb stone casting the area as per design			
12,3	Installation of gym equipments one number each from selected list of open gym equipments including installation of suitable numbers of seating benches and dustbins and ticket counter etc as per the approved list and make			
12.4	Work Completed in all respect as per agreement			
13	Garden Maintenance based equipments	lot	1	1.13%
13.1	Procurement of required items and all required accessories and equipments/system as per the approval			

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost
13.2	Checkig testing and satisfaction upon workability of procured components all complete with all accessories			
14	Internal Electrification Work of civil works including walkway lighting and campous lighting etc,			8.83%
14.1	16 m high mast; 8 nos. × 200W LED floodlights per mast; complete mast, winch/raising-lowering system, foundation, panel, erection, testing etc.	Set	6	
14.2	100W LED street light, complete with driver and accessories	No.	45	
14.3	8 m GI/octagonal pole with bracket/arm, foundation and erection	No.	45	
14.4	63A feeder pillar with 6 outgoing circuits, MCCB/MCB, contactor/timer, busbar, protection and accessories	No.	6	
14.5	25 sq.mm Aluminium armoured power cable; supply only	m	2500	
14.6	Excavation, sand bedding, protective layer, cable laying, backfilling and route marking	m	2500	
14.7	Glands, lugs, jointing/termination kits, junction boxes and related accessories	L.S.	1	
14.8	Earth pits with electrodes, chamber, earth lead and connection for feeder/high-mast system	No.	6	
14.9	90W solar LED light with panel, battery, controller, pole and complete installation	No.	20	
14.10.	Additional lighting points, junction boxes, small poles/brackets and wiring for dark spots around walkway/pond/park, as required	L.S.	1	
14.11	Testing, insulation/earth resistance tests, commissioning and handover	L.S.	1	
14.12	Additional lighting points, junction boxes, wiring/cabling, small fittings and allied works for large park area, walkway and dark spots around 1 km pond perimeter	L.S.	1	
14.13	Checkig testing and satisfactory commissioning of procured components all complete with all accessories	L.S.	1	
15	Internal and External Water supply and sanitation for entire works/area	lot	1	3.02%

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost
15.1	Procurement and installation of required internal and external water supply and sanitation of entire area with required plumbing and PHE works as per the actual requirements at site			
16	Cost for construction (CAPEX)			79.20%
17	Cost of Operation & Maintenance Cost for 5 years (OPEX)			20.80%
18	Total Project Cost (Capex + Opex) (Sr.No. 16 + Sr.No. 17)			100.00%

Note: Bidders are advised to visit the site at their own cost and submit their bid accordingly. The authority reserve right to exclude any component / subcomponent and transfer the corresponding amount to remaining component / subcomponent as per requirement of the project.

Instructions to Bidders for Online Submission of Bids

Detailed instructions & documents to be furnished for online bidding:

1. Guidelines for online submission of bids can be downloaded from the website <http://www.eproc2.bihar.gov.in>
2. Bidders in order to participate in the online bidding process have to get 'Digital Signature Certificate (DSC)' as per Information Technology Act-2000. This Certificate will be required for digitally signing the bid. Bidders can get the above-mentioned digital signature certificate from any vendor approved by Controller of Certifying Authorities (CCA). Bidders, who already possess valid Digital Certificates, need not procure new Digital Certificate.
3. Bidders should submit their bids online in electronic format with digital signature. Bids without Digital Signature will not be accepted. No proposal will be accepted in physical form.
4. Bids will be opened online as per time schedule mentioned in the Invitation for Bids (IFB).
5. Bidders should be ready with the scanned copies of cost of documents & bid security as specified in the tender document. Before submission of bids online, bidders must ensure that scanned copies of all the necessary documents have been attached with the bid.
6. Bidders should produce original Demand Draft/Bank Guarantee towards tender fee & bid security as mentioned in the Invitation for Bids (IFB) to the BSCL, Bhagalpur office during the period & time as mentioned in the IFB, failing which bid will not be accepted. The details of cost of documents, bid security specified in the tender documents should be the same as submitted online (scanned copies), otherwise bid will summarily be rejected.
7. The Department will not be responsible for delay in online submission of bids due to any reason, whatsoever.
8. All required information for bid must be filled and submitted online.
9. Other details can be seen in the bid documents.
10. Only online withdrawal or modification of bids, if any, in pursuance of relevant clauses of the (Standard Bidding Document) SBD is acceptable.
11. Details of documents to be furnished for online bidding:
(Scanned copies of the following documents to be up-loaded in pdf format on the website <https://www.eproc2.bihar.gov.in> in technical bid folder).
 - i. Tender fee as per e-proc.
 - ii. Bid security (Bank Guarantee) in the form specified in Section-10 of RFP.

- iii. Qualification information and supporting documents, as specified in Section-3 of RFP.
 - iv. Certificates, undertakings, affidavits as specified in Section-3 of RFP.
 - v. Any other information pursuant to Clause-4.3 of Section-2 ITB.
 - vi. Undertakings that the bid shall remain valid for the period specified in Clause-15.1 of Section-2 ITB.
12. Scanned copies of the following documents are required to be uploaded on the website <http://www.eproc2.bihar.gov.in> in financial bid folder:
- i. Form of bid as specified in Section-8 of RFP in pdf format.
 - ii. Duly filled Price Bid.
13. Uploaded documents of successful bidder will be verified with the original before signing of the agreement. The successful bidder should provide the originals to the concerned authority on receipt of such a letter in this regard, which will be sent through registered post or speed post or by e-mail or delivered by hand.
14. Each uploading shall be digitally signed by the bidder.
15. For rates quoted below the estimated cost, additional performance guarantee shall be deposited by the tenderer as per conditions of bid document and government circulars at the time of agreement.

Sd/-
Chief Executive Officer (CEO),
Bhagalpur Smart City Limited.

INVITATION FOR BID (IFB)
NATIONAL COMPETITIVE BIDDING

The undersigned, on behalf of the BSCL, Bhagalpur, in Technical bid(Part -I) and Financial bids(Part – II) invites bids for the work mentioned in table below through e-Procurement from eligible and approved Contractors, registered in appropriate class with Central/State Govt. Departments/CPSU/CPSE/State PSU's/Autonomous Bodies, Govt. of Bihar/Govt. of India or an entity incorporated under Indian Companies act or any appropriate law engaged in the civil construction or any public sector undertaking either of central or of state engaged in construction activities can also participate but registration with concerned works department will be essential within a period of two month from issue of L.O.A. The bid shall be submitted online in the website <http://www.eproc2.bihar.gov.in>. The bidder(s) should have necessary portal enrolment with their own Digital Signature Certificate:

Sl. No .	Name of the work	Estimated Cost (Rs.) Inclusive of all applicable taxes and GST.	Bid Security* (Rs.)	Cost of Document (Rs.)	Period of Completion
1	2	3	4	5	6
1	Remaining work of Rejuvenation of Bhairva Talab in Bhagalpur, Bihar including 5 years of Defect Liability period and Operation & Maintenance under Bhagalpur Smart City Limited, on Engineering, Procurement & Construction (EPC) contract basis.	Rs.9,61,61,964.75.00 /- (Rupees Nine Crores Sixty One Lakhs Sixty One Thousand Nine Hundred and Sixty Four) Only	As per NIT	As per NIT	15 Months Including monsoon and rainy seasons

Note : Updated estimate cost and earnest money should be taken as mentioned in the website.

- (a) Cost of Bid Documents and Bid Processing Fee (Column-5&6 of clause 8) is mandatory to be paid through online mode i.e., Internet Payment gateway (Credit/Debit card), Net banking, NEFT/RTGS. A scanned images of valid to be uploaded along with the tender documents on failing which the tenders will be rejected.
- (b) Earnest Money shall be paid in the form Bank Guarantee only. as per rule 161 of PWD Code and pledged to Chief Executive Officer (CEO), and submitted to Chief Executive Officer (CEO), failing which the tenders will be rejected.

1.0 INTRODUCTION

1.1 About BSCL

Bhagalpur Smart City Limited (BSCL) is the special purpose vehicle created under the Bhagalpur Municipal Corporation to deliver several Pan City and Area Based Development initiatives with a focus on both infrastructure and ICT advancements in the city and at strategic locations.

2. Period of availability of tenders online/date & time of bidding on-line/last date of seeking clarification/date of opening of tender papers are as given below–

Sl. No.	Issuing Authority	Place of Opening	Availability of tender on- line for bidding		Date & Time of opening of technical bid
			From	To	
1	2	3	4	5	6
1	Chief Executive Officer (CEO),	Bhagalpur Smart City Limited, Office: 4th Floor, Bhagalpur Smart City Building, ICC, Police line, Bhagalpur, Bihar- 812001. India.	As per NIT	As per NIT	As per NIT

3. Cost of bidding document which is non-refundable, shall be paid through **Internet Payment Gateway (IPG) / Challan.**
4. Bids must be accompanied by Security amount specified for the work in the table, payable at Bhagalpur and drawn in favour of “**Chief Executive Officer**”, **Bhagalpur Smart City Limited**. Bid Security will have to be in anyone of the forms as specified in the bidding document and shall have to be valid for 45 days beyond the validity of the bid.
5. Cost of Bid Security shall be deposited in the office of the Chief Executive Officer, BSCL, Municipal Corporation, Court compound, Bhagalpur, Bihar - 812001, on the time & date mentioned as per NIT/Corrigendum by post / hand. Only those applications will be entertained whose bid security is received on or before time & date mentioned as per NIT/Corrigendum. BSCL will not be held responsible for postal delay, if any, in the delivery of the document or non-receipt of the same in BSCL.
6. Tenderer(s) shall upload scanned copy in pdf format/Digitally Signed copy of his/her Valid DD, Bid Security, Credit Facility, GST, PAN, five Years Audited Turnover, five Years Income Tax Return, Work Experience, Partnership Deed or Article of Association / Memorandum, Undertakings, Affidavits, Power of Attorney, Undertaking & Solvency Certificate failing which the bid shall be rejected.
7. EPF, ESI & Labour license registration/undertaking in case award of work.

8. Uploaded documents of successful bidder will be verified with the original before signing the agreement. The successful bidder has to provide the originals to the concerned authority on receipt of such a letter, which can be sent through registered post or speed post or can be delivered by hand or email.
9. Bidders in order to participate in the bidding process have to get 'Digital Signature Certificate (DSC)' as per Information Technology Act-2000 to participate in online bidding. This certificate will be required for digitally signing the bid. Bidders can get the above-mentioned digital Signature certificate from any approved vendors (CCA). Bidders, who already possess valid Digital Certificates, need not procure new Digital Certificate.
10. Bidders have to submit their bid online in electronic format with Digital Signature. Bids without Digital Signature will not be accepted.
11. The work shall have to be completed in time, failing which penalty for non-completion of work in time shall be imposed, as stated in the Bid Document. Please note that there is a provision of Bonus for early completion of work.
12. Bidders who have rescinded work in any department/PSU shall not be eligible to participate in the bidding process.
13. Bidders shall provide their Banker's contact details, so that BSCL can contact the Bank, if required.
14. If any work is awarded to a bidder after submission of bid to BSCL, his bid capacity shall be reduced by that bid amount as indicated in Para 1.4 of Qualification Information & Other Forms (Section-3 of ITB).
15. Successful bidder shall have to take all necessary approvals and clearances from the competent authority such as Ministry of Environment and Forest (MoEF)/ Central Pollution Control Board/ State Pollution Control Board etc.
16. Deleted.
17. Other details can be seen in the bidding documents.

Sd/-

Chief Executive Officer (CEO),
Bhagalpur Smart City Limited.

SECTION-2

INSTRUCTIONS TO BIDDERS

(ITB)

Instructions to Bidders

Sr. No.	Clause
A.	General
1	Scope of Bid
2	Source of Funds
3	Eligible Bidders
4	Qualification of Bidder
5	One Bid per Bidder
6	Cost of Bidding
7	Site visit
B.	Bidding Documents
8	Content of Bidding Documents
9	Clarification of Bidding
10	Amendment of Bidding Documents
C.	Preparation of Bids
11	Language of Bid
12	Documents Comprising the Bid
13	Bid Prices all bids
14	Currencies of Bid and Payment
15	Bid Validity
16	Bid Security
17	Alternative Proposals by Bidders
18	Format and Signing of Bid
D.	Submission of Bids
19	Method of Submission
20	Deadline of Submission of Bids
21	Late Bids
22	Modification and Withdrawal of Bids
E.	Bid Opening and Evaluation
23	Bid Opening & Evaluation of Bids
24	Process to be Confidential
25	Clarification of Financial Bids
26	Examination of Bids and Determination of Responsiveness
27	Correction of Errors
28	Evaluation and Comparison of Financial Bids
F.	Award of Contract
29	Award Criteria
30	Employer's right to Accept any Bid and reject any Bid
31	Notification of Award and Signing of Agreement
32	Performance Security
33	Advance Payment and Security
34	Corrupt or Fraudulent Practices
35	Dispute Resolution

A. GENERAL

1.Scope of Bid

- 1.1 The Employer (named in appendix to ITB) invites bids for the construction of works (as defined in these documents and referred to as “the works”) detailed in the table given in IFB. The bidders need/may to submit bids for entire work detailed in the table given in IFB.(The bidder may submit bids for any or all the works detailed in the table given in IFB)
- 1.2 In this project, the estimated cost of the project is given in the documents and bidders should submit their bid amount with regard to the entire work as per the scope as indicated above complete in all respect internal and external finish etc., approval of the same from competent authorities (BSCL).
- 1.3 The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data.
- 1.4 Throughout these bidding documents, the terms ‘bid’ and ‘tender’ and their derivatives (bidder/ tenderer, bidding/tendering, etc.) are synonymous.

2. Source of Funds

The expenditure on this project will be met from fund allocated to Bhagalpur Smart City Limited from Govt. of Bihar & Govt. of India under Smart City Mission.

3. Eligible Bidders

- 3.1 This invitation for Bids is open to all bidders as mentioned in IFB.
- 3.2 All bidders shall provide in Section-3, Forms of Bid and Qualification Information, a statement in para 1.12, that the Bidder is neither associated, nor has been associated, directly or indirectly, with the Consultant, Engineer in charge or any other entity that has prepared the tender design, specifications and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Employer to provide consulting services for the preparation or supervision of the works, and any of its affiliates, shall not be eligible to bid.

4. Qualification of the Bidder

- 4.1 All bidders shall provide in Section-3, Forms of Bid and Qualification Information, a preliminary description of the proposed work method and schedule as necessary. The proposed methodology should include programme of design and construction duly supported with quality assurance procedures proposed to be adopted justifying their capability of execution and completion of work as per technical specifications, within stipulated period of completion.
- 4.2 Deleted.

4.3 All bidders shall include the following information and documents with their bids in Section-3:

- a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- b) Total monetary value of construction work performed for each of the last five years.
- c) Major items of construction equipment proposed to carry out the Contract. (attached Annexure-I)
- d) Qualifications and experience of key site management and technical personal proposed for Contract. (attached Annexure-II)
- e) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past seven years.
- f) Evidence of access to line (s) of credit and availability of other financial resources facilities (10% of contract value), certified by the Bankers (not more than 03 months old).
- g) Undertaking that the bidder will be able to invest minimum cash up to 25% of contract value of work, during implementation of work.
- h) Authority to seek references from the Bidders' bankers;
- i) Self-attested copy of information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties' concerned, and disputed amount;
- j) Proposals for sub-contracting components of the works amounting to more than 10 percent of the Bid Price shall not be permitted, except for specialized nature of work in which new emerging engineering methodology is proposed to be used with the prior approval of implementing agency. Use of such new technologies should be indicated while submitting the bid.
- k) The proposed work programme and methodology of construction & Operation And maintenance for five years, backed with equipment planning & deployment, duly supported with broad calculation required to be furnished, quality control procedures proposed to be adopted, justifying their capability of supply, installation and commissioning of the work as per scope within the stipulated period of completion as per milestones.
- l) Any bidder debarred or terminated from work or blacklisted from any Govt./Semi Govt./Central PSU/State PSU will not be allowed to participate in this tender.

m) Experience in similar works means: -

Construction of river front development work/Park/Road work/RCC Storm water drain/Water or wastewater work. Or

The contractor/firm should have executed in any one year, the minimum quantities of the following work as indicated below:-

- 1 Earthwork/filling work – 10,000 cum
- 2 Concrete for road work/RCC – 1,000 cum
- 3 RCC Drain/pipe (any material) laying work–100 meter
- 4 RCC Building – 100 Sqm

- n) The contractor/firm must have achieved a minimum annual financial turnover (in all classes of civil engineering construction work only) equal to 50% of estimated cost of works for which bid has been invited in any one financial year during last five financial years (from 2020-21 to 2024-25).

4.4 Joint ventures are not acceptable.

4.4.1 Bids submitted by a joint venture (JV) of not more than a total of three firms as partners shall comply with the following requirements: -

- (i) There shall be a JV agreement specific for the contract package between the constituent firms indicating clearly, amongst other things, the proposed distribution of responsibilities both financial as well as technical for the execution of work amongst them. For the purpose of this clause, the most experience lead partner will be the one defined. A copy of JV agreement in accordance with requirements mentioned in Annexure-I shall necessarily be submitted with the bid.

(a) Alternatively, a letter of intent to execute a JV in the event of successful bid shall be signed by all partners of JV and submitted with the bid together with a copy of the proposed agreement. Pursuant to the foregoing, the JV shall include among other things, the joint venture's objectives, the proposed management structure, the contribution of each partner to joint venture operation, the commitment of the partners to joint and several liability for due performance, recourse/sanctions within the joint venture in the event of default of withdrawal of any partner and Arrangements for providing the required indemnities.

(b) The JV so formed shall also have to be registered with the concerned department after issue of LOA but before the agreement.

- (ii) The bid, and in the case of the successful bidders, the form of agreement, etc, shall be signed and/or executed in such a manner as may be required for making it legally binding on all partners (including operative parts of the ensuing contract in respect of Agreement of Arbitration, etc). On award of work, the Form of Agreement and Contract Documents shall be signed by all partners of the Joint Venture to conclude Contract Agreement.

- (iii) Lead partner shall be nominated as being partner-in-charge; and this authorization shall be evidenced by submitting a power of attorney signed by the legally authorized signatories of all the partners.

- (iv) The partner-in-charge shall be authorized to incur liabilities and to receive instruction for and on behalf of the partners of the Joint Venture, whether jointly or severally and entire execution of the Contract (including payment) shall be carried out exclusively through the partner-in-charge. A copy of the said authorization shall be furnished with the bid.

- (v) All partners of the Joint Venture shall be liable jointly and severally for the execution of the contract in accordance with contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under sub clause (iii) above as well as in the Form of tender and the Form of Agreement (in case of a successful bidder).
- (vi) In the event of default, all the partners of the Joint venture will retain the full and undivided responsibility for the performance of their obligations under the contract and/or for satisfactory completion of the works.
- (vii) The bid submitted shall include all the relevant information as required under the provisions of sub-clause 4.5 of ITB and furnished separately for each partner. The requirement of key plants & construction equipments as per Annexure I of RFP testing equipment for establishing field laboratory, key personnel to be employed on contract work as per Annexure II of RFP shall be counted altogether for the partners.
- (viii) The bank guarantee/other suitable instrument in shape of bid security shall be issued in the name of JV and pledged in favour of employer.

4.4.2 Each partner of the JV must produce:

- (i) The Permanent account number (PAN) of Income Tax.
- (ii) An affidavit though 1st class Executive Magistrate that the information furnished with the bid documents is correct in all respect; and
- (iii) Such other certificates as defined in the Appendix to ITB. Failure to produce the certificates shall make the bid non-responsive.

4.4.3 Each bidder must demonstrate: -

- (i) Availability for construction work, either owned, or on lease or on hire, of the key equipment stated in the Appendix to ITB including equipments required for establishing field laboratory to perform mandatory test, and those stated in the Appendix to ITB. The requirement of key plants & equipments construction equipments as per Annexure I of RFP testing equipment for establishing field laboratory key personnel to be employed on contract work as per Annexure II of RFP shall be counted altogether for the partners.
- (ii) Availability for construction work of technical personnel as stated in the Appendix to ITB. The requirement of key plants & equipments construction equipments as per Annexure I of RFP testing equipment for establishing field laboratory key personnel to be employed on contract work as per Annexure II of RFP shall be counted altogether for the partners.
- (iii) The joint venture must satisfy collectively the criteria laid down in Para 3.1 & 3.2 above.
- (iv) Liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of not less than the amount specified in the Appendix to ITB.
- (v) The bidder must not have in his employment:
 - (a) The near relations (defined as first blood relations, and their spouses, of the bidder or the bidder's spouse) of persons. The bidder must produce an affidavit

stating that the near relations of the following departmental officers are not in his employment: JE/AE/EE/SE/CE/E-in-C & Divisional Accountant of any works department of Bihar State.

(b) Without Government permission, any person who retired as gazette officer within the last two years of the rank and from the departments. The bidder must produce an affidavit stating the names of retired gazetted officer (if any) in his employment who retired within the last two years with the following ranks from the departments: JE/AE/EE/SE/CE/E-in-C & Divisional Accountant of any works department of Bihar State. In case there is no such person in his employment, his affidavit should clearly state this fact.

4.4.4 To qualify for a contract for which bids are invited in the Notice Inviting Tender, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contract.

4.4.5 If bidder is Joint venture, the partners would be limited to three (including lead partner). Joint venture firm shall jointly and severally responsible for completion of the project. Joint venture must fulfill the following minimum qualification requirement:

- (i) The lead partner shall meet not less than 50% (fifty percent) of qualification criteria given in sub-clause 4.3,4.5 A,4.5 B,4.7 & 4.8 of ITB.
- (ii) Each of the remaining partners shall meet not less than 25% (Twenty five percent) of all the qualifying criteria given in sub-clause 4.3,4.5 A,4.5 B,4.7 & 4.8 of ITB.
- (iii) However, in case one of the joint ventures partner is proposed to be included primarily to provide financial strength to the joint venture, such joint venture partner shall have to commit to provide liquidity support to the project to the extent of 8% of the value of contract.
- (iv) The joint venture must also collectively satisfy the subject of the criteria of sub-clause 4.3,4.5 A,4.5 B,4.7 & 4.8 of ITB for this purpose the relevant figures for each of the partners shall be 100% or more.
- (v) In the event that the Employer has caused to disqualify under clause 4.8 of ITB, and the constitutions stated below all of the Joint Venture partners will be disqualified.
- (vi) Joint venture applicants shall provide a certified copy of the Joint Venture Agreement in demonstration of the partners undertaking joint and several liabilities for the performance of any contract entered into with the bid.
- (vii) The available bid capacity of the JV as required under clause 4.7 of ITB below will be applied for each partner to the extent of his proposed participation in the execution of the work. The total bid capacity available shall be more than estimated contract value.

4.4.6 Sub-Contractor's (duly authorized) experience and resources shall be taken into account in determining the bidder's compliance with the qualifying criteria. The sub contractor's role may be verified by the employer.

4.4.7 Qualification of a joint venture does not necessarily qualify any of its partners individually or as a partner to any other joint venture. In case of dissolution of a joint venture, each one of the constituent firms may qualify if they meet all the qualification requirements subject to the written approval of the Employer.

4.4.8 The rescinding of contract of a joint venture on account of reasons other than non-performance, such as most experienced partner of joint venture pulling out, court direction leading to breaking up of a joint venture before the start of work, which are not attributable to the poor performance of the contractor will, however, not affect the qualification of the individual partners.

4.5 A. To qualify for award of the contract, each bidder in its name must have in the last five years as referred to in Appendix.

- a) The contractor/firm must have achieved a minimum annual financial turnover equal to 50% of estimated cost in any one financial year during last seven completed financial years (from 2020-21 to 2024-25).
- b) The contractor/firm must have satisfactorily completed in any one year between 2020-21 and 2024-25 as a prime contractor (or as a nominated sub contractor involved execution of all main item of works of 25% of estimated cost (90% or more of contract value executed will be taken as completed work) described in the bid document, provided further that all other qualification criteria are satisfied) at least

The sole contractor/firm must have experience in similar work means: -

Construction of river front development work/Park/Road work/RCC Storm water drain/Water or wastewater work.

Or

The contractor/firm should have executed in any one year, the minimum quantities of the following work as indicated below:-

- 1 Earthwork/filling work – 10,000 cum
- 2 Concrete for road work/RCC – 1,000 cum
- 3 RCC Drain/pipe (any material) laying work–100 meter
- 4 RCC Building – 100 Sqm

- c) Even though the bidder meets the above qualifying criteria, he is subject to be disqualified, if he has made a misleading or false representation(s) in the forms, statements and attachments in proof of the qualifying requirements.
- d) The contractor or his identified sub-contractor should possess required valid electrical licenses for executing the electrification works and should have executed any electrical works for a minimum amount 6% of the estimated cost in any one

- year between 2020-21 and 2024-25.
- e) The contractor or his identified sub-contractor should have executed any water supply/sanitary Engineering works for a minimum amount 6% of the estimated cost in any one year between 2020-21 and 2024-25.

B. Each bidder should further demonstrate:

- a) availability (either owned or by procurement against mobilization advances) of the key and critical equipment for this work given in Annexure-I of Section-2 which indicated the studies, carried out by client equipment to attain the completion of works in accordance with the prescribed work schedule.

The bidders should, however, undertake their own studies and furnish with their bid, a detailed planning and methodology as per their experience provided in clause 4.3(C) above in order to allow the employer to review their proposals. The numbers, types and capacities of each equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

- b) Availability of personnel/ service engineer for this work with adequate experience as required; as per Annexure-II of Section-2.
- c) Liquid assets and/or availability of credit facilities of no less than amount indicated in para 5 of Appendix to ITB (Section-2) (credit lines/letter of credit/certificates from Banks for meeting the funds requirements etc.-usually the equivalent of the estimated cash flow for 03 months in peak construction period.)/ Usually not less than 10% of the value of estimated cost of the project.

C. Deleted

- 4.2** Sub Contractor experience and resources shall not be taken into account in determining the bidders compliance with the qualifying criteria except to the extent stated in 4.5 A above .
- 4.3** Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under:

$$\text{Available Bid capacity} = (A * N * 3 - B)$$

Where,

A = Maximum value of civil engineering construction work in any one year during the the last seven financial years between 2021-15 and 2024-25 (updated to the price level of the year indicated in para – 15 of Appendix to ITB) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the works for which bids are invited up to two places of decimals.

B = Value (updated to the price level of the year as indicated in para- 15 of Appendix to ITB) of existing commitments and ongoing works to be completed during the next 24 months. (Period of completion of works for which bids are invited)

Note:

1. The statements showing the value of existing commitments and on-going works as well as the stipulate period of completion remaining for each of the works listed should be countersigned by the Engineer in charge, not below the rank of Executive Engineer or equivalent.
2. Escalation factor (for computing common base value for works completed and annual financial turnover) is given in para-15 of Appendix to ITB.
3. (Value of existing commitments as on date of bid submission for works (complete or partial) to be completed in the next two years. The details shall be countersigned by the Executive Engineer or the equivalent officer of the employer on whose behalf the firm is carrying out the works.
4. In Case if any bidder provides any misleading information or false information then that bidder will be directly disqualified.
5. Every tenderer (in case of JV collectively) shall produce along with their tender, a cumulative solavncy certificate (of an amount of 20% of the tendered estimate cost plus 10% of his existing commitments.) from a scheduled bank/national bank. If he fails to produce such a certificate, his tender will not be considered. Bank solvency shall not be older than one year period from the date of bidding.
6. Even though the bidders meet the above qualifying criteria, they are subject to be disqualified, if they have:
 - made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
 - Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.
 - Participated in the previous bidding for the same work and had quoted unreasonably high bid prices and couldnot furnish rational justification to the employer.

5. One Bid per Bidder

- 5.1. Each bidder shall submit only one bid for any work or one package as the case may be. A bidder who submits or participates in more than one Bid (other than as a sub-contractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

6. Cost of Bidding

- 6.1 The bidder shall bear all cost associated with the preparation and submission of his

Bid, and the Employer will in no case be responsible and liable for those costs.

7. Site Visit

- 7.1 The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for (construction of works) supply, installation, commissioning and operation & maintenance of the works. The costs of visiting the Site shall be at the Bidder's own expense.

7.2 General Terms and Conditions for E-tendering:

- a) The detail tender notice and Tender Document can be seen on website: <https://www.eproc2.bihar.gov.in> and downloaded online from the Portal: <https://www.eproc2.bihar.gov.in> by the Firms / Individual registered on the Portal.
- b) As the proposals are to be submitted online and are required to be encrypted and digitally signed, the Bidders are advised to obtain Digital Signature Certificate (DSC) at the earliest.
- c) The payment for Tender Document Fee shall be made by the bidder in the mode of Internet Payment Gateway (IPG) / Challan only.
- d) The undersigned reserves the right to reject any or all the tenders without assigning any reason what so ever and no conditional and postal tenders will be accepted.
- e) If the date on which the tenders are to be received is declared a public holiday, the tender will be received on the next working day.
- f) The offer will remain valid up to 180 days from the due date of submission of tenders.
- g) Any amendment to a tender after opening of tender made by the tenderer according to his own will is liable to be ignored altogether and such tenderer will be debarred from tendering for a period of six months.

Sd/-

Chief Executive Officer, (CEO)
Bhagalpur Smart City Limited

B. BIDDING DOCUMENTS

8. Content of Bidding Documents

8.1 The set of bidding documents comprises the documents listed below and addenda issued in accordance with Clause 10:

Section	Particulars	Volume No.
1	Invitation for Bids (IFB) including Instructions to Bidders for Online Submission of Bids	I
2	Instruction to Bidders	
3	Qualification Information and other forms	
4	General Conditions of contract	
5	Special Conditions of Contract & Additional Conditions of Contract	
6	Contract Data	II
7	Technical Specifications	
8	Form of bid	III
9	Price Bid	
10	Securities and other forms	
11	Drawings	IV
12	Documents to be furnished by bidder	V

8.2 Documents to be furnished by the bidder in compliance to Section-2 will be prepared by him in two parts viz Part 1 – Technical Bid, Part 2- Financial Bid and furnished as Volume- V in two parts (refer clause 12).

8.3 The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms / terms, technical specifications, price bid form, Annexes and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. Pursuant to clause 26 hereof, bids which are not substantially responsive to the requirements of the Bid Documents shall be rejected.

9. Clarification of Bidding Documents

9.1 Clarification of Bidding Refer to sub-Clause 9.2 of ITB

9.2 Pre-bid meeting

9.2.1 The bidder or his official representative is invited to attend a pre-bid meeting which will take place at the address, venue, time and date as mentioned in NIT.

9.2.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

- 9.2.3 The bidder may request a clarification on any clause of the RFP documents up to the Pre-bid query submission date and time indicated in the NIT. Clarification should be submitted in the following table in excel format otherwise the queries shall not be entertained:

Sr. No.	RFP Page No.	Clause No.	Description as per RFP	Queries/ Suggestions

- 9.2.4 Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents listed in sub-Clause 8.1 which may become necessary as a result of the pre- bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 10 of ITB and not through the minutes of the pre-bid meeting.
- 9.2.5 Non-attendance at the pre-bid meeting will not be a clause for disqualification of a bidder.

10. Amendment of Bidding Documents

- 10.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda/corrigenda.
- 10.2 Any addendum/corrigendum thus issued shall form part of the bidding documents and shall be (collected by all the purchasers of the bidding documents) communicated in writing or by cable to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum in writing or by cable to the Employer. The Employer will assume no responsibility for postal delays.
- 10.3 To give prospective bidders reasonable time to take appropriate action in accordance to the addendum/corrigendum while preparing their bids, the Employer may, at his discretion, extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 20.2 below.

C. PREPARATION OF BIDS

11. Language of the Bid

11.1 All documents relating to the bid shall be in English language.

12. Documents Comprising the Bid

12.1 The bid to be submitted by the bidder will be as Volume-V of the bid document (refer Clause 8.1) and shall be in two separate parts viz part I and part II detailed below:

Part I shall be “Technical Bid” and shall comprise

- i. Bid security (Bank Guarantee etc.) in the form specified in Section-10.
- ii. Qualification Information and supporting documents as specified in Section-3.
- iii. Certificates, undertaking, affidavits as specified in Section-3.
- iv. Any other information pursuant to Clause 4.3 of these instructions.
- v. Undertakings that the bid shall remain valid for the period specified in Clause 15.1 of Section-2.
- vi. An affidavit affirming the information he has furnished in the bidding documents is correct to the best of his knowledge and belief.

Part II shall be “Financial Bid” and shall comprise

- vii. Form of Bid as specified in Section-8.
 - viii. Price Bid as specified in Section-9.
- 12.2 Priced Bid for whole work as specified in Section-9, read together with clause 19. The bidder shall submit bid online in the correct slot prescribed in the e-Procurement website by using digital signature.
- 12.3 Following documents, which are not submitted with the bid, will be deemed to be part of the bid.

Section	Particulars		Volume No.
1.	Invitation for Bids (IFB)		I
2.	Instruction to Bidders		
3.	Contract Data		
4.	Securities and other forms		
5.	Conceptual Drawings		IV

12.4 Bidders have to submit their bids as per below instructions otherwise it may result in the rejection of the Bid:

Name of Documents	Content	Mode of Submission
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Bid Security/ Earnest Money Deposit (EMD)	Bid Security/Earnest Money Deposit (EMD) receipt in Original.	Both Online and Hard Copy
All Declarations / Affidavit / Agreements / Authorization	All Declarations / Affidavit / Agreements / Authorization in Original.	Online Only Hard copy shall be submitted by the selected bidder at the time of Agreement.
Qualification Bid	All the documents for Submission of the Qualification Bid, its sub sections and any other applicable documents as per RFP.	Online Only
Technical Bid	All the documents for Submission of the Technical Bid, its sub sections and any other applicable documents as per RFP.	Online only
Financial Bid	All the formats for Submission of the Commercial Bid, its sub sections and any other applicable documents as per RFP.	Online Only

13. Bid Prices

- 13.1 The contract shall be for the whole works as described in Sub-Clause 1.1 of ITB and table given in IFB (Section-1) as per the price bid.
- 13.2 The bidder shall fill in rates both in figure and words for all components of the works described in bill of quantity along with total bid price both in figures and words. Components for which no rate or price is entered by the bidder will not be paid for by the employer when executed and shall be deemed covered in other components. In case of any difference, the rate quoted in words will be taken as the quoted rate.
- 13.3 All duties, taxes including GST payable by the contractor under the contract, or for any other cause shall be included in Bid Price submitted by the Bidder.
- 13.4 Deleted
- 13.5 Bid Price submitted by the Bidder shall include Operation & Maintenance of 5 (five) years.
- 13.6 The rate quoted by bidder are inclusive of all cost, carriage of material, royalty & other taxes in Price Bid. No extra payment should be made.

14. Currencies of Bid and Payment

- 14.1 The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

All payment shall be made in Indian Rupees.

15. Bid Validity

- 15.1 Bids shall remain valid for a period not less than 180 days after the deadline date for bid submission specified in Clause 20. A bid valid for a shorter period shall be rejected by the Employer as non-responsive. In case of discrepancy in bid validity period between that given in the undertaking pursuant to clause 12.1(indicated as sl. no v of Part 1- Technical Bid) and the Form of Bid submitted by the bidder, the latter shall be deemed to stand corrected in accordance with the former and the bidder has to provide for any additional security that is required.
- 15.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause-16 in all respects.
- 15.3 Bid evaluation will be based on the bid prices without taking into consideration the above correction.

16. Bid Security

The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. This bid security shall be in favor of Employer as named in Appendix and may be in one of the following forms:

Internet Payment Gateway (IPG) / Challan / Bank Guarantee / Bank Guarantee from any from any Scheduled Indian Bank from any of the branches Nationalized / Scheduled Bank situated **within the territory of India** in the form given in Section-09.

- 16.1 Bank guarantees (and other instruments having fixed validity) issued as surety for the bid shall **be valid for 45 days beyond the validity of the bids.**
- 16.2 Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses-16.1 and 16.2 above shall be rejected by the Employer as non- responsive.
- 16.3 The Bid security of unsuccessful bidders will be returned within 30 days of the end validity period specified in sub-Clause15.1.
- 16.4 The Bid security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.
- 16.5 The Bid security may be forfeited.
- a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
 - b) if the Bidder does not accept the correction of the Bid Price, pursuant to Clause 27; or
 - c) in the case of a successful Bidder, if the Bidder fails within the specified time limit to

- i) sign the Agreement; or
- ii) Furnish the required Performance Security.

17. Alternative Proposals by Bidders

- 17.1 Bidders shall submit offers that fully comply with the requirements of the bidding documents, including the conditions of contract (including mobilization advance or time for completion), basic technical design as indicated in the drawing and specifications. **Conditional offer or alternative offers will not be considered further in the process of tender evaluation.**

18. Format and Signing of Bid

- 18.1 The bidder shall submit the bids as per “Instructions to Bidders for Online Submission of Bids”.
- 18.2 Instruction to Bidders to be followed. Bids submitted online should be digitally signed by the bidder.
- 18.3 Bidders shall follow the Method of submission of bid as mentioned in Instruction to Bidders and Instructions to Bidders for Online Submission of Bids.

D. SUBMISSION OF BIDS

19. Method of Submission

- 19.1.1 Bidders shall follow the Method of submission as per Instructions to Bidders for Online Submission of Bids given in Section-1 (IFB) in so far this bid is considered whose identification is given in item no. 10 Appendix to ITB.

20. Deadline for Submission of the Bids

- 20.1 Bidders shall follow the Method of online submission of bid as mentioned in Instruction to Bidders in section-1 and the bid should be submitted online latest by the date and time given at item 12 Appendix to ITB.
- 20.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

21. Late Bids

- 21.1 Any Bid received by the Employer after the deadline prescribed in Clause 20 will be returned to the bidder.

22. Modification and Withdrawal of Bids

- 22.1 Bidders may modify or withdraw their bid(s) before the deadline prescribed in Clause 20 or pursuant to Clause-23.
- 22.2 Bidders shall follow the Method of submission modification & withdrawal of bid as mentioned in Instruction to Bidders.
- 22.3 No bid may be modified after the deadline for submission of Bids except in pursuance of Clause-23.
- 22.4 Withdrawal or modification of a Bid between the deadline for submission of bids

and the expiration of the original period of bid validity specified in Clause 15.1 above or as extended pursuant to Clause 15.2 may result in the forfeiture of the Bid security pursuant to Clause 16.

E. BID OPENING AND EVALUATION

23. Bid Opening

23.1 The Employer will open all the Technical Bids submitted online including modification made pursuant to Clause 22, in the manner specified in Clause 20 and 23.3. In the event of the specified date of Bid opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day. A notice for the same shall be posted on the website.

23.2 Evaluation of Bid

- i. Subject to confirmation of the bid security by the issuing bank, the bids accompanied with valid security will be taken up for evaluation with respect to the Qualification Information and other information furnished in Part I of the bid pursuant to ITB clause-12.1.
 - ii. After receipt of confirmation of the bid security, the bidder will be asked in writing / e-mail (usually within 15 days of opening of the Technical Bid) to clarify his technical bid, if necessary, with respect to any rectifiable defects.
 - iii. The bidders will respond by e-mail in not more than 7 days of issue of the clarification letter, which will also indicate the date, time and venue of opening of the Financial Bid (usually on the 21st day of opening of the Technical bid).
 - iv. Immediately (usually within 3 or 4 days), on receipt of these clarifications the Evaluation Committee will finalize the list of responsive bidders whose financial bids are for consideration.
- 23.3 After the technical evaluation, these will be put to the Employer, which will find technically responsive bids. The financial of those bids will be opened who are found technically responsive. The financial bids of remaining bidders will remain unopened.
- 23.4 In case bids are invited in more than one package, the order for opening of the “Financial Bid” shall be that in which they appear in the “Invitation for Bid”.
- 23.5 The Employer shall prepare disclose information regarding bid opening to those present.
- 23.6 The Employer shall open the bid and the information regarding bid opening may be disclosed to those present as representative of the bidder.

24. Process to be Confidential

24.1 Information relating to the examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer’s processing of bids or award decisions may result in the rejection of his Bid.

25. Clarification of Financial Bids

- 25.1 To assist in the examination, evaluation and comparison of bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, justification, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price of substance of the Bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids in accordance with ITB Clause-27.
- 25.2 Subject to ITB sub-clause 25.1, no Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. If the bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 25.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

26. Examination of Bids and Determination of Responsiveness

- 26.1 During the detailed evaluation of "Technical Bids", the Employer will determine whether each Bid:
 - 26.1.1 meets the eligibility criteria defined in ITB Clause 3 and 4;
 - 26.1.2 has been properly signed digitally;
 - 26.1.3 is accompanied by the required securities; and
 - 26.1.4 is substantially responsive to the requirements of the bidding documents. During the detailed evaluation of the 'Financial Bid' the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e., price bid, technical specifications, and drawings.
- 26.2 A substantially responsive "Financial Bid" is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the works;(b) which limits in any substantial way, inconsistent with the bidding documents, the Employer's rights or the bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.
- 26.3 If a "Financial Bid" is not substantially responsive, it will be rejected by the Employer and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

27. Correction of Errors

- 27.1 "Financial Bids" determined to be substantially responsive will be checked by the Employer for any arithmetical errors. Errors will be corrected by the Employer as follows:
 - (a) where there is a discrepancy between the rates in figures and in word, the rate in words will govern; and
 - (b) Where there is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

- 27.2 The amount stated in the “Financial Bid” will be corrected by the Employer in accordance with the above procedure and the bid amount adjusted with the concurrence of the Bidder in the following manner:
- i. If the Bid price increases as a result of these corrections, the amount as stated in the bid will be the ‘bid price’ and the increase will be treated as rebate;
 - ii. If the bid price decrease as a result of the corrections, the decreased amount will be treated as the ‘bid price’. Such adjusted bid price shall be considered as binding upon the bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid Security shall be forfeited in accordance with ITB Sub-Clause 16.5.

28. Evaluation and Comparison of Financial Bids

- 28.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with ITB Sub-Clause-26.2.
- 28.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- a. making any corrections for errors pursuant to Clause 27; or
 - b. making an appropriate adjustment for any other acceptable variations, deviations.
 - c. In case lowest quote is made by more than one bidder, then the bidder who has successfully completed and attached completion certificate while submitting online bid for a greater number of similar projects in the last 3 years would be awarded the work. Still, if there is a tie, lottery system will be followed to award the contract.
- 28.3 If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer’s estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, the Employer may require that the amount of the performance security set forth in Clause 32 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

F. AWARD OF CONTRACT

29. Award Criteria

- 29.1 Subject to Clause 30, the Employer will award the Contract to the Bidder whose Bid has been determined
- i. To be substantially responsive to the bidding documents and who has offered the lowest evaluated Bid Price; and
 - ii. To be within the available bid capacity adjusted to account for his bid price which is evaluated the lowest in any of the packages opened earlier than the one under consideration.

In no case, the contract shall be awarded to any bidder whose available bid capacity is less than the evaluated bid price, even if the said bid is the lowest evaluated bid. The contract will in such cases be awarded to the next lowest bidder at his evaluated bid price the L1 cost if accepted by next lowest bidder otherwise tender stands

cancelled.

30. Employer's Right to Accept or Reject any Bid

- 30.1 Notwithstanding Clause 29, the Employer reserves the right to accept or reject any Bid, to cancel the bidding process and reject all bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.
- 30.2 After award of contract, if the Bidder is found to have concealed any fact relevant to projects, the employer may blacklist the Bidder or Bidders within 180 days, with due process as:-
- i. 3 Years Blacklisting for the Project Cost Rs. 1.00 Crore to Rs. 10.00Crore.
 - ii. 5 Years Blacklisting for the Project Cost above Rs. 10.00 Crore toRs.100.00Crore.
 - iii. 10 Years Blacklisting for the Project Cost above Rs. 100.00 Crore.

31. Notification of Award and Signing of Agreement

- 31.1 The Bidder whose Bid has been accepted will be notified of the award by the employer prior to expiration of the Bid validity period by electronic method, cable, telex or facsimile confirmed by speed post / registered letter. This letter (hereinafter and in the General Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the contractor in consideration of the execution, completion, and maintenance of the Works by the contractor as prescribed by the contract (hereinafter and in the contract called the "Contract Price").
- 31.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 32.
- 31.3 The Agreement will incorporate all agreements between the Employer and the successful Bidder. This agreement will be signed only after furnishing of the performance security by the successful bidder but within 15 (Fifteen) days of issue of Letter of Acceptance. The Employer will promptly notify the other bidders that their Bids have been unsuccessful.

32. Performance Security

- 32.1 Within 15 (Fifteen) days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance security in any of the forms given in 32.2 for an amount equivalent to 2% (two) of the Contract price and provision to take an additional security for unbalanced Bids in accordance with the Clause 32.6 of RFP.
- 32.2 A bank guarantee from any of the branches of Nationalized/Scheduled Bank situated within territory of India in the form given in Section 10; or Certified Cheque / Bank Draft payable to employer as indicated in item no. 16 Appendix to ITB.
- 32.3 If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued from any of the branches of Nationalized / Scheduled Bank situated within the territory of India.

- 32.4 Failure of the successful Bidder to comply with the requirements of Sub-Clause 32.1 of ITB shall constitute grounds for cancellation of the award and forfeiture of the Bid Security.
- 32.5 The validity of the performance security is 30 days beyond the operation and maintenance period.

32.6 Additional Performance Guarantee: -

Provision for taking Additional Performance Guarantee if bidder quoted whole project amount below the estimated cost of whole project shall be made as follows: -

- a) If bidder quoted whole project below 0% to 5% than total estimated cost of project then additional Performance Guarantee required at the rate of 0.25% for every 1% amount quoted below estimate value of project.
- b) If bidder quoted whole project below 5% to 15% than total estimated cost of project then additional Performance Guarantee required at the rate of 0.5% for every 1% amount quoted below estimate value of project.
- c) If bidder quoted whole project below 15% to 20% than total estimated cost of project then additional Performance Guarantee required at the rate of 1% for every 1% amount quoted below estimate value of project.
- d) If bidder quoted whole project below 20% than total estimated cost of project then additional Performance Guarantee required at the rate of 2% for every 1% amount quoted below estimate value of project.

33. Advance Payment and Security

The Employer will provide contract or an interest – bearing mobilization advance (as per CVC guidelines in this regard) on the Contract Price in two stages of 5% each subject to maximum amount of 10% of contract price.

34. Corrupt or Fraudulent Practices

The Employer will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question and will declare the firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract with BSCL, UD & HD, Government of Bihar, and any other state agencies, if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for the contract, or in execution of the work related to contract.

35. Dispute Resolution

The dispute arising between the employer and the contractor, if not resolved amicably shall be referred to appointed expert mediator of Bihar State Legal Services Authority (BSLSA). If the matter does not get resolved it will finally go for arbitration. Arbitration in such a case will be done in accordance to Indian Arbitration and Conciliation Act, 1996 and amended provisions thereof. The place of arbitration shall be Bhagalpur and the language of arbitration shall be English. This may be read in conjunction with Clause 20.2 of Condition of Contract.

36. Prohibition of Cartel Formation and Collusive Practices[X].1 Warranty and

Undertaking:

1. The Contractor hereby warrants, represents, and undertakes that it has not entered into, and shall not enter into, any formal or informal agreement, arrangement, understanding, or concerted action with any other contractor, competitor, or vendor regarding the project, tender, or execution of this Contract. Specifically, the Contractor certifies that it has not engaged in, and will not engage in:

- a) Price-Fixing: Directly or indirectly establishing, stabilizing, or rigging labor rates, material prices, or profit margins.
- b) Market or Territory Allocation: Dividing or allocating geographical territories, specific sub-projects, or prospective clients with competitors.
- c) Bid Rigging / Cover Pricing: Coordinating bids, submitting artificially high or non-competitive rates, or withholding bids to manipulate the outcome of the procurement process.
- d) Output Restrictions: Colluding to limit supply, production capacities, or service availability to artificially inflate market rates.

2. Right to Audit and Access Records If the Principal/Employer reasonably suspects a breach of this clause, the Principal/Employer shall have the right, upon written notice, to audit, inspect, and copy all relevant financial documents, communications, bookkeeping records, and electronic files of the Contractor to verify compliance with competition laws.

3. Remedies for Breach Any breach of this Clause by the Contractor shall constitute a material breach of this Contract, giving the Principal/Employer the absolute right to take the following actions, independently or cumulatively:

- a) Immediate Termination: Terminate this Contract immediately for default without any liability for damages or unperformed work.
- b) Expulsion and Blacklisting: Expel the Contractor from the approved vendor list and disqualify the Contractor from participating in future tenders.
- c) Indemnification: Recover from the Contractor all losses, damages, and additional costs incurred by the Principal/Employer resulting from the collusive behavior, including the cost of re-tendering the work.
- d) Regulatory Reporting: Report the Contractor's conduct to the relevant legal authorities and antitrust regulators (e.g., the Competition Commission).

APPENDIX TO ITB

S. No.	Description	Clause Reference with respect to Section- 2
1.	Name of the Employer is Chief Executive Officer, Bhagalpur Smart City Limited, Bhagalpur	[C1. 1.1]
2.	The last five years	[Cl. 4.5 A (a)]
	2020- 2021	
	2021- 2022	
	2022- 2023	
	2023- 2024	
	2024- 2025	
3.	Minimum annual financial turnover amount is 50% of estimated cost (annual financial turnover shall be 50% of the estimated cost & that 50% shall be calculated in Rs.) (all class of similar nature of work as defined in any one financial year from last five years).	[C1.4.5A(a)]
4.	Minimum work Completion Experience (value calculated and mentioned)	[C1.4.5A(b)]
5.	Liquid assets and/or availability of credit facilities is 25 % of the project cost. (Value calculated and mentioned)	[C1.4.5B(c) & Cl.4.3(h)]
6.	Payment Schedule shall be finalized after submission of final work program with mutual consent.	[C1.14]
7.	The pre-bid meeting will take place at – BSCL Office, Bhagalpur	[C1. 9.2.1]
8.	The Technical bid will be opened at BSCL Office, Bhagalpur	[C1.23.1.]
9.	Address of the Employer: Bhagalpur Smart City Limited	
10.	Submission of Bid:	[Cl. 19]
11.	NIT No.	BSCL/Bhairva Talab/2021/...
12.	The bid should be submitted online	[C1. 20.1]
13.	The bid will be opened at the time, date and venue mentioned in NIT	[C1.23.1]
14.	The Bank Guarantee shall be in favor of Chief Executive Officer, Bhagalpur Smart City Limited.	[C1.32.2]
15.	Escalation factors (For bringing the cost of works executed in different financial year to a common base value and annual financial turnover)	[Cl.4.7]
	Duration	Multiply factor
	2020-21	1.61
	2021-22	1.46
	2022-23	1.33
	2023-24	1.21
	2024-25	1.10

ANNEXURE – I

List of Indicative Equipments to be supplied and installed on Contract work [Reference Cl. 4.5 (B) (a)]

1. Indicative list of equipment to be deployed

Sl.	Type of Equipment (leased or owned)	Maximum age as on 01.08.2026 (in Years)	Minimum no. of Equipment required
1.	JCB	5	2
2.	Excavator	5	1
3.	Bar Cutting Machine	5	2
4.	Bar Bending Machine	5	2
5.	Welding Machine	5	1
6.	Vibrator (Needle)	5	2
7.	Well-equipped Laboratory facility for quality test	5	1
8.	Self Loader Concrete Mixer	5	1
9.	Motor Grader	5	1
10.	Vibratory roller/ Soil Compactor Machine	5	2
11.	Cube Testing Machine (CTM)	5	1
12.	Cube Mould	5	30
13.	Water Tanker	5	4
14.	Dewatering Pump	5	2
15.	Generator (45 KVA)	5	3
16.	Mechanical Broom	5	1
17.	Air Compressor	5	1
18.	Steel formwork with tubular support	5	1

ANNEXURE – II

List of Minimum Key Personnel to be deployed on Contract Work [Reference Cl.4.5 (B) (b)]

1. During Construction Period

S.No.	Personnel	Qualification	No. of Person
1	Site Engineer	B.E/B.Tech/Bsc. in Civil Engineering with 5 Years Exp. or Diploma Civil with 7 Years Exp.	1
2	Electrical Engineer	B.E. Electrical + 5 Years Exp. Or Diploma in Electrical + 7 years Exp.	1
3	Quantity Surveyor/Billing Engineer	B.E/B.Tech/Bsc. in Civil Engineering with 5 Years Exp. Or Dip. Civ. + 7 years Exp.	1
4	Quality Control Engineer	B.E/B.Tech/Bsc. in Civil Engineering with 5 years' Or Dip. Civ. + 7 years Exp with Experience in Quality Control works	1
5	Site Supervisor	Diploma in Civil / Mechanical having 5 years of experience.	2
	Total		6

Bio data of the proposed staffs (Serial No. 1 to 5) shall be duly signed by the Authorized Signatory of the bidder.

ANNEXURE – III

Stage Payment Schedule

Name of Work: Remaining work of Rejuvenation of Bhairva Talab in Bhagalpur, Bihar including 5 years of Defect Liability period and Operation & Maintenance under Bhagalpur Smart City Limited, on Engineering, Procurement & Construction (EPC) contract basis.

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost	Percentage weightage of Stage for Payment
1	Design & Drawing	lot	1	0.31%	
1.1	Architectural, Structural Drawings				40.00%
1.2	MEP and Others Drawings				40.00%
1.3	As Build Drawings				20.00%
					100.00%
2	Pond soil cleaning & Filling including the Stone boulder pitching in pond side base etc.	lot	1	5.20%	
2,2	Removing of water and Stone boulder pitching in pond side surface in blance area with the help of pile and girde beam etc.				50.00%
2.2	Making of boating platform with entrance gate & ss railing including ticket counter in all respect				45.00%
2.3	Work Completed in all respect as per agreement				5.00%
					100.00%
3	Dismantling Works	lot	1	0.09%	100.00%
4	Making New Boundary Wall	lot	1	2.37%	
4.1	Water proof painting in wall surface as per the approved shade				75.00%
4.2	Makinng of entry gate near in balnace mandir area and fencing work along the temple area all complete work				25.00%
					100.00%
5	Making of secondary emergency entry/Exit gate 2 Nos	lot	1	0.05%	

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost	Percentage weightage of Stage for Payment
5.1	Enamel paint in secondary emergency entry/Exit gate 2 Nos in all respect				100.00%
6	Making of Ghats (400 mts)	lot	1	31.64%	
6.1	Removing of water, Excavation of soil and construction of ghat step foundation and back filling of local soil etc in all respect as per drawing				25.00%
6.2	Laying of PCC and RCC at ghat and ghat steps with stone boulder curating as per the drawing in all respect				50.00%
6.3	Laying of Red Sand Stone/ Finishing Works and fixing of S.S. railing etc all complete work				25.00%
					100.00%
7	Storm Water Drainage and Drainage system in Campus (Apporx 100 meter)			3.02%	
7.1	Construction of Inlet and outlet RCC drain/RCC Pipe for the pound with required chamber as per the approved drawing in all respect				100.00%
8	Children Play area and Equipment	lot	1	5.14%	
8.1	Earthwork and excavation at site, supplying and filling of plinth with sand, Brick masonry and making of all around fencing as per the approved drawing and design				25.00%
8.2	Preparation of EPDM floor area for children, by laying, Brick Soling, GSB, PCC and laying EPDM flooring over the surface with kerb stone casting the area as per design				25.00%
8.3	Preparation of beds for laying Mexican Turf Grass and through standard procedure of laying good earth mixed with sludge, manure and good earth				5.00%

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost	Percentage weightage of Stage for Payment
8.4	Installation of Kids play equipments one number each from selected list of open play equipments with suitable benches and dustbin including ticket counter as per the approved list and make				40.00%
8.5	Work Completed in all respect as per agreement				5.00%
					100.00%
9	Toilet & public Utility (2 Nos.)	lot	1	1.86%	
9.1	Construction of Toilet & public Utility -2 Nos. (Balance work of one no. existing and construction of one no. of toilet block at suitable location with water facility as per approved drawing) completed each in all respect				100.00%
10	Septic Tank (1 Nos.)	lot	1	0.62%	
10.1	Septic Tank (1 Nos.) work completed in all respect				100.00%
11	Landscape works (5.00 Acres)	lot	1	9.90%	
11.1	Leveling & Dressing with required local soil, Providing and laying of Cement concrete paver blocks including both side kerb stone as per walkway drawing and installation of covered seating benches in sufficient numbers (25 nos.) wherever applicable/required in entire area all works complete in all respect.				50.00%

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost	Percentage weightage of Stage for Payment
11.2	Preparation of Soil for Planting which includes: trenching in soil, supply and stacking of good earth, sludge, dump manure, spreading of sludge, dump manure, good earth and mixing, preparation of beds for hedges, shrubbery by uprooting weeds, laying of mixed manure, earth and sludge for plantation.				25.00%
11.2	Providing and stacking of species of plants, shrubs, trees and all horticulture work and laying of Mexican Turf grass in landscaping areas as per approved drawing and in all numbers				25.00%
					100.00%
12	Outdoor Playing Equipments/Gym Equipments			6.00%	
12.1	Earthwork and excavation at site, supplying and filling of plinth with sand and construction of plat form with the help of brick masonry and making of all around fencing as per the approved drawing and design				25.00%
12.2	Preparation of EPDM floor area for out door gym, by laying, Brick Soling, GSB, PCC and laying EPDM flooring over the surface with kerb stone casting the area as per design				25.00%
12,3	Installation of gym equipments one number each from selected list of open gym equipments including installation of suitable numbers of seating benches and dustbins and ticket counter etc as per the approved list and make				45.00%
12.4	Work Completed in all respect as per agreement				5.00%
					100.00%
13	Garden Maintenace based equipments	lot	1	1.13%	

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost	Percentage weightage of Stage for Payment
13.1	Procurement of required items and all required accessories and equipments/ system as per the approval				85.00%
13.2	Checkig testing and satisfaction upon workability of procured components all complete with all accessories				15.00%
					100.00%
14	Internal Electrification Work of civil works including walkway lighting and campous lighting etc,			8.83%	85.00%
14.1	16 m high mast; 8 nos. × 200W LED floodlights per mast; complete mast, winch/raising-lowering system, foundation, panel, erection, testing etc.	Set	6		
14.2	100W LED street light, complete with driver and accessories	No.	45		
14.3	8 m GI/octagonal pole with bracket/arm, foundation and erection	No.	45		
14.4	63A feeder pillar with 6 outgoing circuits, MCCB/MCB, contactor/timer, busbar, protection and accessories	No.	6		
14.5	25 sq.mm Aluminium armoured power cable; supply only	m	2500		
14.6	Excavation, sand bedding, protective layer, cable laying, backfilling and route marking	m	2500		
14.7	Glands, lugs, jointing/termination kits, junction boxes and related accessories	L.S.	1		
14.8	Earth pits with electrodes, chamber, earth lead and connection for feeder/high-mast system	No.	6		
14.9	90W solar LED light with panel, battery, controller, pole and complete installation	No.	20		

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost	Percentage weightage of Stage for Payment
14.10.	Additional lighting points, junction boxes, small poles/brackets and wiring for dark spots around walkway/pond/park, as required	L.S.	1		
14.11	Testing, insulation/earth resistance tests, commissioning and handover	L.S.	1		
14.12	Additional lighting points, junction boxes, wiring/cabling, small fittings and allied works for large park area, walkway and dark spots around 1 km pond perimeter	L.S.	1		
14.13	Checkig testing and satisfactory commissioning of procured components all complete with all accessories	L.S.	1		15.00%
					100.00%
15	Internal and External Water supply and sanitation for entire works/area	lot	1	3.02%	
15.1	Procurement and installation of required internal and external water supply and sanitation of entire area with required plumbing and PHE works as per the actual requirements at site				100.00%
16	Cost for construction (CAPEX)			79.20%	
17	Cost of Operation & Maintenance Cost for 5 years (OPEX)			20.80%	
	O&M for Year 1				20.00%
	O&M for Year 2				20.00%
	O&M for Year 3				20.00%
	O&M for Year 4				20.00%
	O&M for Year 5				20.00%
					100.00%
18	Total Project Cost (Capex + Opex) (Sr.No. 16 + Sr.No. 17)			100.00%	
Payment during DLP & Operation and Maintenance per year					

Sr.No.	Scope of Work / Work Component	Unit	Quantity	Weightage in Percentage to the Estimated Cost	Percentage weightage of Stage for Payment
Group A	BOUNDARY WALL				30.00%
	POND				
	GHAT/STAIRS				
	TOILET BLOCKS WITH CHANGING ROOMS				
	WALKWAY				
	ELECTRICAL EQUIPMENTS AND LIGHTS				
	S.S. HAND RAIL AT GHAT AND ALONG THE POUND EDGE				
	LAND SCAPE AND HORTICULTURE				
	KIDS PLAY AREA AND EQUIPMENT				
	GYM EQUIPMENT				
	S.S. DUSTBINS				
Group B	MANPOWER (22 Nos.)				70.00%
					100.00%

SECTION-3

QUALIFICATION INFORMATION

&

OTHER FORMS

QUALIFICATION INFORMATION

The information to be filled in by the bidder in the following pages will be used for purpose of qualification as provided for in Clause – 4 of the Instructions to Bidders. This information will not be incorporated in the Contract.

1. For Individual Bidders

1.1. Constitution or legal status of Bidder [Attach copy]

Place of registration:

Principal place of business:

Power of attorney of signatory of Bid [Attach]

1.2. Total value of civil engineering construction work performed in the last five financial years** (in Rs. Lakhs)

Year (β)	Amount (In Rs. Lakhs)
2020-21	
2021-22	
2022-23	
2023-24	
2024-25	

1.3. Work of similar nature performed as prime contractor, work performed in the past as a nominated sub- contractor will also be considered provided the sub-contract involved supply, installation, commissioning of all works which comes under similar projects, provided further that all other qualification criteria are satisfied (in the same name) on works of a similar nature over the last seven financial years (2020-21 to 2024-25) and the current financial year till date.

Project Name	Name of the Employer *	Description of Work	Contract Number	Value of Contract (Rs. in Crore)	Date of issue of Work Order	Stipulated Period of Completion	Actual date of Completion *	Remarks Explaining Reasons for Delay and Work Completed

* Attach certificate(s) from the Engineer(s)-in-Charge/EE/Employer.

β Attached certificate from Chartered Accountant (CA).

In case lowest quote is made by more than one bidder, then the bidder who has successfully completed and attached completion certificate while submitting online bid form for the number of similar projects in the last 3 years would be awarded the work. Still, if there is a tie, lottery system will be followed to award the contract.

1.3.1 Quantities of work executed as prime contractor, work performed in the past as a nominated sub-contractor will also be considered provided the sub-contract involved execution of all main items of work described in the bid document, provided further that all other qualification criteria are satisfied (in the same name and style) in the last seven years :**

Year	Name of the Work	Name of the employer	Cement Concrete including RCC/PCC	Earthwork/ Filling work	RCC Drain/pipe laying above 250 mm Dia	RCC Building	Remarks

1.4 Information on Bid capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

(A). Existing commitments and on-going works:

Description of works	Place & State	Contract No.	Name & Address of Employer	Value of Contract (Rs. in Lakh)	Period of Completion	Value of Works* remaining to be completed (Rs in Lakh)	Anticipated date of completion
1	2	3	4	5	6	7	8

* Attach certificate(s) from the Engineer(s) - in - Charge / EE / Employer.

(B). Works for which bids already submitted:

Description of work	Place & State	Name & Address of Employer	Estimated value of works (Rs in Lakh)	Stipulated Period of completion	Date when decision is expected	Remarks If any
1	2	3	4	5	6	7

1.5 Availability of key items of Contractor's Equipment essential for carrying out the

Works [ref. Clause 4.5(B)(a). The Bidder should list all the information requested below. Refer also to Sub Clause 4.3(d) of the Instructions to Bidders.]

Description of works	Requirement		Availability Proposals			Remarks (from whom to be purchased)
	No.	Capacity	Owned/Leased/To be procured	Nos. / Capacity	Age/ Condition	
1	2	3	4	5	6	7

- 1.6 Qualifications and experience of key personnel required for administration and execution of the Contract [Ref. Clause 4.5(B) (b)]. Attach biographical data. Refer also to Sub-Clause 4.3 (g) of Instructions to Bidders.

Position	Name	Qualification	Years of Professional Experience	Years of experience in Proposed position

- 1.7 Proposed sub-contracts and firms involved. [Refer ITB Clause 4.3(m)]

Sanction of the works	Value of Sub-contract	Sub-contractor (Name & Address)	Experience in similar Work

Attach copies of certificates on possession of valid license for water supply/sanitary work/building electrification work [Reference Clause 4.5A(c) & 4.5A (d) of ITB].

- 1.8 Financial reports for the last five financial years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc. List them below and attach copies. (Attach certificate from Chartered Accountant).
- 1.9 Evidence of access to financial resources to meet the qualification requirements: Cash in hand, lines of credit, etc. List them below and attach copies of support documents.
- 1.10 Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.
- 1.11 Information on litigation history of current and last 05 financial years starting 2020-21 in which the Bidder is involved.

Other Party(ies)	Employer	Cause of Dispute	Amount involved	Remarks showing Present Status

1.12 Statement of compliance under the requirements of Sub Clause 3.2 of the Instructions to Bidders.

(Name of Consultant engaged for project preparation is)

1.13 Proposed work methods and schedule. The Bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the Bidding documents. [Refer ITB Clause 4.1 & 4.3(n)]

1.14 Programme.

1.15 Quality Assurance Programme.

2. Additional Requirements.

Bidders should provide any additional information required to fulfill the requirements of Clause 4 of the Instructions to the Bidders, if applicable.

2.1. Affidavit as provided in Section 3 of RFP.

2.2. Undertaking as provided in Section 3 of RFP.

2.3. Copy of letter of association in the form of agreement with subcontractor for the work defined or for any specializes /Engineering methodology work.

Note: Even though the bidder meets the above qualifying criteria, he is subject to be disqualified, if he has made a misleading or false representation(s) in the forms, statements and attachments in proof of the qualifying requirements.

Standard Operating and Procedure For Operation and Maintenance

Standard Operation & Maintenance Manual (SOP) For REJUVENATION OF BHAIKVA TALAB PROJECT

1. BOUNDARY WALL
2. POND
3. GHAT/STAIRS
4. TOILET BLOCKS WITH CHANGING ROOMS
5. WALKWAY
6. ELECTRICAL EQUIPMENTS AND LIGHTS
7. S.S. HAND RAIL AT GHAT AND ALONG THE POND EDGE
8. LAND SCAPING AND HORTICULTURE
9. KIDS PLAY AREA AND EQUIPMENT
10. GYM EQUIPMENT
11. S.S. DUSTBINS
12. MANPOWER

1. Background, Objectives & Scope

1.1 Background of Smart City Mission

“Citizens of Bhagalpur collectively envision a progressive city, dedicated towards promoting its unique identity, good governance, enhanced quality of life, sustainable utilization of its distinctive historical, cultural and ecological assets to attract tourism, investments, and business.”

Aspirations of citizens from which the vision emerged:

The Vision for Bhagalpur has emerged from the SWOT analysis as well as the aspirations expressed by citizens. Bhagalpur aspires to be a city where municipal governance is in-synch with citizens’ needs and the citizenry is aware, and responsible, with a sense of ownership for the city. The citizens’ aspirations can be categorized into four broad heads from which specific goals have taken shape:

1. Aspirations of Bhagalpur being a Smart City with an accountable, smart and efficient local Government striving for a livable city with smart services
2. Aspirations linked to due recognition of the city’s traditional industries and cultural and ecological and tourism assets leading to increased investments and tourist trade
3. Aspirations of improved intra-city and inter-city
4. Aspirations linked to presence of robust and well-functioning infrastructure that assures universal access and coverage

1 Objectives

Development of Bhairva Talab (major wetland) in city is a very necessary for urban infrastructure development and preserve the healthy water source in the city, ensuring hygienic and safe drinking water sources in city for human life and it also full-fill the requirements of **JAL JIWAN AND HARIALI MISSION**. This comprehensive approach necessitates a robust standard operation and maintenance framework to ensure the longevity and effectiveness of these vital components of urban infrastructure.

Any signs of wear, damage, or instability should be addressed through timely repairs or replacements. This proactive approach ensures the longevity of the development and ensure a safe, hygienic and comfortable environment for users.

This SOP for Bhairva Talab is being maintained by Bhagalpur Smart City Limited with following scopes:

- ❖ Ensure proper illumination of pound area to improve visibility for users.
- ❖ Improve public safety by creating well accessible ghats steps leading to water body with parapet wall to ensure safety of visitors.
- ❖ Improve public utilities like Toilet, wash rooms, changing rooms and drinking water facilities at Bhairva Talab.
- ❖ Provide dedicated walk way for the visitors.
- ❖ Provide a safe viewing point at pound area etc.

2. Name of the major components developed under the river front development project for the O&M as per the RFP:

Sl.no	Name of the major components	Quantity/Nos.
1	Construction of Boundary wall	1300 mts
2	Construction of Ghats steps	400 mts
3	Construction of Toilet Blocks with Changing Room	2 nos.
5	Installation of S.S. Parapet Hand Rails	650 mts
6	Installation of S.S. Dustbin	At 5 locations
7	Installation of Walk way Lights	All around the pound

3. Mandatory Tools & Tackles Required-

All the mandatory tools & tackles will be provided by the contractor without any extra cost with fuel and operators for the entire contract period of the Project-

1. Grass Cutter Machine-02 nos.
2. Hand Driven wheel Barrors- 06 nos.
3. Additional movable type dustbins 80 to 100 lts. – 05 nos. or as per the requirement
4. Other Tolls and Tackles as per the site/work requirements.

4. Mandatory Common Points-

To be followed by the successful bidder/contracting agency during at entire O & M period.

1. Ghat & Steps

- a. Daily cleaning of Ghat steps & external area and removal of garbage at **Nagar Nigam Dustbin** points.
- b. Periodical use of Bleaching Powder and lime dust at Ghat steps & external area whenever is required.

2. Toilet Blocks

- a. Daily cleaning of all toilet/urinal/washbasin/sanitary items with chemical (Harpic/Hydrochloric acid) at least three times in a day.
- b. Daily cleaning of all ceramic wall tiles and floor tiles with wall floor cleaning chemicals at least two times in a day.
- c. Daily cleaning of all Glass mirrors at least once in a day.
- d. Periodical repair and maintenance of all sanitary item including bibcock, stopcock, waste pipe and overhead water tank etc.
- e. Periodical repair and maintenance of broken/cracks/removed ceramic wall and floor tiles with proper adhesive materials.
- f. Ensure daily consumable materials like hand wash shop, phenol etc. should be kept in toilet blocks.
- g. Periodical repair and maintenance of water motor, electrical items (lights

& fans) and plumbing of toilet blocks etc.

3. Stainless Steel (SS) Hand Rails

- a. Periodical repair of maintenance of ss hand rails of Ghat steps, and parapet wall SS hand rails and viewing areas.
- b. Periodical cleaning and buffing of SS hand rails of Ghat steps, entrance stairs and viewing points areas etc.

4. S.S. Dustbins.

- a. Periodical repair of maintenance of ss Dustbins of Ghat/Promenade areas, near viewing points and toilet blocks areas.
- b. Daily removal of garbage from dustbins and ensure dispose of garbage at suitable space etc.

All above mandatories periodical/daily repair & maintenance will be done by the contracting agency as per the as per the direction of BSCL/Authority during the entire O & M period.

5. Daily Maintenance of plants & grass.

- a. Daily maintenance of plants and Grass areas all around the ponds, near viewing points, campus area and toilet blocks areas.
- b. Daily watering of plants and Grass areas all around the ponds, near viewing points, campus area and toilet blocks areas

6. All above mandatories periodical/daily repair & maintenance will be done by the contracting agency as per the as per the direction of BSCL/Authority during the entire O & M period.

7. Setting up administrative office.

Setting up minimum internal infrastructure such as administrative office with furniture, almirah, stationeries, computer, printer, tools and tackle, consumable items with sufficient manpower etc. in respect to perform daily routine work and administrative office electricity charges will be borne by the contracting agency.

8. Termination of Contract during O & M-

1. If contractor works not found satisfactory or found any un-lawful activity, the BSCL/Authority will have full right to terminate the contract at any time after giving on month notice.
2. Contractor or contracting agency will not stop their works or scape from contract without prior written information to BSCL/Authority and contractor is bound to continue his contract minimum six month after giving written information or till the finalization of next contractor for the same work.

7. Proposed applicable charges for the user of Bhairva Talab-

Sl. No.	Name of the Components	Proposed Charges
1	General Entry Ticket above 5 years age per person (8.00 a.m to 8 p.m)	Rs. 10/-
2	General Entry Ticket above 5 years age per person for morning walkers (5.00 a.m. to 8 a.m.)	Rs.5/-
3	Toilet Blocks	
a.	For Urinal per person	Rs.5.00
b.	For Toilet per person	Rs.10.00

Sl. No.	Name of the Components	Proposed Charges
c.	For Changing Room per person	Rs.10.00
4.	Video Recording & Photography	
a.	DSLR & CAMERA for One Hours	Rs.150.00
b.	Professional Video Recording for Two Hours	Rs. 2000.00

- 8 All electricity chargers such as electrical bills of the lights and Toilet Blocks will be paid by the contracting agency or electricity expenditure born by contracting agency during the contact period from the collection of revenue from the Bhairva Talab project and after completion of contract period no dues corticate of concern/electrical department will submit by the contractor.

10. Periodic Inspection Report with Geo-tagging Photographs:

Daily Inspection: To be conducted by the Contractor authorized Person

<u>Daily Inspection Report of River Front Components</u>			
Date of Inspection -----			
Name of Maintenance Manager (Contractor)-----			
Name of the Manager/Sr. Manager-----			
Sl. no.	Name of the Component	Functional / Non – Functional / Clean / Not maintained	Remarks
1	All Lights		
2	Toilet Blocks		
a	Toilet Block- I		
b	Toilet Block-II		
3	Ghat area & Pond area		
a	Zone-I (Near Ghta Area- Gate no.-1)		
b	Zone-II (Near Gate no.-2)		
c	Zone-III (Near Mandir Area)		

Signature of Contractor

Signature of BSCL

SPECIAL CONDITION OF CONTRACT FOR O & M

1. Successful bidder/Contractor may develop some fabricated shops at suitable locations after taking prior approvals from the authority/BSCL for revenue generation and provide better facilities to visitors or users on his own cost.
2. Successful bidder/Contractor may develop boating facilities in pond with proper safety measures after taking prior approvals from the authority/BSCL and after getting proper NOC from the concerned department for revenue generation and provide better facilities to visitors or ghat users on his own cost.
3. Successful bidder/Contractor may develop other facilities like Food Kiosk, Kids Play equipments, Open-Gym/Closed-Gym equipments, Library and study areas etc. at Bhairva Talab areas after taking prior approvals from the authority/BSCL and after getting proper NOC from the concerned department for revenue generation and provide better facilities to visitors or ghat users on his own cost.
4. Successful bidder/Contractor will deploy sufficient numbers of safety guards, cleaner, operator and electrician etc during the entire contract period and he will not keep/sale/use any objectionable and prohibited materials in project areas. If any objectionable materials are found at Bhairva Talab Premises contract may be terminated and contracting agency will be punished as per the laws.
5. Minimum manpower required as mentioned below:
 1. Safety & Security Guards – 10 nos for three shifts.
 2. Cleaners/Broomers- 4 nos.
 3. Gardeners- 2 nos.
 4. Electrician-1 no.
 5. Plumber-1 no.
 6. Ticket collector- 2 nos.
 7. Supervisor- 1 nos.
 8. Accountant: 1 nos.
6. In case of non deployment of specified manpower Rs. 1000/- per day per manpower penalty will be imposed.

**SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO
OR
AVAILABILITY OF CREDIT FACILITIES
(Clause 4.3 (i) OF ITB)**

BANK CERTIFICATE

This is to certify that M/s. is a reputed Company with a good financial standing.

If the contract for the work, namely..... is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs..... to meet their working capital requirements for executing the above contract during the contact period.

(Signature)

Name of Bank

Senior Bank Manager

Address of the Bank

AFFIDAVIT

1. I, the under signed, do here by certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/S _____ has been blacklisted nor has abandoned any work in any government department, India nor any contract awarded to us for such work have been rescinded, during last seven years prior to the date of this bid.
3. The undersigned hereby authorize(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
4. The undersigned understand and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department/Project implementing agency.

(Signed by an authorized Officer of the Firm)

Title of officer

Name of Firm

Date

UNDERTAKING

I, the undersigned do hereby undertake that our firm
M/s.....
would invest a minimum cash up to 25% of the value of the work during implementation
of the Contract.

(Signed by an authorized Officer of the Firm)

Title of officer

Name of Firm

Date

SECTION-4

GENERAL CONDITIONS OF CONTRACT

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CLAUSE OF CONTRACT

CLAUSE 1

Performance Guarantee

- (i) The contractor shall submit an irrevocable PERFORMANCE GUARANTEE of 2% (Two percent) of the tendered amount including earnest money in the shape as mentioned in the Bihar Financial Rules or Bank Guarantee (for work costing more than one crore) or any other deposits mentioned for his proper performance of the contract agreement, (notwithstanding and/or without prejudice to any other provisions in the contract) within period specified in scheduled 'F'(Section-4,GCC) from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in schedule 'F' on written request of the contractor stating the reason for delays in procuring the Bank Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of N.S.C. of Post Office/ Pledged in favour of department; D.D. of any Scheduled Bank or State Bank of India or Bank Guarantee (for work costing more than Rupees one Crore.)
- (ii) The performance Guarantee shall be initially valid up to 30 days beyond the Operation & Maintenance.
- (iii) The Engineer-in-Charge shall not make a claim under the Performance guarantee except for amounts to which the Governor of Bihar is entitled under the contract (notwithstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - (a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance guarantee.
 - (b) Failure by the contractor to pay Governor of Bihar any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
 - (c) Failure by the contractor to rectify any defects as defined in the defect liability clause in the schedule – F(Section-4,GCC) of contract data to the satisfaction of the Engineer incharge.
- (iv) In the event of the contract being determined or rescinded under provisions of any of the clause/condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Governor of Bihar.

CLAUSE 2

Compensation for Delay (Liquidated Damage)

If the contractor fails to maintain the required progress in terms of clause 5 (Section-4,GCC) or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the Superintending Engineer (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/month (as applicable) that the progress remains below that specified in Clause 5 (Section-4,GCC) or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified.

i) Compensation for delay of work @ 2 % per month of delay to be computed on per Day basis

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the Tendered Value of work or to the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Government. In case, the contractor dies not achieve a particular milestone mentioned in schedule- F(Section-4,GCC), or the rescheduled milestone(s) in terms of Clause 5.4(Section-4,GCC), the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

CLAUSE 2A

Incentive for early completion

In case, the contractor completes the work ahead of scheduled completion time, a bonus @ 1% (one percent) of the tendered value per month computed on per day basis, shall be payable the contractor, subject to a maximum limit of 5% (five percent) of the tendered value. The amount of bonus, if payable, shall be paid along with final bill after completion of work. Provided always that provision of the Clause 2A shall be applicable only when so provided in 'Schedule F'(Section-4,GCC).

CLAUSE 3

When Contract can be Determined / Rescined

Subject to the other provisions contained in this clause the Engineer-In-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i) It the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wind up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- iii) if the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date of completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- iv) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge.
- v) If the contractor persistently neglects to carry out his obligations under the contract and/or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
- vi) If the contractor commits any acts mentioned in Clause 21 hereof:
- vii) If the work is not started by the contractor within 1/8th of the stipulated time subject to the maximum of 45 days.

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

- a) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of Engineer-in-Charge shall be conclusive evidence). Upon such determination or rescission,

the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.

- b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above course(s) being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE 3A

In case, the work cannot be started due to reasons not within the control of the contractor as decided the Engineer in Charge within 1/4th of the stipulated time for completion of work, either party may close the contract. In such eventuality, the Earnest Money deposit and the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all. the reasons shall be examined by the Engineer in Charge and his decision shall be final and binding.

CLAUSE 4

Contractor liable to pay compensation even if action not taken under Clause 3

In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause-3(Section-4,GCC) thereof, shall have become exercisable and the same are not exercised the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work. or any part thereof, paying or allowing for the same in account at the contract rates or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

CLAUSE 5

Time and Extension for Delay

The time allowed for execution of the Works as specified in the Schedule 'F'(Section-4,GCC) or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in letter of acceptance or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the security deposit absolutely.

- 5.1 As soon as possible after the contract is concluded the Contractor shall submit a Time & Progress Chart for each milestone and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of

items of the work. It shall indicate the forecast of the dates of commencement and completion of various trades or sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and Contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate Programme has been agreed upon) complete the work as per milestone given in schedule 'F'(Section-4,GCC).

5.2 If the work(s) be delayed by.

- i) force majeure, or
- ii) Serious loss or damage by fire, or
- iii) Civil commotion, local.
- iv) delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- v) non-availability of stores, which are the responsibility of Government to supply or
- vii) non-availability or break down of tools and Plant to be supplied or supplied by Government or
- vii) any other cause which, in the absolute discretion of the authority mentioned in Schedule 'F'(Section-4,GCC) is beyond the Contractor's control.

then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

5.3 Request for the rescheduling of Milestones and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the hindering event causing delay on the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

5.4 In any such case the authority mentioned in Schedule 'F'(Section-4,GCC) may give a fair and reasonable extension of time and reschedule the milestones for completion of work. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.

5.5 The basic centerlines, reference points and benchmarks will be fixed by the department. The contractor shall established at his own cost at suitable points, additional reference lines and bench marks as may be necessary and instructed by the engineer-in-charge. The contractor shall remain responsible for the sufficiency and accuracy of all the bench marks and reference lines.

CLAUSE 5A

The Engineer may require the contractor to attend a progress review meeting during execution of work.

The Engineer shall record the minutes of the meeting and provide a copy to the Contractor for compliance. These minutes will be a part of evidence in case of any request for extension of time or impunitive action against the contractor.

CLAUSE 6

Measurement of Work Done

Engineer-in-Charge shall, except as otherwise provided, ascertain and determine measurement and the value in accordance with the contract of work done.

All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works perform under the contract.

All measurements and levels shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the contractor or his authorized representative at least once

in a month during the progress of the work and such measurements shall be signed and dated by the Engineer-in-Charge and the contractor or their representatives in token their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the Department shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance labour and other things necessary for measurements and recording levels.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of India Standards and if for any item no such standard is available then a mutually agreed method as approved by the department shall be followed.

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

Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement defects noticed till completion of the operation & maintenance period.

CLAUSE 7

Payment on Intermediate Certificate to be Regarded as Advances

No payment shall be made for work for less than the estimated work of Rs. 2.5 lacs till the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs. 2.5 lacs the interim or running account bill shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the Department in triplicate on or before the date of every month fixed for the same by the Engineer-in-Charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F'(Section-4,GCC) ,in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. The Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, Engineer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer-in-

Charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid by 10th working day after the day of presentation of the bill by the Contractor to the Engineer-in-Charge or his Assistant Engineer together with the account of the material issued by the department, or dismantled materials, if any. In the case of works outside the headquarters of the Engineer-in-Charge the period of ten working days will be extended to fifteen working days.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion interim payments shall continue to be made as herein provided as per clause - 2, without prejudice to the right of the department to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

CLAUSE 8

Completion Certificate and Completion Plans

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within fifteen days of the receipt of such notice the Engineer-in-Charge shall inspect the work and if there is no defect in the work shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of execution thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding surplus materials and rubbish etc. and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

CLAUSE 8A

Contractor to Keep Site Clean

When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, color washing, painting etc. on walls, floor, windows etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days notice in writing to the contractor.

CLAUSE 8 B

Completion Plans to be Submitted by the Contractor

The contractor shall submit completion plan as required vide General Specifications for Electrical works (Part-I internal) 1972 and (Part-II External) 1974 as applicable within thirty days of the completion of the work.

In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum equivalent to 2.5% of the value of the work subject to a ceiling of Rs. 15,000 (Rs. Fifteen thousand only) as may be fixed by the Engineer in Charge concerned and in this respect the decision of the Engineer in Charge shall be final and binding on the contractor.

CLAUSE 9

Payment of Final Bill

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified herein under, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized Assistant Engineer, complete with account of materials issued by the Department and dismantled materials.

- | | | | |
|-----|---|---|----------|
| i) | If the Tendered value of work is up to Rs. 1 crores | : | 2 months |
| ii) | If the Tendered value of work exceeds Rs. 1 crores | : | 4 months |

CLAUSE 9 A

Payment of Contractor's Bills to Banks

Payments due to the contractor may, if so desired by him, be made to his bank instead of direct to him provided that the contractor furnishes to the Engineer-in-Charge: (1) an authorisation in the form of a legally valid document such as a power of attorney conferring authority on the bank to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by Government or his signature on the bill or other claim preferred against Government before settlement by the Engineer-in-Charge of the account or claim by payment to the bank. While the receipt given by such banks shall constitute a full and sufficient discharge for the payment, the contractor shall wherever possible present his bills duly receipted and discharges through his bankers.

Nothing herein contained shall operate to create in favour of the bank any rights or equities vis-a-vis the Governor of Bihar.

CLAUSE 10 A

Materials to be provided by the Contractor

The contractor shall, at his own expense, provide all materials, required for the works other than those, which are stipulated, to be supplied by the Government.

The contractor shall, at his own expense and without delay, supply to the Engineer-in-Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within fifteen days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether sample are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analysed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of

samples for such tests at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorized representative shall at all time have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

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

CLAUSE 10 B

i) Deleted

iii) Deketed

CLAUSE 10 D

**Dismantled
Material Govt.
Property**

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as Government's property and such materials shall be disposed off to the best advantage of Government according to the PWD codal provision.

CLAUSE 11

**Work to be
Executed in
Accordance with
Specifications,
Drawings, Orders
etc.**

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specification, designs, drawings and instruction as are not included in the standard specifications of Public Works Department specified in Schedule 'F'(Section-4,GCC) or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

CLAUSE 12

Deleted

CLAUSE 13

**Foreclosure of
Contract due to
Abandonment or
Reduction in Scope
of Work**

If at any time after acceptance of the tender Government shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-Charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates for works executed at site only.

CLAUSE 14

Cancellation of contract in full or part

If the contractor:

- i) at any time makes default in proceeding with the works or any part of the work with due diligence and continues to do so after a notice in writing of 7 days from the Engineer-in-Charge; or
- ii) Commits default to comply with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge; or
- iii) Fails to complete the works or items of work with individual dates of completion, on or before the date(s) of completion, and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge; or
- iv) Shall offer or give or agree to give to any person in Government service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Government; or
- v) Shall enter into a contract with Government in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Accepting Authority/Engineer-in-Charge; or
- vi) Shall obtain a contract with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering; or
- vii) Being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or
- viii) Being a company, shall pass a resolution or the Court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or
- ix) Shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or
- x) Assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Competent Authority;

The Competent Authority may, without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to Government, by a notice in writing to cancel the contract as a whole or only such items of work in default from the Contract.

The Engineer-in-Charge shall on such cancellation by the Competent Authority have powers to :

- (a) Take possession of the site and any materials, constructional plant, implements stores, etc., thereon; and/or
- (b) Carry out the incomplete work by any means at the risk and cost of the contractor.

On cancellation of the contract in full or in part, the Engineer-in-Charge shall determine what amount, if any, is recoverable from the contractor for completion of the works or part of the works or in case the works or part of the works is not to be completed, the loss of damage

suffered by Government. In determining the amount, credit shall be given to the contractor for the value of the work executed by him up to the time of cancellation, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor.

Any excess expenditure incurred or to be incurred by Government in completing the works or part of the works or the excess loss or damages suffered or which may be suffered by Government as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Government in law be recovered from any moneys due to the contractor on any account, and if such moneys are not sufficient the contractor shall be called upon in writing and shall be liable to pay the same within 31 days.

If the contractor fails to pay the required sum within the aforesaid period of 30 days the Engineer-in-Charge shall have the right to sell any or all of the contractor's unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the contractor under the contract and if thereafter there be any balance outstanding from the contractor, it shall be recovered in accordance with the provisions of the contract.

Any sums in excess of the amounts due to Government and unsold materials, constructional plant, etc., shall be returned to the contractor, provided always that if cost or anticipated cost of completion by Government of the works or part of the works is less than the amount which the contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the contractor.

CLAUSE 15

Suspension of Work

- i) The contractor shall, on receipt of the order in writing of the Engineer-in-Charge (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof, for any of the following reasons :
 - a) on account of any default on the part of the contractor or;
 - b) for proper execution of the works or part thereof for reasons other than the default of the contractor; or
 - c) for safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.
- ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above, the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and;

CLAUSE 16

Action in case Work not done as per Specifications

All works under or in course of execution or executed in pursuance of the contract shall at all times be open and accessible to the inspection and supervision of the Engineer-in-Charge, his authorised subordinates in charge of the work and all the superior officers, officer of the Quality Control Organisation of the Department and of the Cabinet (Technical) Vigilance, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-Charge or his higher authority or his authorised subordinates in charge of the work or to the Cabinet (Technical) Vigilance or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or article provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract the contractor shall, on demand in writing which shall be made within the period specified in

schedule – F (Section-4,GCC) of contract data from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the contractor failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 (Section-4,GCC) of the contract (for non-completion of the work in time) for this default.

In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure and incidental items rectified, or removed and re-executed at the risk and cost of contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

CLAUSE 17

Contractor Liable for Damages, defects during maintenance period

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wired, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within defect liability period/ Operation & Maintenance after a certificate final or otherwise of its completion shall have been given by the Engineer-in-Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit except for the portion pertaining to asphaltic work which is governed by sub-para (iii) of clause 35 or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of defect liability period after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of Electrical & Mechanical services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.

CLAUSE 18

Contractor to Supply Tools & Plants etc.

The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other document forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in-Charge at cost to the contractor, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portions thereof.

CLAUSE 18 A

Recovery of Compensation paid to Workman

In every case in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen's Compensations Act, 1923, Government is obliged to pay compensation to a

workman employed by the contractor, in execution of the works, Government will recover from the contractor the amount of the compensation so paid; and without prejudice to the right of the Government under sub-section (2) of section 12, of the said Act, Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise. Government shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the contractor and upon his giving to Government full security for all costs for which Government might become liable in consequence of contesting such claim.

CLUASE 18 B

Ensuring Payment and Amenities to Workers if Contractor fails

In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Government is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the P.W.D. Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by P.W.D. Contractors, Government will recover from the contractor the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the Government under sub-section (2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise Government shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the Government full security for all costs for which Government might become liable in contesting such claim.

CLAUSE 19

Labour Laws to be complied by the Contractor

The contractor shall obtain a valid licence under the State Labour Act, and the Contract Labour (Regulation and Abolition) Central rules 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) ACT, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.

Any failure to fulfill these requirements shall attract the penal provisions of the contract arising out of the resultant non-execution of the work.

CLAUSE 19 A

No labour below the prescribed age shall be employed on the work.

CLAUSE 19 B

Payment of Wages

Payment of wages :

- i) The contractor shall pay to labour employed by him either directly or through sub-contractors, wages not less than fair wages as defined in P.W.D. Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- ii) The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- iii) In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Public Works Department contractor's Labour Regulations made by Government from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorisedly made, maintenance of wage books or wage slips,

publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation And Abolition) Central Rules, 1971, wherever applicable.

- iv) a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of nonfulfilment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.
- b) Under the provision of Minimum Wages (Central) Rules 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.
- v) The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Act, 1970, or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time.
- vi) The contractor shall indemnify and keep indemnified Government against payments to be made under and for the observance of the laws aforesaid and the P.W.D. Contractor's Labour Regulations without prejudice to his right to claim indemnity from his sub-contractors.
- vii) The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
- viii) Whatever is the minimum wage for the time being, or if the wage payable higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.
- ix) The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

CLAUSE 19 C

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per P.W.D. Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid he shall be liable to pay a penalty of Rs. 200/- for each default and in addition the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

CLAUSE 20

**Minimum wages
Act to be
complied with.**

The contractor shall at least pay and comply with all the provisions of the Minimum wages Acts and rules framed there under other labour laws related to contract labour.

CLAUSE 21

The contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge. And if the contractor shall assign or sublet his contract, or attempt to do so, or

Work not to be sublet. Action in case of insolvency	become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employ of Government in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-Charge on behalf of the Governor of Bihar shall have power to adopt the courses specified in Clause 3 hereof in the interest of Government and in the event of such course being adopted the consequences specified in the said Clause 3 shall ensue.
Compensation	CLAUSE 22 All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained. CLAUSE 23 Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21(Section-4,GCC) thereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21(Section-4,GCC). CLAUSE 24 All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on. CLAUSE 25 Settlement of Disputes & Arbitration The Settlement of Disputes and Arbitration shall be done in accordance with the provisions made in Bihar Public Works Contract Disputes Arbitration Tribunal Act, 2008." CLAUSE 26 Contractor to indemnify Govt. against Patent Rights The contractor shall fully indemnify and deep indemnified the Governor of Bihar against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under the action brought against Government in respect of any such matter as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the Governor of Bihar if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf. CLAUSE 27 Deleted CLAUSE 28 Action where no Specifications are specified In the case of any class of work for which there is no such specifications as referred to in Clause 11(Section-4,GCC), such work shall be carried out in accordance with the Bureau of Indian Standards Specifications, Indian Road Congress for road works and Indian Building Congress for building works or any central government agency. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers specifications. If not available then as per Department Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

CLAUSE 29

With-holding and lien in respect of sums due from contractor

- i) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the Government shall be entitled to with hold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the Government shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalisation or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the Government shall be entitled to withhold and have a lien to retain to the extent of payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge of the Government or any contracting person through the Engineer-in-Charge of the Government or any contraction person through the Engineer-in-Charge pending finalisation of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or Government will be kept withheld or retained as such by the Engineer-in-Charge or Government till the claim arising out of or under the contract is determined by the arbitrator (if the contract is governed by the arbitration clause) or by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the Government shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

- ii) Government shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for Government to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Government to the contractor, without any interest thereon whatsoever.

CLAUSE 29 A

Lien in respect of claims in other Contracts

Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the Government or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or Government or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or the Government or with such other person or persons.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the Government will be kept withheld or retained as such by the Engineer-in-Charge or the Government till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

CLAUSE 30

Unfiltered water supply

The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

- i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-Charge.
- ii) The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer-in-Charge, unsatisfactory.

CLAUSE 32

Hire of Plant & Machinery

- i) The contractor shall arrange at his own expense all tools, plant machinery and equipment (hereinafter referred to as T & P) required for execution of the work except for the Plant & Machinery listed in Schedule 'C'(Section-4,GCC) and stipulated for issue to the contractor. If the contractor requires any item of T & P on hire from the T & P available will, if such item is available, hire it to the contractor at rates to be agreed upon between him and the Engineer-in-Charge. In such a case all the conditions hereunder for issue of T & P shall also be applicable to such T & P as is agreed to be issued.
- ii) Plant and Machinery when supplied on hire charges shown in Schedule 'C'(Section-4,GCC) shall be made over and taken back at the departmental equipment yard/shed shown in Schedule 'C'(Section-4,GCC) and the contractor shall bear the cost of carriage from the place of issue to the site of work and back. The contractor shall be responsible to return the plant and machinery in the condition in which it was handed over to him, and he shall be responsible for all damage caused to the said plant and machinery at the site of work or elsewhere in operation and otherwise during transit including damage to or loss of plant and for all losses due to his failure to return the same soon after the completion of the work for which it was issued. The Divisional Engineer shall be the sole judge to determine the liability of the contractor and its extent in this regard and his decision shall be final and binding on the contractor.
- iii) The plant and machinery as stipulated above will be issued as and when available and if required by the contractor. The contractor shall arrange his programme of work according to the availability of the plant and machinery and no claim, whatsoever, will be entertained from him for any delay in supply by the Department.
- iv) The hire charges shall be recovered at the prescribed rates from and inclusive of the date the plant and machinery made over up to and inclusive of the date of the return in good order even though the same may not have been working for any cause except major breakdown due to no fault of the contractor or faulty use requiring more than three working days continuously (excluding intervening holidays and Sundays) for bringing the plant in order. The contractor shall immediately intimate in writing to the Engineer in Charge when any plant or machinery gets out of order requiring major repairs as aforesaid. The Engineer in Charge shall record the date and time of receipt of such intimation in the log sheet of the plant or machinery. Based on this if the breakdown occurs before lunch period or major breakdown will be computed considering half a day's breakdown on the day of complaint. If the breakdown occurs in the post lunch period of major breakdown will be computed starting from the next working day. In case of any dispute under this clause the decision of the Superintending Engineer shall be final and binding on the contractor.
- v) The hire charges shown above are for each day of 8 hours (inclusive of the one-hour lunch break) or part thereof.
- vi) Hire charges will include service of operating staff as required and also supply of lubricating oil and stores for cleaning purposes. Power fuel of approved type, firewood, kerosene oil etc. for running the plant and machinery and also the full time chowkidar for guarding the plant and machinery against any loss or damage shall be arranged by the contractor who shall be fully responsible for the safeguard and security of plant and machinery. The contractor shall on or before the supply of plant and machinery sign an agreement indemnifying the Department against any loss or damage caused to the plant and machinery either during transit or at site of work.
- vii) Ordinarily, no plant and machinery shall work for more than 8 hours a day inclusive of one hour lunch break. In case of an urgent work however, the Engineer in Charge may,

at his discretion, allow the plant and machinery to be worked for more than normal period or 8 hours a day. In that case the hourly hire charges for overtime to charge (1/8) th of the daily charges) subject to a minimum of half day's normal charges on any particular day. For working out hire charges for over time a period of half an hour and above will be charged as one hour and a period of less than half an hour will be ignored.

- viii) The contractor shall release the plant and machinery every seventh day for periodical servicing and/or wash out which may take about three to four hours or more. Hire charges for full day shall be recovered from the contractor for the day of servicing/Wash out irrespective of the period employed in servicing.
- ix) The plant and machinery once issued to the contractor shall not be returned by him on account of lack of arrangements of labour and materials, etc. on his part, the same will be returned only when they are required for major repairs or when in the opinion of the Engineer in Charge the work or a portion of work for which the same was issued is completed.
- x) Log Book for recording the hours of daily work for each of the plant and machinery supplied to the contractor will be maintained by the Department and will be countersigned by the contractor or his authorised agent daily. In case the contractor contests the correctness of the entries and/or fails to sign the Log Book the decision of the Engineer in Charge shall be final and binding on him. Hire charges will be calculated according to the entries in the Log Book and will be binding on the contractor. Recovery on account of hire charges for road rollers shall be made for the minimum number of days worked out on the assumption that a roller can consolidate per day and maximum quantity of materials or area surfacing as noted against each in the annexed statement (see attached annexure).
- xi) In the case of concrete mixers, the contractors shall arrange to get the hopper cleaned and the drum washed at the close of the work each day or each occasion.
 - a) In case rollers for consolidation are employed by the contractor himself, log book for such rollers shall be maintained in the same manner as is done in case of departmental rollers, maximum quantity of any item to be consolidated for each roller day shall also be same as in Annexure to Clause 34(x) (Section-4,GCC). For less use of rollers recovery for the less roller days shall be made at the stipulated issue rate.
- xii) The contractor shall be responsible to return the plant and machinery in the condition in which it was handed over to him and he shall be responsible for all damage caused to the said plant and machinery at the site of work or elsewhere in operation or otherwise or during transit including damage to or loss of parts, and for all losses due to him failure to return the same soon after the completion of the work for which it was issued. The Divisional Engineer shall be the sole judge to determine the liability of the contractor and its extent in this regard and his decision shall be final and binding on the contractor.
- xiii) The contractor will be exempted for levy of any hire charges for the number of days he is called upon in writing by the Engineer in Charge to suspend execution of the work provided Government plant and machinery in question have, in fact remained idle with the contractor because of the suspension.
- xiv) In the event of the contractor not requiring any item of plant and machinery issued by Government though not stipulated for issue in Schedule 'C'(Section-4,GCC) any time after taking delivery at the place of issue, he may return it after two days written notice or at any time without notice if he agrees to pay hire charges for two additional days without in any way affecting the right of the Engineer in-Charge to use the said plant and machinery during the said period of two days as he likes including hiring out to a third party.

CLAUSE 33

Employment of Technical Staff and employees

Contractors Superintendence, Supervision, Technical Staff & Employees

- i) The contractor shall provide all necessary superintendence during execution of the work and as along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

The contractor along with bidding of the tender, intimate in writing to the Engineer-in-Charge the name, qualifications, experience, age, address and other particulars along with certificates, of the technical representative to be in charge of the work. If there is any change then the new incumbent's qualifications and experience shall not be lower than specified in Schedule in I.T.B. (Annexure – 2). The Engineer-in-Charge shall within 15 days of issue of letter of acceptance intimate in writing his approval or otherwise it is deemed to be approved. Any such approval may at any time be withdrawn and in case of such withdrawal the contractor shall appoint another such representative according to the provisions of this clause. Decision of the tender accepting authority / Superintending Engineer shall be final and binding on the contractor in this respect. Technical staff shall be available at site within fifteen days of start of work.

If the contractor (or any partner in case of firm/company) himself has such qualifications, it will not be necessary for the said contractor to appoint such a principal technical representative but the contractor shall designate and appoint a responsible agent to represent him and to be present at the work whenever the contractor is not in a position to be so present. All the provisions applicable to the principal technical representative under the Clause will also be applicable in such a case to contractor or his responsible agent. The principal technical representative and/or the contractor or his responsible authorised agent shall be actually available at site at least two working days every week, these days shall be determined in advance and also during recording of measurement of works and whenever so required by the Engineer-in-Charge by a notice as aforesaid and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative in the site order book and in token of acceptance of measurements. There shall be no objection if the representative/agent looks after more than one work and not more than three works in the same station provided these details are disclosed to the Engineer-in-Charge and he shall be satisfied that the provisions and the purpose of the clause are fulfilled satisfactorily.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative or agent is effectively appointed or is effectively attending or fulfilling the provision of this clause, a recovery shall be effected from the contractor as specified in Schedule 'F' (Section-4, GCC) and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint a suitable technical representative or responsible agent and if such appointed persons are not effectively present or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as a suitable agent is appointed and the contractor shall submit a certificate of employment of the technical representative/responsible agent along with every on account bill/fixed bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

- ii) The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.

The Engineer in Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer in Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer in Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

CLAUSE 34

- i) Sales Tax or any other tax on materials in respect of this contract shall be payable by the contractor according to law in effect.

**Levy/Taxes
payable by
Contractor**

- ii) The contractor shall deposit royalty and obtain necessary permit for supply of the red earth, moorum, sand chips bajri, stone, kankar, etc. from local authorities.
- iii) If pursuant to or under any law, notification or order any royalty, cess or the hike becomes payable to the Government of India and does not at any time become payable by the contractor to the State Government/ Local authorities in respect of any material used by the contractor in the works then in such a case, it shall be lawful to the Government of India and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from the dues of the contractor.

CLAUSE 35

Conditions for reimbursement of levy/taxes if levied after receipt of tenders

- i) All tendered rates shall be inclusive of all taxes and levies payable under respective statutes. However, pursuant to the Constitution (46th Amendment) Act. 1982, if any further tax or levy is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Engineer in Charge (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.
- ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorised representative of the Government and/or the Engineer-in-Charge and further shall furnish such other information/document as the Engineer-in-Charge may require from time to time.
- iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy, pursuant to the Constitution (Forty Sixth Amendment) Act 1982, give a written notice thereof to the Engineer-in-Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

CLAUSE 36

Imprisonment of Contractor

If the contractor is imprisoned, becomes insolvent compound with his creditors, has a receiving order made against him or carries on business under a receiver for the benefit of the creditors or any of them, or being a partnership firm becomes dissolved, or being a company or corporations goes into liquidation or commences to be wound up not being a voluntary winding up for the purpose only of amalgamation or reconstitution the department shall be at liberty.

- (a) To give such liquidator, receiver, or other person in whom the contract may become vested, the option of carrying out the contract or a portion thereof to be determined by the department, subject to his providing an appropriate guarantee for the performance of such contract or.
- (b) To terminate the contract, forthwith by notice in writing to the contractor, the liquidator, the receiver or person in whom the contract may become vested and take further action as provided in the relevant clauses of the contract.

CLAUSE 37

Termination of Contract on death of contractor

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the Divisional Officer on behalf of the Governor of Bihar shall have the option of terminating the contract without compensation to the contractor after the affidavit of his/ their legal heir/heirs that they are not going to be in this profession in future.

CLAUSE 38

If relation working in PWD then the contractor not allowed to tender

The contractor shall not be permitted to tender for works in the P.W.D. Division (responsible for award and execution of contracts) in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of the Superintending Engineer and Assistant Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted Officer in the P.W.D. or in the concerned department. Any breach of this condition by the contractors of this Department shall lead to blacklisting.

If the contractor is registered in any other department, he shall be debarred from tendering in P.W.D. for any breach of this condition.

NOTE : By the term "near relatives" is meant wife, husband, parents and grand parents, children and grand children, brothers and sisters, uncles, aunts and cousins and their corresponding in law.

CLAUSE 39

No-Gazetted-Engineer to work as Contractor within two years of

No engineer of gazetted rank of other gazetted officer employed in engineering of administrative duties in an engineering department of the Government of Bihar shall work as a contractor or employee of a contractor for a period of two years after his retirement from government service without the previous permission of State Government in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained said permission prior to engagement in the contractor's service, as the case may be.

CLAUSE 40

Deleted

CLAUSE 41

Release of Security deposit

On completion of the whole of the work, half of the total amount of security shall be repaid to the contractor after six months of completion. However, the balance half of the total amount of security will be returned after completion of defect liability period/ Operation & Maintenance period and after the Engineer has certified that all defects notified by him to the contractor before the end of this period have been corrected and also after recovery of any dues.

CLAUSE 42

Responsibility of Technical Staff and employees

Technical officers / staff deployed by the Contractor at any construction site will also be responsible for inferior quality / poor performance of any work and his name will be circulated to all works division of the P.W.D. to debar from any other site, if his name is being proposed by other contractor.

CLAUSE 43

Contractor's Risks

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

CLAUSE 44

Insurance

The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:

- (a) loss of or damage to the Works, Plant and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- (d) personal injury or death.

Policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

Alteration to the terms of an insurance shall not be made without the approval of the Engineer.
Both parties shall comply with any conditions of the insurance policies.

CLAUSE 45

Cash Flow Estimate to be Submitted

The Contractor shall, within the time stated in special Conditions of contract after the date of the Letter of Acceptance, provide to the Engineer for his information a detailed cash flow estimate, in quarterly periods, of all payments to which the Contractor will be entitled under the Contract and the Contractor shall subsequently supply revised cash flow estimates at quarterly intervals, if required to do so by the Engineer in charge.

CLAUSE 46

Safety, Security and Protection of the Environment

The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:

- (a) have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons,
- (b) Provide and maintain at his own cost all lights, guards, fencing, warning signs and watchmen and where necessary or required by the Engineer or by any duly constituted authority, for the protection of the Works or for the safety and convenience of the public or others, and
- (c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

CLAUSE 47

Cost of Samples

All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Contract.

CLAUSE 48

Cost of Tests

The cost of making any test shall be borne by the Contractor if such test is:

- (a) clearly intended by or provided for in the Contract, or
- (b) particularized in the Contract (in case only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfill) in sufficient detail to enable the Contractor to price or allow for the same in his Tender.

CLAUSE 49

Cost of Tests not Provided for

If any test required by the Engineer which is:

- (a) not so intended by or provided for,
- (b) (in the cases above mentioned) not so particularized, or
- (c) (though so intended or provided for) required by the Engineer to be carried out at any place other than the Site or the place of manufacture, fabrication or preparation of the materials or Plant tested,

shows the materials, Plant or workmanship not to be in accordance with the provisions of the Contract to the satisfaction of the Engineer, then the cost of such test shall be borne by the Contractor, but in any other case department will bear the cost.

CLAUSE 50

Commencement of Works

The contractor shall commence the Works as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within the time stated in the Appendix to Tender after the date of the Letter of Acceptance. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.

CLAUSE 51

If any part of the Permanent Works has been substantially completed and has satisfactorily passed any Test on Completion prescribed by the Contract, the Engineer may issue a Taking-Over Certificate in respect of that part of the Permanent Works before completion of the Works and, upon the issue of such Certificate, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work in that part of the Permanent Works during the Operation & Maintenance Period.

**Substantial
Completion of
Parts**

CLAUSE 52

Force Majeure

Force Majeure

Neither party shall be liable to the other for any loss or damage occasioned by or arising out of acts of GOD such as Unprecedented flood, Volcanic eruption, Earthquake or other convulsion of nature and other acts such as general/ partial strikes by a section of government employees/ invasion, the act of foreign countries/ hostilities or war like operations before or after declaration of war, rebellion/ military or usurped power which prevent performance of the contract and which could not have been foreseen or avoided by a prudent person.

CLAUSE 53

Recovery

Recovery

Any amount found recoverable from the contractor shall be recovered as public demand under the Bihar Public Demand Act. without prejudice to any other mode of recovery.

NOTE:

In case of difference or ambiguity in Hindi and English version, the English version will prevail.

SECTION 4A
CONTRACT DATA
(PROFORMA OF SCHEDULES)

PROFORMA OF SCHEDULES

(Operative Schedules to be supplied separately to each intending tenderer)

SCHEDULE 'A'

Deleted

SCHEDULE 'B'

Deleted

SCHEDULE 'C'

Deleted

SCHEDULE 'D'

Deleted

SCHEDULE 'E'

Deleted

CLAUSE 10 CC

Deleted

SCHEDULE 'F'

Deleted

Clause 1

- | | | |
|-----|--|-----------------------|
| i) | Time allowed for submission of performance Guarantee from the date of issue of letter of acceptance, in days | 7 (Seven) days |
| ii) | Maximum allowable extension beyond the period provided in i) above in days | 5 (Five) days |

Clause 2

Authority for fixing compensation under clause 2. **CEO, BSCL, Bhagalpur,**

Clause 2A

Deleted

Clause 5

Number of days from the date of issue of notice to start. **07 days**

Time allowed for execution of work **15 Months**

Authority to give fair and reasonable extension of time for completion of work. As per Revised PWD code Rule 159(vii)

Clause 7

Deleted

Clause 10CC

Clause 10CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column

15 Months

Clause 11

Specifications to be followed for execution of work

BCD and RCD

Clause 12

Not Applicable

Clause 16

Competent Authority for deciding reduced rates.

BSCL

Chief Executive Officer,

- The following document also form part of the contract.

All documents mentioned in clause 4 of Agreement form

- The law, which applies to the contract, is
The Law of Union of India.
- The court of jurisdiction ***Bhagalpur***
- The Language of contract document ***English***
- The limit of sub-contracting ***Nil***
- The Currency of the Contract is ***Indian Rupees***

ARTICLES

1. Definitions of Interpretation
2. Scope of Work
3. Disclaimer
4. Performance Security
5. Site of Project
6. Utilities & Trees
7. Assignment and Charges
8. Liability & Indemnity
9. Dispute Resolution
10. Miscellaneous
11. Definition

ARTICLE 1
DEFINITIONS AND INTERPRETATION

1.1 Definitions

The words and expressions beginning with capital letters and defined in this Agreement (including those in Article 26) shall, unless the context otherwise requires, have the meaning ascribed thereto herein, and the words and expressions defined in the Schedules and used therein shall have the meaning ascribed thereto in the Schedules.

1.2 Interpretation

1.2.1 In this Agreement, unless the context otherwise requires,

- a. references to any legislation or any provision thereof shall include amendment or re-enactment or consolidation of such legislation or any provision thereof so far as such amendment or re-enactment or consolidation applies or is capable of applying to any transaction entered into hereunder;
- b. References to laws of India or Indian law or regulation having the force of law shall include the laws, acts, ordinances, rules, regulations, bye laws or notifications which have the force of law in the territory of India and as from time to time may be amended, modified, supplemented, extended or re- enacted;
- c. references to a “**person**” and words denoting a natural person shall be construed as a reference to any individual, firm, company, corporation, society, trust, government, state or agency of a state or any association or partnership (whether or not having separate legal personality) of two or more of the above and shall include successors and assigns;
- d. the table of contents, headings or sub-headings in this Agreement are for convenience of reference only and shall not be used in, and shall not affect, the construction or interpretation of this Agreement;
- e. the words “**include**” and “**including**” are to be construed without limitation and shall be deemed to be followed by “without limitation” or “but not limited to” whether or not they are followed by such phrases;
- f. references to “**construction**” include, unless the context otherwise requires, survey and investigation, design, developing, engineering, procurement, supply of plant, materials, equipment, labour, delivery, transportation, installation, processing, fabrication, testing, and commissioning of the Project, including maintenance during the Construction Period, removing of defects, if any, and other activities incidental to the construction and “**construct**” or “**build**” shall be construed accordingly;
- g. references to “**development**” include, unless the context otherwise requires, construction, renovation, refurbishing, augmentation, up-gradation and other activities incidental thereto during the Construction Period, and “**develop**” shall be construed accordingly;
- h. any reference to any period of time shall mean a reference to that according to Indian standard time;
- i. any reference to day shall mean a reference to a calendar day;
- j. reference to a “**business day**” shall be construed as reference to a day (other than a Sunday) on which banks in the State are generally open for business;
- k. any reference to month shall mean a reference to a calendar month as per the Gregorian calendar;
- l. references to any date, period or Project Milestone shall mean and include such date, period or Project Milestone as may be extended pursuant to this Agreement;
- m. any reference to any period commencing “**from**” a specified day or date and “**till**” or “**until**”

a specified day or date shall include both such days or dates; provided that if the last day of any period computed under this Agreement is not a business day, then the period shall run until the end of the next business day;

- n. the words importing singular shall include plural and vice versa;
- o. references to any gender shall include the other and the neutral gender;
- p. “**lakh**” means a hundred thousand (1,00,000) and “**crore**” means ten million (1,00,00,000);
- q. “**indebtedness**” shall be construed so as to include any obligation (whether incurred as principal or surety) for the payment or repayment of money, whether present or future, actual or contingent;
- r. references to the “**winding-up**”, “**dissolution**”, “**insolvency**”, or “**reorganization**” of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, reorganization, dissolution, arrangement, protection or relief of debtors;
- s. save and except as otherwise provided in this Agreement, any reference, at any time, to any agreement, deed, instrument, licensee or document of any description shall be construed as reference to that agreement, deed, instrument, license or other document as amended, varied, supplemented, modified or suspended at the time of such reference; provided that this Sub-clause(s) shall not operate so as to increase liabilities or obligations of the Authority hereunder or pursuant hereto in any manner whatsoever;
- t. any agreement, consent, approval, authorization, notice, communication, information or report required under or pursuant to this Agreement from or by any Party or the Authority’s Engineer shall be valid and effective only if it is in writing under the hand of a duly authorized representative of such Party or the Authority’s Engineer, as the case may be, in this behalf and not otherwise;
- u. the Schedules and Recitals to this Agreement form an integral part of this Agreement and will be in full force and effect as though they were expressly set out in the body of this Agreement;
- v. references to Recitals, Articles, Clauses, Sub-clauses, Provisos or Schedules in this Agreement shall, except where the context otherwise requires, mean references to Recitals, Articles, Clauses, Sub-clauses, Provisos and Schedules of or to this Agreement; reference to an Annex shall, subject to anything to the contrary specified therein, be construed as a reference to an Annex to the Schedule in which such reference occurs; and reference to a Paragraph shall, subject to anything to the contrary specified therein, be construed as a reference to a Paragraph of the Schedule or Annex, as the case may be, in which such reference appear; the damages payable by either Party to the other of them, as set forth in this Agreement, whether on per diem basis or otherwise, are mutually agreed genuine pre-estimated loss and damage likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty (the “**Damages**”);and
- w. Time shall be of the essence in the performance of the Parties’ respective obligations. If any time period specified herein is extended for the reasons specified in the Agreement, such extended time shall also be of the essence.

1.2.2 Unless expressly provided otherwise in this Agreement, any Documentation required to be provided or furnished by the Contractor to the Authority shall be provided free of cost and in three copies, and if the Authority is required to return any such Documentation with its

comments and/or approval, it shall be entitled to retain two copies thereof.

1.2.3 The rule of construction, if any, that a contract should be interpreted against the parties responsible for the drafting and preparation thereof, shall not apply.

1.2.4 Any word or expression used in this Agreement shall, unless otherwise defined or construed in this Agreement, bear its ordinary English meaning and, for these purposes, the General Clauses Act, 1897 shall not apply.

1.3 Measurements and arithmetic conventions

All measurements and calculations shall be in the metric system and calculations done to 2 (two) decimal places, with the third digit of 5 (five) or above being rounded up and below 5 (five) being rounded down.

1.4 Priority of agreements and errors/discrepancies

1.4.1 This Agreement, and all other agreements and documents forming part of or referred to in this Agreement are to be taken as mutually explanatory and, unless otherwise expressly provided elsewhere in this Agreement, the priority of this Agreement and other documents and agreements forming part hereof or referred to herein shall, in the event of any conflict between them, be in the following order:

1. this Agreement; and all other agreements and documents forming part hereof or referred to herein; i.e., this Agreement at (a) above shall prevail over the agreements and documents at (b).

1.4.2 Subject to the provisions of Clause 1.4.1, in case of ambiguities or discrepancies within this Agreement, the following shall apply:

- i. between two or more Clauses of this Agreement, the provisions of a specific Clause relevant to the issue under consideration shall prevail over those in other Clauses;
- ii. between the Clauses of this Agreement and the Schedules, the Clauses shall prevail and between Schedules and Annexes, the Schedules shall prevail;
- iii. between any two Schedules, the Schedule relevant to the issue shall prevail;
- iv. between the Specifications and Standards, the latter shall prevail;
- v. deleted
- vi. between any value written in numerals and that in words, the latter shall prevail.

1.5 Deleted

ARTICLE 2

SCOPE OF WORK

2.1 Scope of the Project

- i. Under this Agreement, the scope of the Project (the “**Scope of the Project**”) shall be defined as scope of work as indicated in Invitation for Bids (IFB) with the Specifications and Standards set forth in RFP.
- ii. Performance and fulfillment of all other obligations of the Contractor in accordance with the provisions of this Agreement and matters incidental thereto or necessary for the performance of any or all of the obligations of the Contractor under this Agreement.
- iii. Bidder Shall submit Architectural Planning & Design, Engineering, Procurement, construction of work preparation of detailed structural design & drawing, BOQ of each item for the project Rejuvenation of Bhairva Talab, including 5 years Operation & Maintenance in Defects Liability Period of Two Years under Bhagalpur Smart City Mission, Bhagalpur on Engineering, Procurement & Construction (EPC) basis project of Bhagalpur Smart City Limited under the Smart City Mission. Including all electrical and mechanical works after obtaining approval from competent authority.

2.2 SCOPE OF SERVICES FOR OPERATION AND MAINTENANCE (O&M)

The Contractor shall operate and maintain the entire Pond area (Under their executed scope of work) for a total operation and maintenance period of 05 (five) years during phase of the project. All necessary repairs, maintenance, overhaul, replacements etc. shall be made during the O&M to maintain the Pond area at the status of formal handing over. At the end of O&M period the ponds shall be handed over to the Employer in fully functional and new condition except normal wear and tear.

It includes supply of all tools, tackles, maintenance spares, consumables as required, for the successful operation of the pond. The scope shall include but not limited to the following items:

- (i) Operation and Maintenance including Civil, Electrical, Mechanical and all allied works.
- (ii) Repairs; Refurbishments & Replacement required during O&M period for satisfactory running of pond.
- (iii) O&M of all functional infrastructure and common areas within the Pond premises.
- (iv) Proper maintenance of Water Supply, Paths, lawns including trimming and upkeep of gardens etc.
- (v) Security of the campus and contents therein shall be Contractor’s responsibility.
- (vi) The Contractor shall be responsible for cleaning of the total ponds area. At all times the ponds, its equipment and surrounds shall be kept clean and in order including the buildings, floors, walls, roofs, windows, and garden etc.
- (vii) The Contractor shall be responsible for Gardening of the Plant area along with creation of a Greenbelt in the surroundings.
- (viii) The records maintained by the Contractor shall be produced periodically to the Authority for proper monitoring. The Authority’s remarks shall be attended to on next submission. Consolidated summary reports shall be furnished to the Employer monthly, quarterly and yearly

containing salient features.

(ix) The Contractor shall also maintain history sheets of overhauling, maintenance, replacement of all the important electrical and mechanical equipment.

(x) The O&M shall include the appropriate preventive maintenance of equipment as per the manufacturer's recommendation.

ARTICLE 3
DISCLAIMER

3. Disclaimer

- 3.1 The Contractor acknowledges that prior to the execution of this Agreement, the Contractor has, after a complete and careful examination, made an independent evaluation of the Qualification, Scope of the Project, Specifications and Standards, Site, local conditions, physical qualities of ground, subsoil and geology, traffic conditions, suitability and availability of access routes to the Site and all information provided by the Authority or obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. Save as provided in RFP Clause, the Authority makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumptions, statement or information provided by it and the Contractor confirms that it shall have no claim whatsoever against the Authority in this regard.
- 3.2 The Contractor acknowledges and hereby accepts to have satisfied itself as to the correctness and sufficiency of the Contract Price.
- 3.3 The Contractor acknowledges and hereby accepts the risk of in adequacy, mistake or error in or relating to any of the matters set forth in Clause 3.1 above and hereby acknowledges and agrees that the Authority shall not be liable for the same in any manner whatsoever to the Contractor, or any person claiming through or under any of them, and shall not lead to any adjustment of Contract Price or Scheduled Completion Date.
- 3.4 The Parties agree that any mistake or error in or relating to any of the matters set forth in Clause 3.1 above shall not vitiate this Agreement, or render it voidable.
- 3.5 In the event that either Party becomes aware of any mistake or error relating to any of the matters set forth in Clause 3.1 above, that Party shall immediately notify the other Party, specifying the mistake or error.
- 3.6 Except as otherwise provided in this Agreement, all risks relating to the Project shall be borne by the Contractor; and the Authority shall not be liable in any manner for such risks or the consequences thereof.

ARTICLE 4

PERFORMANCE SECURITY

4.1 Performance Security

1. The Contractor shall, for the performance of its obligations here under, provide to the Authority, within 15 (Fifteen) days of the date of this LoI/LoA, an irrevocable and unconditional guarantee, for an amount equal to 2% (Two percent) of the Contract Price, from a Bank in the form set forth in Annex-I of Schedule-F (the “**Performance Security**”). The Performance Security shall be valid beyond 30(thirty) /days of the expiry of the Operation and Maintenance Period specified in RFP Clause Until such time the Performance Security is provided by the Contractor pursuant hereto and the same comes into effect, the Bid Security shall remain in force and effect, and upon such provision of the Performance Security, the Authority shall release the Bid Security to the Contractor. For the avoidance of doubt, the Parties expressly agree that the Contractor shall provide, no later than 30 (thirty)/ days prior to the expiry of the Performance Security for the Operation and Maintenance Period specified in RFP Clause, a Performance Security in respect of the extended Operation and Maintenance Period, as specified in RFP, for an amount equal to 2% (two percent) of the Contract Price.
2. Notwithstanding anything to the contrary contained in this Agreement, the Parties agree that in the event of failure of the Contractor to provide the Performance Security in accordance with the provisions of Article 4 Clause 4.1 and within the time specified therein or such extended period as may be provided by the Authority, in accordance with the provisions of Article 4 Clause 4.1.3, the Authority may encash the Bid Security and appropriate the proceeds thereof as Damages, and there upon all rights, privileges, claims and entitlements of the Contractor under or arising out of this Agreement shall be deemed to have been waived by, and to have ceased with the concurrence of the Contractor, and this Agreement shall be deemed to have been terminated by mutual agreement of the Parties.
3. In the event the Contractor fails to provide the Performance Security within 15 (Fifteen) days, it may seek extension of time for a period not exceeding a further 15 (fifteen) days on payment of Damages for such extended period in a sum calculated at the rate of 0.05% (zero point zero five percent) of the Contract Price for each day until the Performance Security is provided.
4. Contractor will have to deposit additional performance guarantee for seriously unbalanced rate quoted by him at the time of agreement.
5. Within 15 days from the receipt of the letter of acceptance, the successful bidder shall deliver to the employer a performance security for an amount equivalent to 2% of the contract price plus additional security for unbalanced bids in accordance with clause 32.6 of ITB.
6. The performance guarantee shall be initially valid upto 60 days beyond the Operation & Maintenance period.
7. A bank Guarantee from any of the branches of nationalised scheduled bank situated within the territory of Bihar in the form given in Schedule-F.
8. Failure of the successful bidder to comply with the requirement of the Article 4 sub clause 4.1.5 shall constitute grounds for cancellation of the award and forfeiture of the bid security.

4.2 Extension of Performance Security

- 4.2.1 The Contractor may initially provide the Performance Security for a period of 30 days beyond

the Operation & Maintenance period. provided that it shall procure the extension of the validity of the Performance Security, as necessary, at least 2 (two) months prior to the date of expiry thereof. Upon the Contractor providing an extended Performance Security, the previous Performance Security shall be deemed to be released and the Authority shall return the same to the Contractor.

4.3 Appropriation of Performance Security

- 4.3.1 Upon occurrence of a Contractor Default, the Authority shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to encash and appropriate from the Performance Security the amounts due to it as Damages for the Contractor's Default.
- 4.3.2 Upon such encashment and appropriation from the Performance Security, the Contractor shall, within 30 (thirty) days thereof, replenish, in case of partial appropriation, to its original level the Performance Security, and in case of appropriation of the entire Performance Security provide a fresh Performance Security, as the case may be, and the Contractor shall, within the time so granted, replenish or furnish fresh Performance Security as aforesaid failing which the Authority shall be entitled to terminate the Agreement in accordance with Article 11 Clause 54 Upon such replenishment or furnishing of a fresh Performance Security, as the case may be, the Contractor shall be entitled to an additional Cure Period of 30 (thirty) days for remedying the Contractor Default, and in the event of the Contractor not curing its default within such Cure Period, the Authority shall be entitled to encash and appropriate such Performance Security as Damages, and to terminate this Agreement in accordance with Article 11 Clause 54.

4.4 Release of Performance Security

The Authority shall release the Performance Security after 30 (thirty) days of the expiry of the Operation and Maintenance Period or the extended Operation and Maintenance Period, as the case may be, under this Agreement. Notwithstanding the aforesaid, the Parties agree that the Authority shall not be obliged to release the Performance Security until all Defects identified during the Operation and Maintenance Period as the case may be, have been rectified.

4.5 Retention Money

- 4.5.1 The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit Government at the time of making any payment to him for work done under the contract to deduct a sum at 8 % (eight percent) (the "**Retention Money**") from the gross amount of any interim payment till full amount of security deposit 10% (ten percent) of agreement value or value of work (whichever is higher) is reached. If value of work exceeds the agreement value, security deposit (10%) will be recovered for the exceeded work.
- 4.5.2 Upon occurrence of a Contractor's Default, the Authority shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to appropriate the relevant amounts from the running account bill for such Contractor's Default.
- 4.5.3 On completion of the whole work, half of the total retention money shall be released to the contractor after six months and balance half will be paid after completion of Operation & Maintenance period provided that all defects notified by Engineer as rectified by Contractor and Engineer has issued certificate for the same (Annex-II of Schedule-F).
- 4.5.4 Within 15 (fifteen) days of the date of issue of the Completion Certificate, the Authority shall

discharge the bank guarantees, if any, furnished by the Contractor under the provisions of Clause 4.5.3 of Article 4 and refund the balance of Retention Money remaining with the Authority after adjusting the amounts appropriated under the provisions of Clause 4.5.2 of Article 4 and the amounts refunded under the provisions of Clause 4.5.3 of Article 4.

4.5.5 The Parties agree that in the event of Termination of this Agreement, the Retention Money if any and the bank guarantees specified in this RFP shall be treated as reckoned as such for the purposes of Termination Payment under Clause 4.3.1.

4.6 Additional Performance Guarantee: -

Provision for taking Additional Performance Guarantee if bidder quoted whole project amount below the estimated cost of whole project shall be made as follows: -

- a) If bidder quoted whole project below 0% to 5% than total estimated cost of project then additional Performance Guarantee required at the rate of 0.25% for every 1% amount quoted below estimate value of project.
- b) If bidder quoted whole project below 5% to 15% than total estimated cost of project then additional Performance Guarantee required at the rate of 0.5% for every 1% amount quoted below estimate value of project.
- c) If bidder quoted whole project below 15% to 20% than total estimated cost of project then additional Performance Guarantee required at the rate of 1% for every 1% amount quoted below estimate value of project.
- d) If bidder quoted whole project below 20% than total estimated cost of project then additional Performance Guarantee required at the rate of 2% for every 1% amount quoted below estimate value of project.

ARTICLE 5 SITE OF PROJECT

5.1 The Site

The site of the project is located near Tilkamanjhi University opposite to STP Plant.

Objective: The following are primary objectives of the project: -

The main objective of Rejuvenation of Bhairva Talab is to revive the pond, its ecology, pursue maintenance and restoration of derelict structures and develop the pond as an urban Eco-Park with amusement activities for the residents, resulting in a accessible picnic spot for visitors. The pond will be developed as a green recreational public space for the citizens & visitors, while conserving & maintaining its natural ecosystem. The immediate need to check the exploitation of the water body by dairy farmers and local s will be addressed by the initiative and the cleaning and beautification of pond will lead to influx of visitors resulting in initiation of development of the area as a whole. This project will strengthen the city identity and establish a connection between citizen and the city's pride. The objectives and vision are as noted below:

- Connecting waterfront development and the ghat with the proper access to roads.
- Development of a recreational public space providing a public social space as amusement park, attract public as a picnic spot and provision of water-based activities like water sports and aquarium
- Check over uncontrolled usage of Pond and campus by local residents leading to discharge of pollutants
- A dedicated SWM strategy with cost effective approach for managing the waste generated at the complex, eliminating and mitigating the sullage and sewerage discharge in the pond.
- Development of ghat steps for controlled organizing of rituals on selected occasions and festivals.
- To prevent the unregulated use of the large parcel of land, conserve and upgrade the degraded land and establish a natural ecosystem.
- Provision of water sports activities like water jet scooters, kayaking, pedal boats zorbing etc.
- Provision of dedicated space for varied age groups and development of space as per their needs like, children's play area, yoga and meditation space for mid and old age, music and sound space for youth, restaurants and resorts
- Plantation along the river bank and the developed ghat as part of landscape beautification.

- To strengthen the city's identification with the tangible heritage in form of upgraded amusement complex.
- To protect water body, the city's cultural heritage, create a spirit of identity and a sense of belonging, and improve the city's aesthetics.

Bhairva Talab Beautification and Rejuvenation Development Components:

The major components identified for Rejuvenation of Bhairva Talab are:

- Promenade and steps development along with landscaping and garden development
- Development of recreational spaces for users of all ages with the zoning as Youth area, Meditation and yoga area, Events area, Water Sports area, preservation and ecology development centre, Sculpture garden, small botanical garden.
- Installation of i-STP, a modular Sewage Treatment Plant of 1 MLD or more as per estimated requirement.
- Redevelopment of formal café and retails shops in and around the delineated areas as part of public facilities.
- Iconic Entry Gate with built in projection system, security and ticket counter of brushed aluminium/ or stainless-steel mirror finish, as an architectural sculpture of one of a kind in entire Bihar.
- Glass Bridge connecting centre of the pond to a large curtain fountain with water curtain feature and utilization for water projection system.
- Amusement rides for children's and adventure rides for youth and teenagers.
- Setting up of public conveniences and spread awareness over open defecations and open urination and dumping of solid waste in the water body.
- Installation of luminaries, and signages in the entire campus and promenade to ensure safety during evening hours and promote women safety during visit.

5.2 Geological and archaeological finds

It is expressly agreed that mining, geological or archaeological rights do not form part of this Agreement with the Contractor for the Works, and the Contractor hereby acknowledges that it shall not have any mining rights or interest in the underlying minerals, fossils, antiquities, structures or other remnants or things either of particular geological or archaeological interest and that such rights, interest and property on or under the Site shall vest in and belong to the Authority or the concerned Government Instrumentality. The Contractor shall take all reasonable precautions to prevent its workmen or any other person from removing or damaging such interest or property and shall inform the Authority forthwith of the discovery thereof and comply with such instructions as the Authority or the concerned Government Instrumentality may reasonably give for the removal of such property. For the avoidance of doubt, it is agreed that any reasonable expenses incurred by

the Contractor hereunder shall be reimbursed by the Authority. It is also agreed that the Authority shall procure that the instructions hereunder are issued by the concerned Government Instrumentality within a reasonable period so as to enable the Contractor to continue its Works with such modifications as may be deemed necessary.

ARTICLE 6
UTILITIES AND TREES

6.1 New utilities

- 6.1.1 The Contractor shall allow, subject to such conditions as the Authority may specify, access to, and use of the Site for laying telephone lines, water pipes, electric cables or other public utilities. Where such access or use causes any financial loss to the Contractor, it may require the user of the Site to pay compensation or damages as per Applicable Laws. For the avoidance of doubt, it is agreed that use of the Site under this Clause – 6.1 shall not in any manner relieve the Contractor of its obligation to construct the Project in accordance with this Agreement and any damage caused by such use shall be restored forthwith at the cost of the Authority.
- 6.1.2 In the event the construction of any Works is affected by a new utility or works undertaken in accordance with this Clause 6.1, the Contractor shall be entitled to a reasonable Time Extension as determined by the Authority's Engineer in accordance with the provisions of RFP Clause.

6.2 Felling of trees

The Authority shall assist the Contractor in obtaining the Applicable Permits for felling of trees to be identified by the Authority for this purpose if and only if such trees cause a Material Adverse Effect on the construction of the Project. The cost of such felling and of the compensatory plantation of trees, if any, shall be borne by the Contractor. In the event of any delay in felling thereof for reasons beyond the control of the Contractor; it shall be excused for failure to perform any of its obligations hereunder if such failure is a direct consequence of delay in the felling of trees. The Parties hereto agree that the felled trees shall be deemed to be owned by the Authority and shall be disposed in such manner and subject to such conditions as the Authority may in its sole discretion deem appropriate. For the avoidance of doubt, the Parties agree that if any felling of trees result any period of delay in providing the Applicable Permits, the Contractor shall be entitled to Time Extension.

ARTICLE 7
ASSIGNMENT AND CHARGES

7.1 Restrictions on assignment and charges

This Agreement shall not be assigned by the Contractor to any person, save and except with the prior consent in writing of the Authority, which consent the Authority shall be entitled to decline without assigning any reason.

7.2 Hypothecation of Materials or Plant

Notwithstanding the provisions of Clause 7.1 of Article 7, the Contractor may pledge or hypothecate to its lenders, any Materials or Plant prior to their incorporation in the Works. Further, the Contractor may, by written notice to the Authority, assign its right to receive payments under this Agreement either absolutely or by way of charge, to any person providing financing to the Contractor in connection with the performance of the Contractor's obligations under this Agreement. The Contractor acknowledges that any such assignment by the Contractor shall not relieve the Contractor from any obligations, duty or responsibility under this Agreement. For the avoidance of doubt, all Materials and Plants shall, upon their incorporation into Works, be free from any and all Encumbrances without the Authority being required to make any payment to any person on account of any costs, compensation, expenses and charges for such Materials, Plants and Works.

ARTICLE 8
LIABILITY AND INDEMNITY

8.1 General indemnity

The Contractor shall indemnify, defend, save and hold harmless the Authority and its officers, servants, agents, Government Instrumentalities and Government owned and/or controlled entities/enterprises, (the “**Authority Indemnified Persons**”) against any and all suits, proceedings, actions, demands and third party claims for any loss, damage, cost and expense of whatever kind and nature, whether arising out of any breach by the Contractor of any of its obligations under this Agreement or from any negligence under the Agreement, including any errors or deficiencies in the design documents, or tort or on any other ground whatsoever, except to the extent that any such suits, proceedings, actions, demands and claims have arisen due to any negligent act or omission, or breach or default of this Agreement on the part of the Authority Indemnified Persons.

8.2 Indemnity by the Contractor

8.2.1 Without limiting the generality of Clause 8.1 of Article 8, the Contractor shall fully indemnify, hold harmless and defend the Authority and the Authority Indemnified Persons from and against any and all loss and/or damages arising out of or with respect to:

- a) failure of the Contractor to comply with Applicable Laws and Applicable Permits;
- b) payment of taxes required to be made by the Contractor in respect of the income or other taxes of the Sub-contractors, suppliers and representatives; or
- c) non – payment of amounts due as a result of Materials or services furnished to the Contractor or any of its Sub-contractors which are payable by the Contractor or any of its Sub-contractors.

8.2.2 Without limiting the generality of the provisions of this Article 8, the Contractor shall fully indemnify, hold harmless and defend the Authority Indemnified Persons from and against any and all suits, proceedings, actions, claims, demands, liabilities and damages which the Authority Indemnified Persons may hereafter suffer, or pay by reason of any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign patent rights, copyrights or other Intellectual Property, proprietary or confidentiality rights with respect to any materials, information, design or process used by the Contractor or by the Sub- contractors in performing the Contractor’s obligations or in any way incorporated in or related to the Project. If in any such suit, action, claim or proceedings, a temporary restraint order or preliminary injunction is granted, the Contractor shall make every reasonable effort, by giving a satisfactory bond or otherwise, to secure the revocation or suspension of the injunction or restraint order. If, in any such suit, action, claim or proceedings, the Project, or any part thereof or comprised therein, is held to constitute an infringement and its use is permanently enjoined, the Contractor shall promptly make every reasonable effort to secure for the Authority a license, at no cost to the Authority, authorizing continued use of the infringing work. If the Contractor is unable to secure such license within a reasonable time, the Contractor shall, at its own expense, and without impairing the Specifications and Standards, either replace the affected work, or part, or process thereof with non- infringing work or part or process, or modify the same so that it becomes non- infringing.

8.3 Notice and contest of claims

In the event that either Party receives a claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity under this Agreement (the “**Indemnified Party**”) it shall notify the other Party (the “**Indemnifying Party**”) within 15 (fifteen) days of receipt of the claim or demand and shall not settle or pay the claim without the prior approval of the Indemnifying Party, which approval shall not be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim or demand, it may conduct the proceedings in the name of the Indemnified Party, subject to the Indemnified Party being secured against any costs involved, to its reasonable satisfaction.

8.4 Defense of claims

8.4.1 The Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such Party in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder, and reasonable costs and expenses thereof shall be indemnified by the Indemnifying Party. If the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party in respect of loss to the full extent provided by this Agreement, the Indemnifying Party shall be entitled, at its option, to assume and control the defense of such claim, action, suit or proceeding, liabilities, payments and obligations at its expense and through the counsel of its choice; provided it gives prompt notice of its intention to do so to the Indemnified Party and reimburses the Indemnified Party for the reasonable cost and expenses incurred by the Indemnified Party prior to the assumption by the Indemnifying Party of such defense. The Indemnifying Party shall not be entitled to settle or compromise any claim, demand, action, suit or proceeding without the prior written consent of the Indemnified Party, unless the Indemnifying Party provides such security to the Indemnified Party as shall be reasonably required by the Indemnified Party to secure the loss to be indemnified hereunder to the extent so compromised or settled.

8.4.2 If the Indemnifying Party has exercised its rights under Clause 8.3, the Indemnified Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

8.4.3 If the Indemnifying Party exercises its rights under Clause 8.3, the Indemnified Party shall nevertheless have the right to employ its own counsel, and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of the Indemnified Party, when and as incurred, unless:

- a) the employment of counsel such party has been authorized in writing by the Indemnifying Party;
- b) the Indemnified Party shall have reasonably concluded that there may be a conflict of interest between the Indemnifying Party and the Indemnified Party in the conduct of the defense of such action;
- c) the Indemnifying Party shall not, in fact, have employed independent counsel reasonably satisfactory to the Indemnified Party, to assume the defense of such action and shall have been so notified by the Indemnified Party; or

d) the Indemnified Party shall have reasonably concluded and specifically notified the Indemnifying Party either:

- 1) that there may be specific defenses available to it which are different from or additional to those available to the Indemnifying Party; or
- 2) that such claim, action, suit or proceeding involves or could have a material adverse effect upon it beyond the scope of this Agreement:

Provided that if Sub-clauses (b), (c) or (d) of this Clause 8.4.3 shall be applicable, the counsel for the Indemnified Party shall have the right to direct the defense of such claim, demand, action, suit or proceeding on behalf of the Indemnified Party and the reasonable fees and disbursements of such counsel shall constitute legal or other expenses hereunder.

8.5 No Consequential Claims

Notwithstanding anything to the contrary contained in this Article 8, the indemnities herein provided shall not include any claim or recovery in respect of any cost, expense, loss or damage of an indirect, incidental or consequential nature, including loss of profit, except as expressly provided in this Agreement.

8.6 Survival on Termination

The provisions of this Article 8 shall survive Termination.

ARTICLE 9

DISPUTE RESOLUTION

9.1 Dispute resolution

9.1.1 Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the “**Dispute**”) shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure set forth in Clause 9.2 of Article 9.

9.1.2 The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of this Agreement promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non-privileged records, information and data pertaining to any Dispute.

9.2 Conciliation

In the event of any Dispute between the Parties, either Party may call upon an officer of the Authority, not below the rank of Secretary to the Government /Chief Executive Officer/Chief General Manager, as the case may be, or such other person as the Parties may mutually agree upon (the “**Conciliator**”) to conciliate and assist the Parties in arriving at an amicable settlement thereof. Failing conciliation by the Conciliator or without the intervention of the Conciliator, either Party may require such Dispute to be referred to the Secretary or Chief Executive Officer of the Authority and the Chairman of the Board of Directors of the Contractor for amicable settlement, and upon such reference, the said persons shall meet no later than 7 (seven) business days from the date of reference to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the 7 (seven) business day period or the Dispute is not amicably settled within 15 (fifteen) business days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) business days of the notice in writing referred to in Clause 9.1.1 or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the provisions of Clause 9.3.

9.3 Arbitration

9.3.1 Any Dispute which is not resolved amicably by conciliation, as provided in Clause 9.2, shall be finally decided by reference to arbitration by an arbitral tribunal constituted in accordance with Clause 9.3.2. Such arbitration shall be held in accordance with the Rules of Arbitration of the International Centre for Alternative Dispute Resolution, New Delhi or Construction Industry Arbitration Council (CIAC), New Delhi (the “**Rules**”), or such other rules as may be mutually agreed by the Parties, and shall be subject to the provisions of the Arbitration and Conciliation Act, 1996. The place of such arbitration shall be Bhagalpur, and the language of arbitration proceedings shall be English.

The Arbitration shall be in Institutional mode & would not be adhoc, in any case, and the online mode of dispute resolution may also be resorted to as per the latest notification of Ministry of Law & Justice, Government of India.

9.3.2 There shall be an arbitral tribunal comprising three arbitrators, of whom each Party shall select one, and the third arbitrator shall be appointed by the two arbitrators so selected and in the event of disagreement between the two arbitrators, the appointment shall be made

in accordance with the Rules.

9.3.3 Wherever possible or required, On-line dispute resolution mechanism as prescribed By Ministry of Law vide their notification-http://doj.gov.in/sites/default/files/List%20of%20firm%20with%20profile-17_1.pdf, with subsequent amendments if any, is to be resorted to, in place of the traditional in-situ arbitration procedures. The decision on which system of procedures is to be followed (viz. traditional or on-line) would rest with the Contracting Parties at the time of signing the contract, who may if they so decide, permit the decision to be made by Third Arbitrator (appointed by the two nominated arbitrators).

9.3.4 The arbitral tribunal shall make a reasoned award (the “**Award**”). Any Award made in any arbitration held pursuant to this Article 9 shall be final and binding on the Parties as from the date it is made, and the Contractor and the Authority agree and undertake to carry out such Award without delay.

9.3.5 The Contractor and the Authority agree that an Award may be enforced against the Contractor and/or the Authority, as the case may be, and their respective assets wherever situated.

9.3.6 This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any arbitration proceedings hereunder.

9.3.7 In the event the Party against whom the Award has been granted challenges the Award for any reason in a court of law, it shall make an interim payment to the other Party for an amount equal to 75% (seventy-five per cent) of the Award, pending final settlement of the Dispute. The aforesaid amount shall be paid forthwith upon furnishing an irrevocable Bank Guarantee for a sum equal to the aforesaid amount. Upon final settlement of the Dispute, the aforesaid interim payment shall be adjusted and any balance amount due to be paid or returned, as the case may be, shall be paid or returned with interest calculated at the rate of 10% (ten percent) per annum from the date of interim payment to the date of final settlement of such balance.

9.4 Adjudication by a tribunal

In the event of constitution of a statutory tribunal or other forum with powers to adjudicate upon disputes between the Contractor and the Authority, all Disputes arising after such constitution shall, instead of reference to arbitration under Clause 9.3, be adjudicated upon by such tribunal or other forum in accordance with Applicable Laws and all references to Dispute Resolution Procedure shall be construed accordingly.

ARTICLE 10 MISCELLANEOUS

10.1 Governing law and jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the courts in the State shall have exclusive jurisdiction over matters arising out of or relating to this Agreement.

10.2 Waiver of immunity

Each Party unconditionally and irrevocably:

1. Agrees that the execution, delivery and performance by it of this Agreement constitute commercial acts done and performed for commercial purpose;
2. Agrees that, should any proceedings be brought against it or its assets, property or revenues in any jurisdiction in relation to this Agreement or any transaction contemplated by this Agreement, no immunity (whether by reason of sovereignty or otherwise) from such proceedings shall be claimed by or on behalf of the Party with respect to its assets;
3. waives any right of immunity which it or its assets, property or revenues now has, may acquire in the future or which may be attributed to it in any jurisdiction; and
4. consents generally in respect of the enforcement of any judgment or award against it in any such proceedings to the giving of any relief or the issue of any process in any jurisdiction in connection with such proceedings (including the making, enforcement or execution against it or in respect of any assets, property or revenues whatsoever irrespective of their use or intended use of any order or judgment that may be made or given in connection therewith).

10.3 Waiver

10.3.1 Waiver, including partial or conditional waiver, by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this Agreement:

- a) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Agreement;
- b) shall not be effective unless it is in writing and executed by a duly authorized representative of the Party; and
- c) Shall not affect the validity or enforceability of this Agreement in any manner.

10.3.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement or any obligation thereunder nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver of such breach or acceptance of any variation or the relinquishment of any such right hereunder.

10.4 Liability for review of Documents

Except to the extent expressly provided in this Agreement:

- a) no review, comment or approval by the Authority or the Authority's Engineer of any Document submitted by the Contractor nor any observation or inspection of the construction of the Project nor the failure to review, approve, comment, observe or

inspect hereunder shall relieve or absolve the Contractor from its obligations, duties and liabilities under this Agreement, Applicable Laws and Applicable Permits; and

- b) The Authority shall not be liable to the Contractor by reason of any review, comment, approval, observation or inspection referred to in Sub-clause (a) above.

10.5 Exclusion of implied warranties etc.

This Agreement expressly excludes any warranty, condition or other undertaking implied at law or by customer otherwise arising out of any other agreement between the Parties or any representation by either Party not contained in a binding legal agreement executed by both Parties.

10.6 Survival

10.6.1 Termination shall:

- a) not relieve the Contractor or the Authority, as the case may be, of any obligations hereunder which expressly or by implication survive Termination hereof; and
- b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of, or caused by, acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination.

10.6.2 All obligations surviving Termination shall only survive for a period of 3 (three) years following the date of such Termination.

10.7 Entire Agreement

This Agreement and the Schedules together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof, and no amendment or modification hereto shall be valid and effective unless such modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties. All prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement are abrogated and withdrawn. For the avoidance of doubt, the Parties hereto agree that any obligations of the Contractor arising from the Request for Proposals and bid submissions, as the case may be, shall be deemed to form part of this Agreement and treated as such.

10.8 Severability

If for any reason whatsoever, any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to the Dispute Resolution Procedure set forth under this Agreement or otherwise.

10.9 Third parties

This Agreement is intended solely for the benefit of the Parties, and the irrespective

successors and permitted assigns, and nothing in this Agreement shall be construed to create any duty to, standard of care with reference to, or any liability to, any person not a Party to this Agreement.

10.10 Successors and assigns

This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns.

10.11 Notices

Any notice or other communication to be given by any Party to the other Party under or in connection with the matters contemplated by this Agreement shall be in writing and shall:

- a) in the case of the Contractor, be given by facsimile or e-mail and by letter delivered by hand to the address given and marked for attention of the person set out below or to such other person as the Contractor may from time to time designate by notice to the Authority; provided that notices or other communications to be given to an address outside the city specified in Sub-clause (b) below may, if they are subsequently confirmed by sending a copy thereof by registered acknowledgement due, air mail or by courier, be sent by facsimile or e-mail to the person as the Contractor may from time to time designate by notice to the Authority;

Attention:

{Designation:

Address:

Fax No:

Email:}

- b) in the case of the Authority, be given by facsimile or e-mail and by letter delivered by hand and be addressed to the person named below with a copy delivered to the Authority Representative or such other person as the Authority may from time to time designate by notice to the Contractor; provided that if the Contractor does not have an office in the same city as the Authority, it may send such notice by facsimile or e-mail and by registered acknowledgement due, air mail or by courier;

{Designation:

Address:

Fax No:

Email:}); and

- c) any notice or communication by a Party to the other Party, given in accordance herewith, shall be deemed to have been delivered when in the normal course of post it ought to have been delivered and in all other cases, it shall be deemed to have been delivered on the actual date and time of delivery; provided that in the case of facsimile or e-mail, it shall be deemed to have been delivered on the working day following the date of its delivery.

10.12 Language

All notices required to be given by one Party to the other Party and all other communications, Documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in English language.

10.13 Counterparts

This Agreement may be executed in two counter parts, each of which, when executed and delivered, shall constitute an original of this Agreement.

10.14 Confidentiality

The Parties shall treat the details of this Agreement as private and confidential, except to the extent necessary to carry out obligations under it or to comply with Applicable Laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the Works in any trade or technical paper or elsewhere without the previous consent of the Authority.

10.15 Copyright and Intellectual Property rights

10.15.1 As between the Parties, the Authority shall retain the copyright and other Intellectual Property rights in the Authority's Documents and other design documents made by (or on behalf of) the Authority. The Authority shall be deemed (by signing this Agreement) to give to the Contractor a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Authority's Documents, including making and using modifications of them. This licenses hall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Authority's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) in the case of Authority's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by this Agreement, including replacements of any computers supplied by the Authority:

10.15.2 The Authority's Documents and other design documents made by (or on behalf of) the Authority's shall not, without the Authority's consent, be used, copied or communicated to a third party by (or on behalf of) for purposes other than those permitted under this Clause 10.15.

10.15.3 As between the Parties, the Authority shall retain the copyright and other Intellectual Property rights in this Agreement and other documents made by (or on behalf of) the Authority. The Contractor may, at its cost, copy, use, and obtain communication of these documents for the purposes of this Agreement. They shall not, without the Authority's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the contract.

10.16 Limitation of Liability

10.16.1 Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with this Agreement.

10.16.2 The total liability of one Party to the other Party under and in accordance with the provisions of this Agreement, save and except as provided in Articles 08, shall not exceed the Contract Price. For the avoidance of doubt, this Clause shall not limit the liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

10.17 Transportation and Office Space at Site to the Client:

10.17.1 A well maintained SUV vehicle with fuel and driver for day-to-day work/visit of site/any other related work and a well-furnished office space with all amenities including supporting staffs should be provided by the contractor to the Client.

10.18 Subject to and on the terms and conditions of this Agreement, the Contractor shall undertake the complete construction of the Project and observe, fulfill, comply with and perform all its obligations set out in this Agreement or arising hereunder.

10.19 The Contractor shall comply with all Applicable Laws and Applicable Permits (including renewals as required) in the performance of its obligations under this Agreement.

10.20 Save and except as otherwise provided in this Agreement or Applicable Laws, as the case may be, the Contractor shall, in discharge of all its obligations under this Agreement, conform with and adhere to Good Industry Practice at all times.

10.21 The Contractor shall remedy any and all loss or damage to the Project, occurring on or after the Appointed Date and until the date of Provisional Certificate, with respect to the Works completed prior to the issuance of the Provisional Certificate and/or Completion Certificate, with respect to the Works referred to in the Punch List, at its own cost, save and except to the extent that any such loss or damage shall have arisen from any default of the Authority or on account of a Force Majeure Event in which case the provisions of Clause 52 of Section-4 shall apply.

10.22 The Contractor shall remedy any and all loss or damage to the Project during the Operation and maintenance period at its own cost, to the extent that such loss or damage shall have arisen out of the reasons specified in Clause 10.90 of Article-10.

10.23 The Contractor shall, at its own cost and expense, in addition to and not in derogation of its obligations elsewhere set out in this Agreement:

- a. make, or cause to be made, necessary applications to the relevant Government Instrumentalities with such particulars and details as may be required for obtaining Applicable Permits set forth and obtain and keep in force and effect such Applicable Permits in conformity with Applicable Laws;
- b. procure, as required, the appropriate proprietary rights, licences, agreements and permissions for Materials, methods, processes, know-how and systems used or incorporated into the Project;
- c. make reasonable efforts to maintain harmony and good industrial relations among the personnel employed by it or its Sub-contractors in connection with the performance of its obligations under this Agreement;
- d. ensure and procure that its Sub-contractors comply with all Applicable Permits and Applicable Laws in the performance by them of any of the Contractor's obligations under this Agreement;
- e. always act in a manner consistent with the provisions of this Agreement and not cause

or fail to do any act, deed or thing, whether intentionally or otherwise, which may in any manner be violative of any of the provisions of this Agreement;

- f. support, cooperate with and facilitate the Authority in the implementation and operation of the Project in accordance with the provisions of this Agreement;
- g. ensure that the Contractor and its Sub-contractors comply with the safety and welfare measures for labour in accordance with Applicable Laws and Good Industry Practice;
- h. keep, on the Site, a copy of this Agreement, publications named in this Agreement, any modified Drawings, Documents relating to the Project, and Change of Scope Orders and other communications sent under this Agreement, and provide access to all these documents at all reasonable times to the Authority's Engineer and its authorized personnel;
- i. cooperate with other contractors employed by the Authority and personnel of any other public authority; and
- j. not interfere unnecessarily or improperly with the convenience of the public, or the access to and use and occupation of all the existing facilities within the Right of Way, irrespective of whether they are public or in the possession of the Authority or of others.

10.24 The Contractor shall undertake all necessary super intendence to plan, arrange, direct, manage, inspect and test the Works.

10.25 The bidder should not outsource the contract without approval from "Engineer-In-Charge" to the sub-contractor. An undertaking from the bidder to be submitted.

10.26 The Contractor shall ensure and procure that the personnel engaged by it or by its Sub-contractors for performance of its obligations under this Agreement are at all times appropriately qualified, skilled and experienced in their respective functions in conformity with Applicable Laws and Good Industry Practice.

10.27 The Authority's Engineer may, for reasons to be specified in writing, direct the Contractor to remove any member of the Contractor's or Sub-contractor's personnel from the Project. Provided that any such direction issued by the Authority's Engineer shall specify the reasons for the removal of such person.

10.28 The Contractor shall, on receiving a direction from the Authority's Engineer under the provisions of Clause 10.27, ensure and procure the removal of such person or persons from the Project with immediate effect. The Contractor shall further ensure that such persons have no further connection with the Project.

10.29 The Contractor shall not use the Project or any part thereof in any manner for branding or advertising purposes including for advertising any commercial product or services or companies.

10.30 The Contractor shall bear full risk in and take full responsibility for the care of Works, and of Materials, goods and equipment for incorporation therein, on and from the Appointed

Date and until the date of Provisional Certificate, with respect to the Works completed prior to the issuance of the Provisional Certificate, and/or Completion Certificate, with respect to the Works referred to in the Punch List, save and except to the extent that any such loss or damage shall have arisen from any default or neglect of the Authority.

10.31 The Contractor shall be responsible for procuring of all power, water and other services that it may require for the Project.

10.32 Except as otherwise specified in the Agreement:

- i. the Contractor accepts complete responsibility for having foreseen all difficulties and costs of successfully completing the Works;
- ii. the Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs without prior approval of Engineer In Charge; and
- iii. the Scheduled Completion Date shall not be adjusted to take account of any unforeseen difficulties or costs without prior approval of Engineer In Charge.

For the purposes of this Clause, unforeseeable difficulties include physical conditions like man-made or natural physical conditions including sub-surface and hydrological conditions which the Contractor encounters at the Site during execution of the Works.

10.33 The Authority shall, at its own cost and expense, undertake, comply with and perform all its obligations set out in this Agreement or arising hereunder.

10.34 The Authority shall be responsible for the correctness of the Scope of the Project, Project Facilities, Specifications and Standards and the criteria for Testing of the completed Works.

10.35 The Authority shall, upon receiving the Performance Security under Clause 4.1 of Article 4, provide to the Contractor:

- a. The land for construction in accordance with the provisions of Clause 8.1, within a period of 15 (fifteen) days from the date of this Agreement.
- b. Approve the duly vetted drawings submitted by the Contractor to enable the Contractor to start construction of Project in accordance with the Specifications and Standards, and subject to the terms and conditions specified in such approval, within a period of 30 (thirty) days from the Appointed Date; and
- c. All environmental and forest clearances as required under Clause 10.38.

10.36 Notwithstanding anything to the contrary contained in this Agreement, the Parties expressly agree that the aggregate Damages payable under this RFP shall not exceed 3% (three percent) of the Contract Price. For the avoidance of doubt, the Damages payable by the Authority under the aforesaid Clauses shall not be additive if they arise concurrently from more than one cause but relate to the same part of the Project.

10.37 The Authority agrees to provide support to the Contractor and undertakes to observe, comply with and perform, subject to and in accordance with the provisions of this Agreement and Applicable Laws, the following:

- a) upon written request from the Contractor, and subject to the Contractor complying with Applicable Laws, provide reasonable support to the Contractor in procuring Applicable Permits required from any Government Instrumentality for implementation of the Project;
- b) upon written request from the Contractor, provide reasonable assistance to the Contractor in obtaining access to all necessary infrastructure facilities and utilities, including water and electricity at rates and on terms no less favorable than those generally available to commercial customers receiving substantially equivalent services;
- c) procure that no barriers that would have a material adverse effect on Works are erected or placed on or about the Project by any Government Instrumentality or persons claiming through or under it, except for reasons of Emergency, national security or law and order;
- d) not do or omit to do any act, deed or thing which may in any manner be violative of any of the provisions of this Agreement;
- e) support, cooperate with and facilitate the Contractor in the implementation of the Project in accordance with the provisions of this Agreement; and
- f) upon written request from the Contractor and subject to the provisions of this RFP, provide reasonable assistance to the Contractor and its personnel or its Sub-contractors to obtain applicable work permits for the purposes of discharge by the Contractor or its Sub- contractors of their obligations under this Agreement and the agreements with the Sub- contractors.

10.38 All the clearances shall be taken by selected bidder from the competent authority such as Ministry of Environment and Forest (MoEF)/ Central Pollution Control Board/ State Pollution Control Board etc. at their own cost.

10.39 The Contractor represents and warrants to the Authority that:

- a) it is duly organized and validly existing under the laws of India, and has full power and authority to execute and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;
- b) it has taken all necessary corporate and other actions under Applicable Laws to authorize the execution and delivery of this Agreement and to validly exercise its rights and perform its obligations under this Agreement;
- c) this Agreement constitutes its legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, and its obligations under this Agreement will be legally valid, binding and enforceable obligations against it in accordance with the terms hereof;
- d) it is subject to the laws of India, and hereby expressly and irrevocably waives any immunity in any jurisdiction in respect of this Agreement or matters arising there under including any obligation, liability or responsibility hereunder;
- e) the information furnished in the Bid and as updated on or before the date of this Agreement is true and accurate in all respects as on the date of this Agreement;
- f) the execution, delivery and performance of this Agreement will not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of the terms of its memorandum and articles of association or any Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;

- g) there are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or inequity before any court or before any other judicial, quasi-judicial or other authority, the outcome of which may result in the breach of this Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform any of its obligations under this Agreement;
- h) it has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Instrumentality which may result in any material adverse effect on its ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement;
- i) it has complied with Applicable Laws in all material respects and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have a material adverse effect on its ability to perform its obligations under this Agreement;
- j) no representation or warranty by it contained herein or in any other document furnished by it to the Authority or to any Government Instrumentality in relation to Applicable Permits contains or will contain any untrue or misleading statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading;
- k) no sums, in cash or kind, have been paid or will be paid, by it or on its behalf, to any person by way of fees, commission or otherwise for securing the contract or entering into this Agreement or for influencing or attempting to influence any officer or employee of the Authority in connection therewith;

10.40 In the event that any occurrence or circumstance comes to the attention of either Party that renders any of its aforesaid representations or warranties untrue or incorrect, such Party shall immediately notify the other Party of the same. Such notification shall not have the effect of remedying any breach of the representation or warranty that has been found to be untrue or incorrect nor shall it adversely affect or waive any obligation of either Party under this Agreement.

10.41 Within ten (10) days from the appointed date the contractor shall:

- a) Appoint its representative, duly authorized to deal with authority in respect of all matters under or arising out of or relating to this agreement.
- b) Undertake & perform all such acts, deeds & things as may be necessary or required before commencement of works under and in accordance with this agreement applicable laws & applicable permits.
- c) Make its own arrangement for quarrying & procurement needed for the project under and in accordance with applicable laws and applicable permits.
- d) Within 20 days from the appointed date contractor shall submit a programme for construction of works and completion of all stages of construction and project milestone of the work as specified in the schedule. The contractor shall submit a revised programme whenever the previous programme is inconsistent with actual progress.
- e) Monthly cashflow forecast for the project.
- f) The contractor shall construct the project as per the duly approved design and drawings,

specification and standards set forth in RFP or in case of any change as approved by Engineer In Charge. The contractor shall be responsible for the correctness of all parts of the works & rectify any error in the position, levels, dimension and any engineering aspects with prior approval from the Engineer In Charge.

10.42 The Contractor shall, no later than 15(fifteen) business days from the occurrence of an event or circumstance specified in Clause 28 of Article 11, inform the Authority by notice in writing, stating in reasonable detail with supporting particulars, the event or circumstances giving rise to the claim for Time Extension in accordance with the provisions of this Agreement. Provided that the period of 15 (fifteen) business days shall be calculated from the date on which the Contractor became aware, or should have become aware, of the occurrence of such an event or circumstance.

Provided further that notwithstanding anything to the contrary contained in this Agreement, Time Extension shall be due and applicable only for the Works which are affected by the aforesaid events or circumstances and shall not in any manner affect the Project Completion Schedule for and in respect of the Works which are not affected thereby.

10.43 In the event of the failure of the Contractor to issue to the Authority's Engineer a notice in accordance with the provisions of Clause 10.42 of Article 10 within the time specified therein, the Contractor shall not be entitled to any Time Extension and shall forfeit its right to any such claims in future. For the avoidance of doubt, in the event of failure of the Contractor to issue notice as specified in this Clause 10.43, the Authority shall be discharged from all liability in connection therewith.

10.44 In respect of the work which the Authority's Engineer is entitled to examine, inspect, measure or test before it is covered up or put out of view or any part of the work is placed there on, the Contractor shall give notice to the Authority's Engineer whenever any such work is ready and before it is covered up. The Authority's Engineer shall then either carry out the examination, inspection or testing without unreasonable delay, or promptly give notice to the Contractor that the Authority's Engineer does not require to do so. Provided, however, that if any work is of a continuous nature where it is not possible or prudent to keep it uncovered or incomplete, the Contractor shall notify the schedule of carrying out such work to give sufficient opportunity, not being less than 3 (three) business days' notice, to the Authority's Engineer to conduct its inspection, measurement or test while the work is continuing. Provided further that in the event the Contractor receives no response from the Authority's Engineer within a period of 3 (three) business days from the date on which the Contractor's notice hereunder is delivered to the Authority's Engineer, the Contractor shall be entitled to assume that the Authority's Engineer would not undertake the said inspection and shall inform to Engineer In Charge.

10.45 If, as a result of an examination, inspection, measurement or testing, any Plant, Material, design or workmanship is found to be defective or otherwise not in accordance with the provisions of this Agreement, the Authority's Engineer may reject such Plant, Material, design or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the Defect and ensure that the rejected it recompiles with the requirements of this Agreement.

10.46 If the Authority's Engineer requires the Plant, Material, design or workmanship to be retested, the tests shall be repeated on the same terms and conditions, as applicable in each case. If the rejection and retesting cause the Authority to incur any additional costs, such costs shall be recoverable by the Authority from the Contractor and may be deducted by the Authority from any monies due to be paid to the Contractor.

10.47 The Contractor shall not be entitled to any extension of time on account of rectifying any Defect or retesting as specified in the Clause 10.45, 10.46 & 10.48 of Article 10

10.48 No examination, inspection, measurement or testing of any Plant, Material, design or workmanship by the Authority's Engineer or its failure to convey its observations or to examine, inspect, measure or test shall relieve the Contractor of its obligations and liabilities under this Agreement in any manner nor shall the Authority be liable for the same in any manner.

10.49 Notwithstanding any previous test or certification, the Authority's Engineer may instruct the Contractor to:

1. remove from the Site and replace any Plant or Materials which are not in accordance with the provisions of this Agreement;
2. remove and re-execute any work which is not in accordance with the provisions of this Agreement and the Specification and Standards; and
3. execute any work which is urgently required for the safety of the Project, whether because of an accident, unforeseeable event or otherwise; provided that in case of any work which is required on account of a Force Majeure Event, the provisions of Clause 52 of Section-4 shall apply.

10.50 If the Contractor fails to comply with the instructions issued by the Authority's Engineer under Clause 10.49, within the time specified in the Authority's Engineer's notice or as mutually agreed, the Authority's Engineer may advise the Authority to have the work executed by another agency. The cost so incurred by the Authority for undertaking such work shall, without prejudice to the rights of the Authority to recover Damages in accordance with the provisions of this Agreement, be recoverable from the Contractor and may be deducted by the Authority from any monies due to be paid to the Contractor.

10.51 Without prejudice to the provisions of this RFP, in the event the Contractor does not achieve any of the Project Financial Progress Milestones within the time period stipulated in Schedule I then in addition to the penalty deductions from stage payments, the Authority's Engineer shall have reasonably determined that the rate of progress of Works is such that Completion of the Project is not likely to be achieved by the end of the Scheduled Completion Date, it may notify the same to the Contractor, and the Contractor shall, within 15 (fifteen) days of such notice, by a communication inform the Authority's Engineer in reasonable detail about the steps it proposes to take to expedite progress and the period within which it shall achieve the Project Completion Date.

10.52 The Contractor shall hand over to the Authority's Engineer a copy of all its quality

control records and documents before the Completion Certificate is issued pursuant to the clause of this RFP.

10.53 Upon recommendation of the Authority's Engineer to this effect, or on its own volition in cases of emergency or urgency, the Authority may by notice require the Contractor to suspend forthwith the whole or any part of the Works if, in the reasonable opinion of the Authority's Engineer or the Authority, as the case may be, such work threatens the safety of the Users and or other persons on or about the Project. Provided, however, that in case of an emergency, the Authority may *suo moto* issue the notice referred to herein above.

10.54 The Contractor shall, pursuant to the notice under Clause 10.53 of Article 10, suspend the Works or any part thereof for such time and in such manner as may be specified by the Authority and thereupon carry out remedial measures to secure the safety of suspended works, the Users, other persons and vehicles on or about the Project including pedestrians. The Contractor may by notice require the Authority's Engineer to inspect such remedial measures forthwith and make a report to the Authority recommending whether or not the suspension here under may be revoked. Upon receiving the recommendations of the Authority's Engineer, the Authority shall either revoke such suspension or instruct the Contractor to carry out such other and further remedial measures as may be necessary in the reasonable opinion of the Authority, and the procedure set forth in the Clause 10.53, 10.54, 10.55 & 10.56 shall be repeated until the suspension hereunder is revoked.

10.55 Subject to the provisions of Clause 52 of Section-4, all reasonable costs incurred for maintaining and protecting the Works or part thereof during the period of suspension (the "Preservation Costs"), shall be borne by the Contractor; provided that if the suspension has occurred as a result of any breach of this Agreement by the Authority, the Preservation Costs shall be borne by the Authority.

10.56 If suspension of Works is for reasons not attributable to the Contractor, the Authority's Engineer shall determine any Time Extension to which the Contractor is reasonably entitled in accordance with the provisions of Clause 28 of Article 11.

10.57 The Contractor shall ensure that the Construction, Materials and workmanship are in accordance with the requirements specified in this Agreement, Specifications and Standards and Good Industry Practice.

10.58 The Contractor warrants that all Materials shall be new, unused, not reconditioned and in conformity with Specification and Standards, Applicable Laws and Good Industry Practice, and that the Contractor shall not use any materials which are generally recognized as being deleterious under Good Industry Practice.

10.59 The Contractor shall establish a quality control mechanism to ensure compliance with the provisions of this Agreement (the "**Quality Assurance Plan**" or "**QAP**").

10.60 The Contractor shall, within 30 (thirty) days of the Appointed Date, submit to the Authority's Engineer its Quality Assurance Plan which shall include the following:

- i) organization, duties and responsibilities, procedures, inspections and documentation;
- ii) quality control mechanism including sampling and testing of Materials, test frequencies, standards, acceptance criteria, testing facilities, reporting, recording and interpretation of test results, approvals, check list for site activities, and proforma for testing and calibration in accordance with the Specifications and Standards and Good Industry Practice; and
- iii) Internal quality audit system.

The Authority's Engineer shall convey its comments to the Contractor within a period of 21 (twenty-one) days of receipt of the QAP stating the modifications, if any, required, and the Contractor shall incorporate those in the QAP to the extent required for conforming with the provisions of the Clause 10.59 & 10.60.

10.61 The Contractor shall procure all documents, apparatus and instruments, fuel, consumables, water, electricity, labour, Materials, samples, and qualified personnel as are necessary for examining and testing the Project Assets, Materials and workmanship in accordance with the Quality Assurance Plan.

10.62 The cost of testing of Construction, Materials and workmanship under the clause 10.57 to clause 10.72 shall be borne by the Contractor.

10.63 The Contractor shall, at least 15 (fifteen) days prior to the commencement of work, submit to the Authority's Engineer for review the methodology proposed to be adopted for executing the Works, giving details of equipment to be deployed, traffic management and measures for ensuring safety. The Authority's Engineer shall complete the review and convey its comments, if any, to the Contractor within a period of 10 (ten) days from the date of receipt of the proposed methodology from the Contractor.

10.64 The Authority or any representative authorized by the Authority in its behalf shall inspect and review the progress and quality of the Works and issue appropriate directions to the Contractor for taking remedial action in the event the Works are not in accordance with the provisions of this Agreement.

10.65 At any time during construction, the Authority may appoint an external technical auditor to conduct an audit of the quality of the Works. The findings of the audit, to the extent accepted by the Authority, shall be notified to the Contractor and the Authority's Engineer for taking remedial action in accordance with this Agreement. The Contractor shall provide all assistance as may be required by the auditor in the conduct of its audit hereunder. Notwithstanding anything contained in this Clause 10.65, the external technical audit shall not affect any obligations of the Contractor or the Authority's Engineer under this Agreement.

10.66 The Authority shall have the right to inspect the records of the Contractor relating to the Works.

10.67 During the Construction Period, the Contractor shall, no later than 10 (ten) days after the close of each month, furnish to the Authority's Engineer a monthly report on the progress of Works and shall promptly give such other relevant information as may be required by the

Authority's Engineer.

10.68 The Authority's Engineer and its authorized representative shall at all times:

- i) have full access to all parts of the Site and to all places from which natural materials are being obtained for use in the Works; and
- ii) During production, manufacture and construction at the Site and at the place of production, been titled to examine, inspect, measure and test the Materials and workmanship, and to check the progress of manufacture of Materials.

10.69 The Contractor shall give the Authority's Engineer and its authorized agents access, facilities and safety equipment for carrying out their obligations under this Agreement.

10.70 The Authority's Engineer shall submit a monthly inspection report (the "**Inspection Report**") to the Authority and the Contractor bringing out there results of inspections and the remedial action taken by the Contractor in respect of Defects or deficiencies. For the avoidance of doubt, such inspection or submission of Inspection Report by the Authority's Engineer shall not relieve or absolve the Contractor of its obligations and liabilities under this Agreement in any manner whatsoever.

10.71 The Contractor shall submit the following samples of Materials and relevant information to the Authority's Engineer for review:

- i) manufacturer's test reports and standard samples of manufactured Materials; and
- ii) Samples of such other Materials as the Authority's Engineer may require.

10.72 For determining that the Works conform to the Specifications and Standards, the Authority's Engineer shall require the Contractor to carry out or cause to be carried out tests, at such time and frequency and in such manner as specified in this Agreement, and in accordance with Good Industry Practice for quality assurance. The Contractor shall, with due diligence, carry out all the tests in accordance with the Agreement and furnish the results thereof to the Authority's Engineer. Of the total tests for each category or type to be undertaken by the Contractor under the provisions of this Agreement and Good Industry Practice, the Authority's Engineer shall

- (a) carry out or cause to be carried out, test checks equal to about 10% (ten percent) of the number of the tests required to be undertaken by the Contractor; and
- (b) witness or participate in at least 10% (ten percent) of the number of such tests conducted or caused to be conducted by the Contractor.

10.73 All items in the Punch List shall be completed by the Contractor in accordance with the provisions of this Agreement. For any delay in their completion other than for the reasons attributable to the Authority or due to Force Majeure, the Authority shall be entitled to recover Damages from the Contractor in accordance with the provisions of this Agreement.

10.74 Upon receiving the Completion Certificate (Schedule-K), the Contractor shall remove its equipment, materials, debris and temporary works from the Site within a period of 30 (thirty) days thereof, failing which the Authority may remove or cause to be removed, such

equipment, materials, debris and temporary works and recover from the Contractor an amount equal to 120% (one hundred and twenty percent) of the actual cost of removal incurred by the Authority.

10.75 The Authority may, notwithstanding anything to the contrary contained in this Agreement, require the Contractor to make modifications or alterations to the Works (“**Change of Scope**”) before the issue of the Completion Certificate either by giving an instruction or by requesting the Contractor to submit a proposal for Change of Scope involving additional cost or reduction in cost. Any such Change of Scope shall be made and valued in accordance with the provisions of the Clause 10.75 to 10.86 of this Article.

10.76 Change of Scope shall mean:

- 1) change in specifications of any item of Works;
- 2) omission of any work from the Scope of the Project; provided that, the Authority shall not omit any work under this Clause in order to get it executed by any other entity; or
- 3) Any additional work, Plant, Materials or services which are not included in the Scope of the Project, including any associated Tests on completion of construction.

10.77 If the Contractor determines at any time that a Change of Scope will, if adopted,

- (i) Accelerate completion,
- (ii) reduce the cost to the Authority of executing, maintaining or operating the Project,
- (iii) improve the efficiency or value to the Authority of the completed Project, or
- (iv) otherwise, be of benefit to the Authority, it shall prepare a proposal with relevant details at its own cost.

The Contractor shall submit such proposal, supported with the relevant details including the amount of reduction in the Contract Price, if any, to the Authority to consider such Change of Scope. The Authority shall, within 15 (fifteen) days of receipt of such proposal, either accept such Change of Scope with modifications, if any, and initiate proceedings therefore in accordance with this Clause 10.75 to 10.86 of this Article or reject the proposal and inform the Contractor of its decision. For the avoidance of doubt, the Parties agree that the Contractor shall not undertake any Change of Scope without a Change of Scope Order being issued by the Authority, save and except any Works necessary for meeting any Emergency.

10.78 In the event of the Authority determining that a Change of Scope is necessary, it may direct the Authority’s Engineer to issue to the Contractor a notice specifying in reasonable detail the works and services contemplated there under (the “**Change of Scope Notice**”).

10.79 Upon receipt of a Change of Scope Notice, the Contractor shall, with due diligence, provide to the Authority and the Authority’s Engineer such information as is necessary, together with preliminary documentation in support of:

- a) the impact, if any, which the Change of Scope is likely to have on the Project Completion Schedule if the works or services are required to be carried out during the Construction Period; and
- b) the options for implementing the proposed Change of Scope and the effect, if any, each such option would have on the costs and time thereof, including the following details:
- c) break down of the quantities, unit rates and cost for different items of work;

- d) Proposed modifications, if any, to the Project Completion Schedule of the Project. For the avoidance of doubt, the Parties expressly agree that, subject to the provisions of Clause 10.85, the Contract Price shall be increased or decreased, as the case may be, on account of Change of Scope.

10.80 The Contractor's quotation of costs for the Change of Scope shall be determined on the following principles:

- a) For works of similar nature compared to the Works being executed, the quotation shall be based on the rates for different items of work to cover the entire component inclusive of all labour, Materials, equipment, incidentals, overheads and profit derived in accordance with the provisions of RFP Clause; and the price adjustment in accordance with RFP Clause shall apply to the rates so worked out.
- b) For works not similar in nature to the Works being executed, the cost of work shall be derived on the basis of latest Bihar BCD / RCD SOR and Standard Data Book.

10.81 Upon reaching an agreement, the Authority shall issue an order (the “**Change of Scope Order**”) requiring the Contractor to proceed with the performance thereof. In the event that the Parties are unable to agree, the Authority may:

- a) Issue a Change of Scope Order requiring the Contractor to proceed with the performance thereof at the rates and conditions approved by the Authority till the matter is resolved in accordance with Article 9; or
- b) Proceed in accordance with RFP.

10.82 The provisions of this Agreement, in so far as they relate to Works and Tests, shall apply to the works undertaken by the Contractor under this Clause 10.75 to 10.86 of this Article.

10.83 Payment for Change of Scope shall be as per the stage of payment defined by the Authority.

10.84 No Change of Scope shall be executed unless the Authority has issued the Change of Scope Order save and except any Works necessary for meeting any Emergency.

10.85 Unless the Parties mutually agree to the contrary, the total value of all Change of Scope Orders shall not exceed 10% (ten percent) of the Contract Price.

10.86 Notwithstanding anything to the contrary in this Clause 10.75 to 10.86 of this Article, no change arising from any default of the Contractor in the performance of its obligations under this Agreement shall be deemed to be Change of Scope, and shall not result in any adjustment of the Contract Price or the Project Completion Schedule.

10.87 The Contractor shall be responsible for all the Defects and deficiencies, in the Project or any Section thereof, till the expiry of the Operation and Maintenance Period of five years.

10.88 The implementing agency shall undertake maintenance of the completed works/components including maintenance, minor and major repairs of civil infrastructure

during construction period till the completion of entire work and during the Operation & Maintenance period of 5 years.

10.89 Without prejudice to the provisions of Clause 10.89 the Contractor shall repair or rectify all Defects and deficiencies observed by the Authority's Engineer/Authority nominee during the Operation and Maintenance Period within a period of 15 (fifteen) days from the date of notice issued by the Authority's Engineer in this behalf, or within such reasonable period as may be determined by the Authority's Engineer at the request of the Contractor, in accordance with Good Industry Practice.

10.90 For the avoidance of doubt, any repair or rectification under taken in accordance with the provisions of Clause 10.89, including any additional tests, shall be carried out by the Contractor at its own risk and cost, to the extent that such rectification or repair is attributable to:

- a) the design of the Project;
- b) Works, Materials or workmanship not being in accordance with this Agreement and the Specifications and Standards;
- c) improper maintenance during construction of the Project by the Contractor; or
- d) Failure by the Contractor to comply with any other obligation under this agreement.

10.91 In the event that the Contractor fails to repair or rectify such Defect or deficiency within the period specified in Clause 10.89, the Authority shall be entitled to get the same repaired, rectified or remedied at the Contractor's cost so as to make the Project conform to the Specifications and Standards and the provisions of this Agreement. All costs consequent thereon shall, after due consultation with the Authority and the Contractor, be determined by the Authority's Engineer. The cost so determined, and an amount equal to 20% (twenty percent) of such cost as Damages, shall be recoverable by the Authority from the Contractor and may be deducted by the Authority from any monies due to the Contractor.

10.92 The Operation and Maintenance Period shall be deemed to be extended till the identified Defects under Clause 10.89 have been remedied.

10.93 Any Materials or Works with Operation and Maintenance Period identified under Clause 10.89 and replaced or repaired during the Operation and Maintenance Period or the extended Operation and Maintenance Period, as the case may be, would be further warranted for a period of twelve (12) months from the date of completion of such repair or replacement.

10.94 The Contractor shall upon termination or expiry of this Agreement, or upon expiry of the Operation and Maintenance Period, assign any outstanding benefit in respect of any subcontract or any warranty from any subcontractor, to the Authority or to such other person as the Authority may direct.

10.95 As per stage payment bill.

10.96 Within 15 (fifteen) days of the receipt of the Stage Payment Statement referred in RFP, the Authority's Engineer shall determine and shall deliver to the Authority and the

Contractor an IPC certifying the amount due and payable to the Contractor, after adjusting the payments already released to the Contractor against the said statement. For the avoidance of doubt, the Parties agree that the Payment Certificate shall specify all the amounts that have been deducted and the reasons therefore.

10.97 In cases where there is a difference of opinion as to the value of any stage of work, the opinion of the Authority's Engineer shall prevail and stage payments shall be made to the Contractor on that basis; provided that the foregoing shall be without prejudice to the Contractor's right to raise a Dispute.

10.98 The Authority's Engineer may, for reasons to be recorded, withhold from payment:

- a) The estimated value of work or obligation that the Contractor has failed to perform in accordance with this Agreement and in respect of which the Authority's Engineer had notified the Contractor; and
- b) The estimated cost of rectification of any Works which have not been constructed in accordance with this Agreement.

10.99 Payment by the Authority hereunder shall be deemed to be provisional and shall not be construed as the Authority's acceptance, approval, consent or satisfaction with the work done.

10.100 In the event the amounts released by the Authority under Clause 10.95 exceed the amount finally determined by the Authority's Engineer pursuant to Clauses 10.96 to 10.98, the difference thereof shall be accounted for in the next IPC.

10.101 If as a result of Change in Law, the Contractor suffers any additional costs in the execution of the Works or in relation to the performance of its other obligations under this Agreement, the Contractor shall, within 15 (fifteen) days from the date it becomes reasonably aware of such addition in costs, notify the Authority with a copy to the Authority's Engineer of such additional costs due to Change in Law.

10.102 If as a result of Change in Law, the Contractor benefits from any reduction in costs for the execution of this Agreement or in accordance with the provisions of this Agreement, either Party shall, within 15 (fifteen) days from the date it becomes reasonably aware of such reduction in costs, notify the other Party with a copy to the Authority's Engineer of such reduction in costs due to Change in Law.

10.103 The Authority's Engineer shall, within 15 (fifteen) days from the date of receipt of notice from the Contractor or the Authority, as the case may be, determine any addition or reduction to the Contract Price, as the case may be, due to the Change in Law.

10.104 The Contractor shall effect and maintain at its own cost the insurances specified in Schedule-N and as per the requirements under Applicable Laws.

10.105 Notwithstanding anything contained in this Agreement, it is hereby expressly agreed between the Parties that the Authority shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor

or Sub-contractor, save and except as for death or injury resulting from any act, omission or default of the Authority, its agents or servants. The Contractor shall indemnify and keep indemnified the Authority from and against all such claims, proceedings, damages, costs, charges, and expenses whatsoever in respect of the above save and except for those acts, omissions or defaults for which the Authority shall be liable.

10.106 The Contractor shall effect and maintain during the Agreement such insurances as may be required to insure the Contractor's personnel and any other persons employed by it on the Project from and against any liability incurred in pursuance of the Clause 10.104, 10.105 & 10.106 Provided that for the purposes of this Clause – 10.106, the Contractor's personnel/any person employed by the Contractor shall include the Sub-contractor and its personnel. Provided further that in respect of any persons employed by any Sub-contractor, the Contractor's obligations to insure as aforesaid under this Clause – 10.106 shall be discharged if the Sub-contractor shall have insured against any liability in respect of such persons in such manner that the Authority is indemnified under the policy. The Contractor shall require such Sub-contractor to produce before the Authority, when required, such policy of insurance and the receipt for payment of the current premium within 15 (fifteen) days of such demand being made by the Authority.

10.107 Upon occurrence of a Contractor Default, the Authority shall be entitled, without prejudice to its other rights and remedies under this Agreement including its rights of Termination hereunder, to (a) suspend carrying out of the Works or any part thereof, and (b) carryout such Works itself or authorize any other person to exercise or perform the same on its behalf during such suspension (the “**Suspension**”). Suspension hereunder shall be effective forthwith upon issue of notice by the Authority to the Contractor and may extend up to a period not exceeding 90 (ninety) days from the date of issue of such notice.

10.108 During the period of Suspension hereunder, all rights and liabilities vested in the Contractor in accordance with the provisions of this Agreement shall continue to vest in the Contractor and all things done or actions taken, including expenditure incurred by the Authority for discharging the obligations of the Contractor under and in accordance with this Agreement shall be deemed to have been done or taken for and on behalf of the Contractor and the Contractor undertakes to indemnify the Authority for all costs incurred during such period. The Contractor hereby licenses and sub-licenses respectively, the Authority or any other person authorized by it under Clause 10.107 to use during Suspension, all Intellectual Property belonging to or licensed to the Contractor with respect to the Project and its design, engineering, construction, and which is used or created by the Contractor in performing its obligations under the Agreement.

10.109 In the event that the Authority shall have rectified or removed the cause of Suspension within a period not exceeding 60 (sixty) days from the date of Suspension, it shall revoke the Suspension forthwith and restore all rights of the Contractor under this Agreement. For the avoidance of doubt, the Parties expressly agree that the Authority may, in its discretion, revoke the Suspension at any time, whether or not the cause of Suspension has been rectified or removed hereunder.

10.110 Upon the Contractor having cured the Contractor Default within a period not exceeding 60 (sixty) days from the date of Suspension, the Authority shall revoke the Suspension forthwith and restore all rights of the Contractor under this Agreement.

ARTICLE 11 DEFINITIONS

11.1 Definitions

In this Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

“Accounting Year” means the financial year commencing from the first day of April of any calendar year and ending on the thirty-first day of March of the next calendar year;

“Advance Payment” shall have the meaning as set forth in Clause 47 of Article 11;

“Affiliate” means, in relation to either Party {and/or Members}, a person who controls, is controlled by, or is under the common control with such Party {or Member} (as used in this definition, the expression “control” means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person, whether by operation of law or by contract or otherwise);

“Agreement” means this Agreement, its Recitals, the Schedules hereto and any amendments thereto made in accordance with the provisions contained in this Agreement;

“Applicable Laws” means all laws, brought into force and effect by GOI or the State Government(s) including rules, regulations and notifications made there under, and judgments, decrees, injunctions, writs and orders of any court of record, applicable to this Agreement and the exercise, performance and discharge of the respective rights and obligations of the Parties hereunder, as may be in force and effect during the subsistence of this Agreement;

“Applicable Permits” means all clearances, licenses, permits, authorizations, no objection certificates, consents, approvals and exemptions required to be obtained or maintained under Applicable Laws in connection with the construction of the Project during the subsistence of this Agreement;

“Appointed Date” means date of this Agreement.

“Arbitration Act” means the Arbitration and Conciliation Act, 1996 and shall include modifications to or any re-enactment thereof, as in force from time to time;

“Authority” shall have the meaning attributed thereto in the array of Parties hereinabove as set forth in the Recitals;

“Authority’s Engineer/Engineer” shall have the meaning Representative acting on behalf of the Authority;

“Authority Representative” means such person or persons as may be authorized in writing by the Authority to act on its behalf under this Agreement and shall include any person or persons having authority to exercise any rights or perform and fulfill any obligations of the Authority under this Agreement;

“Bank” means a bank in corporate in India and having a minimum net worth of Rs.1,000 crore (Rupees one thousand crore) or any other bank acceptable to the Authority;

“Bank Rate” means the rate of interest specified by the Reserve Bank of India from time to time in pursuance of section 49 of the Reserve Bank of India Act, 1934 or any replacement of such Bank Rate for the time being in effect;

“Base Date” means the last date of that calendar month, which date precedes the Bid Due Date by at least 28 (twenty-eight) days;

“Bid” means the documents in their entirety comprised in the bid submitted by the [selected bidder] in response to the Request for Proposals in accordance with the provisions thereof and **“Bids”** shall mean the bids submitted by any and all pre-qualified bidders;

“Bid Security” means the bid security provided by the Contractor to the Authority in accordance with the Request for Proposals, and which is to remain in force until substituted by the Performance Security;

“CPI (IW)” means the Consumer Price Index for Industrial Workers as published by the Labour Bureau, Government of India and shall include any index which substitutes the CPI (IW), and any reference to CPI (IW) shall, unless the context otherwise requires, be construed as a reference to the CPI (IW) published for the period ending with the preceding month, save and except that for the purposes of annual revision of the Fixed Charge in accordance with the provisions of RFP, the revision due on April 1 of any year shall be computed with reference to CPI (IW) as on January 31 of that year;

“Change in Law” means the occurrence of any of the following after the Base Date:

- i. the enactment of any new Indian law;
- ii. the repeal, modification or re-enactment of any existing Indian law;
- iii. the commencement of any Indian law which has not entered into effect until the Base Date;
- iv. a change in the interpretation or application of any Indian law by a judgment of a court of record which has become final, conclusive and binding, as compared to such interpretation or application by a court of record prior to the Base Date; or
- v. any change in the rates of any of the Taxes or royalties that have a direct effect on the Project;

“Change of Scope” shall have the meaning as set forth in Clause 10.75, 10.76, 10.77 of Article 10;

“Change of Scope Notice” shall have the meaning as set forth in Clause 10.78 of Article 10;

“Change of Scope Order” shall have the meaning as set forth in Clause 10.81 of Article 10;

“Completion Certificate” shall have the meaning as set forth in Schedule K;

“Joint Venture” means the Joint Venture of entities which have formed a joint venture for implementation of this Project;

“Construction” shall have the meaning as set forth in Clause 1.2.1 (f);

“Construction Period” means the period commencing from the Appointed Date and ending on the date of the Completion Certificate;

“Contractor” shall have the meaning attributed thereto in the array of Parties hereinabove as set forth in the Recitals;

“Contractor Default” shall have the meaning as set forth in Clause 4.3 of Article 4;

“Cure Period” means the period specified in this Agreement for curing any breach or default of any provision of this Agreement by the Party responsible for such breach or default and shall:

- ☐ commence from the date on which a notice is delivered by one Party to the other Party asking the latter to cure the breach or default specified in such notice;
- ☐ not relieve any Party from liability to pay Damages or compensation under the provisions of this Agreement; and

☐ not in any way be extended by any period of Suspension under this Agreement; provided that if the cure of any breach by the Contractor requires any reasonable action by the Contractor that must be approved by the Authority or the Authority's Engineer hereunder, the applicable Cure Period shall be extended by the period taken by the Authority or the Authority's, Engineer to accord their approval;

"Damages" shall have the meaning as set forth in paragraph of Clause 1.2.1;

"Defect" means any defect or deficiency in Construction of the Works or any part thereof, which does not conform with the Specifications and Standards;

"Operation & Maintenance Period" shall have the meaning as set forth in Clause 10.88 of Article 10;

"Dispute" shall have the meaning as set forth in Clause 9.1 of Article 9;

"Dispute Resolution Procedure" means the procedure for resolution of Disputes as set forth in Article 9;

"Drawings" means all of the drawings, calculations and documents pertaining to the Project as set forth in Schedule-H, and shall include 'as built' drawings of the Project;

"Document" or "Documentation" means documentation in printed or written form, or in tapes, discs, drawings, computer programmes, writings, reports, photographs, films, cassettes, or expressed in any other written, electronic, audio or visual form;

"Emergency" means a condition or situation that is likely to endanger the safety or security of the individuals on or about the Project, including Users thereof, or which poses an immediate threat of material damage to the Works or any of the Project Assets;

"Encumbrances" means, in relation to the Project, any encumbrances such as mortgage, charge, pledge, lien, hypothecation, security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations, and shall include any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Project, where applicable herein.

"Force Majeure" or "Force Majeure Event" shall have the meaning ascribed to it in Clause 52 of Section-4;

"GAD" or "General Arrangement Drawings" shall have the meaning as set forth in Clause 10.35;

"GOI" or "Government" means the Government of India;

"Good Industry Practice" means the practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability and prudence which are generally and reasonably expected from a reasonably skilled and experienced contractor engaged in the same type of undertaking as envisaged under this Agreement and which would be expected to result in the performance of its obligations by the Contractor in accordance with this Agreement, Applicable Laws and Applicable Permits in reliable, safe, economical and efficient manner;

"Government Instrumentality" means any department, division or sub-division of the Government or the State Government and includes any commission, board, authority, agency or municipal and other local authority or statutory body, including panchayat, under the control of the Government or the State Government, as the case may be, and having jurisdiction over all or any part of the Project or the performance of all or any of the services or obligations of the Contractor under or pursuant to this Agreement;

"Indemnified Party" means the Party entitled to the benefit of an indemnity pursuant to Article 8;

“Indemnifying Party” means the Party obligated to indemnify the other Party pursuant to Article 8;

“Indirect Political Event” shall have the meaning as set forth in Clause 52 of Section-4;

“Insurance Cover” means the aggregate of the maximum sums insured under the insurances taken out by the Contractor pursuant to Clause 13 Article 11, and includes all insurances required to be taken out by the Contractor under RFP Clauses but not actually taken, and when used in the context of any act or event, it shall mean the aggregate of the maximum sums insured and payable or deemed to be insured and payable in relation to such act or event;

“Intellectual Property” means all patents, trademarks, service marks, logos, get-up, trade names, internet domain names, rights in designs, blue prints, programmes and manuals, drawings, copyright (including rights in computer software), database rights, semiconductor, topography rights, utility models, rights in know-how and other intellectual property rights, in each case whether registered or unregistered and including applications for registration, and all rights or forms of protection having equivalent or similar effect anywhere in the world;

“Interim Payment Certificate” or **“IPC”** means the interim payment certificate issued by the Authority’s Engineer for payment to the Contractor in respect of Contractor’s claims for payment raised in accordance with the provisions of this Agreement;

“LOA” or **“Letter of Acceptance”** means the letter of acceptance referred to in Recital (D);

“Lead Member” shall, in the case of a Joint Venture, mean the member of such Joint Venture who shall have the authority to bind the Contractor and each member of the Joint Venture; and shall be deemed to be the Contractor for the purposes of this Agreement;

“Manuals” shall mean the manuals;

“Material Adverse Effect” means a material adverse effect of any act or event on the ability of either Party to perform any of its obligations under and in accordance with the provisions of this Agreement and which act or event causes a material financial burden or loss to either Party;

“Materials” are all the supplies used by the Contractor for incorporation in the Works of the Project;

“Non-Political Event” shall have the meaning as act of God, epidemic, extremely adverse weather conditions, lightning, earthquake, landslide, cyclone, flood, volcanic eruption, chemical etc.

“Parties” means the parties to this Agreement collectively and **“Party”** shall mean any of the parties to this Agreement individually;

“Performance Security” shall have the meaning as set forth in Article 4;

“Plant” means the apparatus and machinery intended to form or forming part of the Works;

“Political Event” shall have the meaning as set forth in Clause 52;

“Programme” shall have the meaning as set forth in Clause 10.41;

“Project” means the construction of the Project in accordance with the provisions of this Agreement, and includes all works, services and equipment relating to or in respect of the Scope of the Project;

“Project Assets” means all physical and other assets relating to (a) tangible assets such as civil works and equipment including [foundations, embankments, pavements, road surface, interchanges, bridges, culverts, road over-bridges, drainage works, traffic signals, sign boards, kilometer-stones, electrical systems, communication systems, rest areas, relief

centres, maintenance depots and administrative offices]; and (b) Project Facilities situated on the Site;

“Project Completion Date” means the date on which the last Provisional Certificate is issued;

“Project Completion Schedule” means the progressive Project Milestones set forth in Schedule-I for completion of the Project on or before the Scheduled Completion Date;

“Project Facilities” means all the amenities and facilities to be constructed on the Site,

“Project Milestone” means the project milestone as set forth in Schedule-I and includes the Scheduled Completion Date;

“Provisional Certificate” shall have the meaning as set forth in Schedule K;

“Punch List” shall have the meaning a list of outstanding work;

“Quality Assurance Plan” or **“QAP”** shall have the meaning as set forth in Clause 10.59;

“Re.”, **“Rs.”** or **“Rupees”** or **“Indian Rupees”** means the lawful currency of the Republic of India;

“Request for Proposals” or **“RFP”** shall have the meaning as set forth in Recital (C);

“Retention Money” shall have the meaning as set forth in Clause 4.5;

“Scheduled Completion Date” shall be the date as set forth in ITB;

“Scope of the Project” shall have the meaning as set forth in Clause 2.1;

“Section” means a part of the Project;

“Specifications and Standards” means the specifications and standards relating to the quality, quantity, capacity and other requirements for the Project and any modifications thereof, or additions thereto, as included in the design and engineering for the Project submitted by the Contractor to, and expressly approved by, the Authority;

“State” means the State or the Union Territory, as the case may be, in which the headquarters of the Authority are situate and **“State Government”** means the government of that State or Union Territory;

“Structures” means an elevated [road or a flyover], as the case may be;

“Sub-contractor” means any person or persons to whom a part of the Works has been subcontracted by the Contractor and the permitted legal successors in title to such person, but not an assignee to such person;

“Suspension” shall have the meaning as set forth in Clause 10.107;

“Taxes” means any Indian taxes including excise duties, customs duties, value added tax, sales tax, local taxes, cess and any impost or surcharge of like nature (whether Central, State or local) on the goods, Materials, equipment and services incorporated in and forming part of the Project charged, levied or imposed by any Government Instrumentality, but excluding any interest, penalties and other sums in relation thereto imposed on any account whatsoever. For the avoidance of doubt, Taxes shall not include taxes on corporate income;

“Termination” means the expiry or termination of this Agreement;

“Termination Notice” means the communication issued in accordance with this Agreement by one Party to the other Party terminating this Agreement;

“Termination Payment” means the amount payable by either Party to the other upon Termination;

“Tests” means the tests set forth in Schedule-J to determine the completion of Works in accordance with the provisions of this Agreement;

“Time Extension” shall have the meaning as set forth in Clause 47 of Article 11;

“User” means a person who uses or intends to use the Project or any part thereof in

accordance with the provision of this Agreement and Applicable Laws;

“Valuation of Unpaid works” shall have the meaning as set forth in Clause 21.5.1;

“WPI” means the wholesale price index for various commodities as published by the Ministry of Commerce and Industry, GOI and shall include any index which substitutes the WPI, and any reference to WPI shall, unless the context otherwise requires, be construed as a reference to the WPI published for the period ending with the preceding month; and

“Works” means all works including survey and investigation, design, engineering, procurement, construction, Plant, Materials, temporary works and other things necessary to complete the Project in accordance with this Agreement.

Definitions

11.2 A. General

1.Definition: Terms which are defined in the Contract data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

Bill of Quantities means the indicative Bill of Quantities forming part of the BID.

The **Completion Date** is the date of completion of the Works as certified by the Engineer in accordance with RFP.

The Contract is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in RFP.

The Contract Data defines the documents and other information which comprise the Contract.

The Contractor is a person or corporate body whose Bid to carry out the Works has been accepted by the Employer

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer and includes Technical and Financial bids.

The **Contract Price** is the price state in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; **months** are calendar months.

A **Defect** is any part of the Works not completed in accordance with the Contract.

The **Defects Liability Period/Operation & Maintenance Period** is the period named in the contract Data and calculated from the Completion Date.

The **Employer** is **Chief Executive Officer, Bhagalpur Smart City Limited, Bhagalpur** who will employ the contractor to carry out the Works.

The **Employer's representative** will be the **Chief Executive Officer, Bhagalpur Smart City Limited, Bhagalpur** concerned to be notified by the Employer. The Employer's representative will act on behalf of Employer.

The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer) who is responsible for supervising the Contractor, administering the Contract, certifying payments due to the Contractor issuing and valuing Variations to the Contract, awarding extensions of time. *

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works.

The Intended Completion Date is specified in the Contract Data. The Intended Completion date may be revised only by the Engineer by issuing an extension of time.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

Site Investigation Reports are those which were included in the Bidding documents and are factual interpretative reports about the surface and the sub-surface conditions at the site.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer.

The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

Temporary Works are works designed, consulted, installed, and removed by the contractor which are needed for construction or installation of the Works.

A **Variation** is an instruction given by the Engineer, which varies the works.

The Works are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

2. Interpretation

2.1. In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about the Conditions of Contract.

2.2. If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion date and Intended Completion date for the whole of the works).

2.3. The documents forming the Contract shall be interpreted in the following order of priority:

- (1) Agreement
- (2) Letter of Acceptance, notice to proceed with the works
- (3) Contractor's Bid
- (4) Contract Data
- (5) Conditions of Contract including Special Conditions of Contract
- (6) Specifications
- (7) Drawings
- (8) Approved Bill of Quantities with payment schedule
- (9) Any other document listed in the Contract Data as forming part of the Contract.

3. Language and Law

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

4. Engineer's Decisions

4.1. Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

5. Delegation

5.1. The Engineer may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

6.1. Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract act).

7. Sub-Contracting

7.1. The Contractor may sub-contract any portion of work, up to a limit specified in Contract Data, with the approval of the Engineer but may not assign the Contract without the approval of the Employer in writing. Sub-contracting does not alter the Contractor's obligations. Maximum number of Sub Contractor will be two and they will have to meet all qualifying criteria in the ratio of work allotted.

8. Other Contractors

8.1. The Contractor shall cooperate and share the site with other contractors, public authorities, utilities, and the employer between the dates given in the Schedule of other Contractors. The contractors shall as referred to in the Contract Data, also provide facilities and services for them as described in the Schedule. The Employer may modify the schedule of other contractors and shall notify the contractor of any such modification.

9. Personnel

9.1. The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of key personnel only if their qualification, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the schedule.

9.2. If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff of his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's Risks

10.1. The Employer carries the risks which this Contract states are Employer's risks, and the contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

11.1. The Employer is responsible for the excepted risks which are

- (a) in so far as they directly affect the execution of the Works in India, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive; or
- (b) a cause due solely to the design of the Works, other than the Contractor's design.

12. Contractor's Risks

12.1. 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 other than the excepted risks are the responsibility of the Contractor.

13. Insurance

13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Operation & Maintenance Period, in the amounts and deductibles stated in the Contract data for the following events which are due to the Contractor's risks:

- (a) loss of or damage to the Works, Plants and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- (d) personal injury or death.

13.2. Policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

13.3. If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

13.4. Alterations to the terms of an insurance shall not be made without the approval of the Engineer.

13.5 Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports

14.1. The Contractor, in preparing the Bid, shall rely on any site investigation reports referred to in the Contract data, supplemented by any information available to the Bidder.

15. Queries about the Contract Data

15.1. The Engineer will clarify queries on the Contract Data.

16. Contractor to Construct the Works

16.1. The Contractor shall construct and install the Works in accordance with the specification and Drawings.

17. The Works to be Completed by the Intended Completion date

17.1. The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the programme submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

18. Approval by the Engineer

18.1. The Contractor shall submit Specifications and Drawings, showing the proposed Temporary works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.

18.2. The Contractor shall be responsible for design of Works.

18.3. The Engineer's approval shall not alter the Contractor's responsibility for design of the all Works.

18.4 The Contractor shall obtain approval of third parties to the design of all Works where required.

18.5 All drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

19. Safety

19.1. The Contractor shall be responsible for the safety of all activities on the Site.

20. Discoveries

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

21. Possession of the Site

21.1. The Employer shall give possession of all parts of the site to the Contractor.

22. Access to the Site

22.1. The Contractor shall allow the engineer and any person authorized by the Engineer access to the Site, to any place where work in connection with the contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured/ fabricated / assembled for the works.

23. Instructions

23.1. The Contractor shall carry out all instructions of the Engineer pertaining to works which comply with the applicable law where the site is located.

23.2. The Constructor shall permit the Employer to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Employer, if so required by the Employer.

24. Deleted

25. Deleted.

26.Deleted.

11.2 B. TIME CONTROL

27. Programme

27.1 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 in the Works along with monthly cash flow forecast.

27.2. 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 work including any changes to the sequence of the activities.

27.3. 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.

27.4. The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer again at any time. A revised Programme is to show the effect of Variations and Compensation Events.

28. Extension of the Intended Completion Date

28.1 The Engineer shall extend the intended completion date if a variation is issued or on account of reasons such as,

- (i) unavailability of free work front,
- (ii) delay in utility Shifting,
- (iii) Delay in environmental clearance,
- (iv) Delay in approval of subcontract by employer and
- (v) force majeure (Natural calamities or condition beyond human control).

If delay is attributed to the contractor such as poor mobilisation of men, materials and machineries, the extension of time will be granted with liquidated damages and for that period price escalation will not be done. The proposal of extension of time will be submitted by the contractor with supporting documents, recommended by engineer after proper scrutiny of reasons of the delay and approved by the competent authority.

28.2 The Engineer shall decide whether and by how much to extend the Intended Completion date within 35 days of the Contractor asking the Engineer for a decision upon the effect of a Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

28.3 The Engineer shall within 14 days of receiving full justification from the contractor for extension of Intended Completion Date refer to the Employer his decision. The Employer shall in not more than 21 days communicate to the Engineer the acceptance or otherwise of the Engineer's decision.

29. Deleted

30. Deleted

31. Management Meetings

31.1 Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

31.2 The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

32.Early Warning

32.1 The Contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works. The Engineer may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.

32.2 The Contractor shall cooperate with the Engineer in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer.

11.2 C. QUALITY CONTROL

33. Identifying Defects

33.1 The Engineer shall check the Contractor's work and notify the Contractor of any defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.

34. Tests

34.1 If the Engineer instructs the Constructor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples.

35 Correction of Defects

35.1 The Engineer shall give notice to the contractor of any Defects before the end of the Operation & Maintenance Period, which begins at completion and is defined in the Contract Data. The Operation & Maintenance Period shall be extended for as long as defects remain to be corrected.

35.2. Every time notice of a defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Engineer's notice.

36. Uncorrected Defects

36.1 If the contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

11.2 D. COST CONTROL

37. Bill of Quantities

37.1. The Bill of Quantities shall contain all components for the construction, installation, testing, and commissioning work to be done by the Contractor.

37.2. The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the component of the work done as per the Bill of Quantities for each component.

38. Changes in the Quantities

38.1. Deleted

38.2. Deleted

38.3. If requested by the Engineer, the Contractor shall provide the Engineer with a detailed cost breakdown of any component in the Bill of Quantities.

39. Variations

39.1 All Variations shall be included in updated Programmes produced by the Contractor.

40. Payments for Variations

40. 1. Deleted

40.2. Deleted

40.3 If the Contractor's quotation is unreasonable, the Engineer may order the Variation and make a change to the Contract Price which shall be based on Engineer's own forecast of the effects of the variation on the Contractor's costs.

40.4 The Contractor shall not be entitled to additional payment for costs which could have been avoided by giving early warning.

41. Cash Flow Forecasts

41.1 When the Programme is updated, the contractor is to provide the engineer with an updated cash flow forecast.

42. Payment Certificates

42.1. The Contractor shall submit to the Engineer interim statements of the estimated value of the work completed less the cumulative amount certified previously.

42.2 The Engineer shall check the Contractor's interim statement within 14 days and certify the amount to be paid to the Contractor.

42.3 The value of work executed or stage of payment shall be determined by the **Authority** Engineer.

42.4 Deleted

42.5 Deleted

42.6 Deleted

43. Payments

43.1. Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of contract and taxes at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Authority Engineer within 28 days of the date of payment certificate.

43.2 Deleted

44. Deleted.

45. Tax

45.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

46. Currencies

46.1 All payments shall be made in Indian Rupees.

47. Advance Payment

47.1 The Employer shall make advance payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the employer in amounts and currencies equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will be charged @10% quarterly compounded. The Interest will be charged with the instalment of recovery of mobilization advance.

47.2 The Contractor is to use the advance payment only to pay for Equipment, Plant and Mobilization expenses required specifically for execution of the works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents.

47.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, or Liquidated Damages.

48. Securities

48.1 The Performance Security (including additional security for unbalanced bids) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 28 days from the date of expiry of Operation & Maintenance Period and the additional security for unbalanced bids shall be valid until a date 28 days from the date of issue of the certificate of completion.

49. Cost of Repairs

Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

11.2 E. FINISHING THE CONTRACT

50. Completion

The Contractor shall request the Engineer to issue a Certificate of Completion of the Works and the Engineer will do so upon deciding that the Work is completed.

51. Taking Over

The Employer shall take over the Site and the Works within seven days of the Engineer issuing a certificate of Completion.

52. Final Account

52.1 The Contractor shall supply to the Engineer a detailed account of the total amount that the Contractor considers payable under the contract before the end of the Operation & Maintenance Period. The Engineer shall issue a Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Authority Engineer shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

53. Operating and Maintenance Manuals

53.1. The "As built" Drawings and/or operating and maintenance manuals, the Contractor shall supply them by dates stated in the Contract Data.

53.2. If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data,

or they do not receive the Authority Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

54. Termination

54.1. The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

54.2. Fundamental breaches of Contract include, but shall not be limited to the following:

- (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Authority Engineer;
- (b) the Authority Engineer instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days;
- (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (d) a payment certified by the Engineer is not paid by the Employer to the Contractor within 56 days of the date of the Engineer's certificate;
- (e) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer.
- (f) the Contractor does not maintain a security which is required;
- (g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- (h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non- competitive levels and to deprive the Borrower of the benefits of free and open competition."

54.3 When either party to the Contract gives notice of a breach of contract to the Engineer for a cause other than those listed under Sub Clause 54.2. above, the Engineer shall decide whether the breach is fundamental or not.

54.5 Notwithstanding the above, the Employer may terminate the Contract for convenience.

54.6 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

55. Payment upon Termination

55.1. If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor shall be a debt payable to the Employer.

55.2. If the Contract is terminated at the Employer's convenience or because of a fundamental Breach of Contract by the Employer, the Engineer shall issue a certificate for the value of the work done, the cost of balance by the contractor and available at site, the reasonable cost of removal of Equipment, a 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 due in terms of the contract and less taxes due to be deducted at source as per applicable law.

56. Property

56.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

57. Release from Performance

57.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

11.2 F. SPECIAL CONDITIONS OF CONTRACT

1. LABOUR

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. 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.

2. COMPLIANCE WITH LABOUR REGULATIONS

During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications /bye laws/Acts/Rules /regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct 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.

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK

- 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 5 years service or more on death, the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- (c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the employer plus workers @ 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 Employer, if they employ 20 or more contract labour.
- f) Minimum Wages Act 1948 :- The Employer is supposed 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 are scheduled employments.
- g) Payment of Wages Act 1936:- It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) Equal Remuneration Act 1979 :- The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- i) Payment of Bonus Act 1965 : - The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/-per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above upto Rs.3500/- per month shall be worked out by taking wages as Rs.2500/ -per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
- 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 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of

employment by the Employer on matters provided in the Act and get the same 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 1988 :- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation 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 5 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, travelling expenses from home upto 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 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 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DAY, MONTH AND YEAR FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED

SIGNED, SEALED AN DELIVERED

For and on behalf of

For and on behalf of

[THE AUTHORITY] by:

THE CONTRACTOR by:

(Signature)

(Signature)

(Name)

(Name)

(Designation)

(Designation)

In the presence of:

1.

2.

{COUNTERSIGNED and accepted by:

Name and particulars members 'contractor}

Schedules

SCHEDULE – A
(See Clauses 2.1 and 8.1)

SITE OF THE PROJECT

1.1 The Site

- 1.1 The site of the Project (the “Site”) shall comprise the site described in respect of which the land shall be provided by the Authority to the Contractor. The Authority shall be responsible for acquiring and providing land on the Site finalized by the Authority.
- 1.2 The dates of providing the land/site to the Contractor within 15 days of agreement.
- 1.3 Deleted.
- 1.4 Deleted.

SCHEDULE – F
(See Clauses 4.1.1, 4.5)

FORMAT OF BANK GUARANTEE

Annex-I

(See Clause 7.1.1)

Format of Guarantee for Performance Security

.....,
.....,
.....,

WHEREAS:

- a) (insert name and address of the contractor) (hereinafter called the “**Contractor**”) and (insert name and address of the project authority), (hereinafter called the “**Authority**”) have entered into an agreement (hereinafter called the “**Agreement**”) for Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) 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 and Operation & 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 and undertakes to pay to the Authority upon occurrence of any failure or default in the due and faithful performance of all or any of the Contractor’s obligations, under and in accordance with the provisions of the Agreement during the {Construction Period/ Operation & Maintenance Period} on 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 upto an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority 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 Authority, under the hand of an officer not below the rank of Chief Executive Officer of the Authority, 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 Authority 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 Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.

3. In order to give effect to this Guarantee, the Authority 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 Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority 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 performance 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 Authority against the Contractor, and either to enforce or for bear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority 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 Authority 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 Authority 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 Authority on the Bank under this Guarantee all rights of the Authority 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 Authority 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 authorized 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 Authority that the envelope was so posted shall be conclusive.

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 Authority pursuant to the provisions of the Agreement

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:

- & The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- & 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.

Annex – II
(Schedule - F)
(See Clause 4.5)

Form of Guarantee for Withdrawal of Retention Money

.....,
.....,
.....,

WHEREAS:

- a) (insert name and address of the contractor) (hereinafter called the “**Contractor**”) has executed an agreement (hereinafter called the “**Agreement**”) with the (insert name and address of the project authority), (hereinafter called the “**Authority**”) for Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis. subject to and in accordance with the provisions of the Agreement.
- b) In accordance with Clause 7.5 of the Agreement, the Contractor may withdraw the retention money (hereinafter called the “**Retention Money**”) after furnishing to the Authority a bank guarantee for an amount equal to the proposed withdrawal.
- c) We, through our branch at (the “**Bank**”) have agreed to furnish this bank guarantee (hereinafter called the “**Guarantee**”) for the amount of Rs. cr. (Rs..... crore) (the “**Guarantee Amount**”).

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

- 1. The Bank hereby unconditionally and irrevocably undertakes to pay to the Authority, 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 upto an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority 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 Authority, under the hand of an officer not below the rank of a Chief Executive Officer of the Authority, that the Contractor has committed default in the due and faithful performance of all or any of its obligations for under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority 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 Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
- 3. In order to give effect to this Guarantee, the Authority 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 Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority 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 Retention Money and any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or for bear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority 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 Authority 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 Authority in respect of or relating to the Retention Money.
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 Authority on the Bank under this Guarantee all rights of the Authority 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 90 (ninety) days after the date of the Completion Certificate specified in Clause 12.4 of the Agreement.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority 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 authorized 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 Authority 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 up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.

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.

Annex – III
(Schedule - F) (See Clause 33 of ITB)

Form of Guarantee for Advance Payment

.....,
.....,
.....,

WHEREAS:

- (A) (insert name and address of the contractor) (hereinafter called the “**Contractor**” has executed an agreement (hereinafter called the “**Agreement**”) with the (insert name and address of the project authority), (hereinafter called the “**Authority**”) for Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis. (“**Project**”), subject to and in accordance with the provisions of the Agreement
- (B) In accordance with Clause 17.2 of the Agreement, the Authority shall make to the Contractor an advance payment with a simple interest at the rate of 10% (ten per cent) per annum (herein after called “**Advance Payment**”) equal to 10% (ten per cent) of the Contract Price; and that the Advance Payment shall be made in minimum two installments subject to the Contractor furnishing an irrevocable and unconditional guarantee by a scheduled bank for an amount equivalent to 110% (one hundred and ten per cent) of such installment to remain effective till the complete and full repayment of the installment of the Advance Payment as security for compliance with its obligations in accordance with the Agreement. The amount of {first/second/third} installment of the Advance Payment is Rs. cr. (Rupeescrore) and the amount of this Guarantee is Rs. cr. (Rupees.....crore) (the “**Guarantee Amount**”) \$.
- \$ The Guarantee Amount should be equivalent to 110% of the value of the applicable installment.
- (C) We, through our branch at (the “Bank”) have agreed to furnish this bank guarantee (*hereinafter called the “**Guarantee**”*) for the Guarantee Amount.

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 repayment on time of the aforesaid installment of the Advance Payment under and in accordance with the Agreement, and agrees and undertakes to pay to the Authority, 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 Authority shall claim, without the Authority 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 Authority, under the hand of an officer not below the rank of a Chief

Executive Officer of the Authority, that the Contractor has committed default in the due and faithful performance of all or any of its obligations for their payment of the installment of the Advance Payment under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority 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 Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.

3. In order to give effect to this Guarantee, the Authority 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 Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority 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 Advance Payment or to extend the time or period of its repayment or to postpone for anytime, and from time to time, any of the rights and powers exercisable by the Authority 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 Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, actor omission on the part of the Authority 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 Authority in respect of or relating to the Advance Payment.
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 Authority on the Bank under this Guarantee all rights of the Authority 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 on or before the aforesaid date, 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 Authority 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 authorized 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 providing 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 Authority 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 upto the date specified in paragraph 8 above or utilities released earlier by the Authority pursuant to the provisions of the Agreement.

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:

The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.

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.

SCHEDULE – H

DRAWINGS

a) Drawings

All drawings of the components are being enclosed.

b) Additional Drawings

Any additional drawings related to the works as may be necessary shall be submitted by the bidder to the Authority for approval.

Annex – I
(Schedule – H)

SCHEDULE – I

PROJECT COMPLETION SCHEDULE

1 Project Completion Schedule

During Implementation period, the Contractor shall comply with the requirements set forth in this Schedule-I for each of the Project Milestones and the Scheduled Completion Date. Within 15 (fifteen) days of the date of each Project Milestone, the Contractor shall notify the Authority of such compliance along with necessary particulars and the same should be approved in the following format by the Authority.

2.0 Project Milestones:

Sr. No.	Milestone	Financial Progress	Time Allowed (from date of start)	Amount to be with-held in case of non achievement of milestone
1	Milestone 1	1/10 th (of whole work)	1/4 th (of whole work)	In the event of not achieving the necessary progress as assessed from the running payments, 1% of the tendered value of work will be withheld for failure of each milestone.
2	Milestone 2	3/8 th (of whole work)	1/2 th (of whole work)	
3	Milestone 3	3/4 th (of whole work)	3/4 th (of whole work)	

4	Milestone 4	Full	Full	
---	-------------	------	------	--

2.1 As “Time is the essence of the Contract”. The Contractor shall be liable to pay to the Employer, the liquidated damages as per the following milestones: -

The above rate of penalty shall be per day till the progress is covered proportionately. However, the Liquidated damages at milestone 1, 2, and 3 above will be returned to the Contractor in the case of the contractor’s progress matches his program of works in the following quarter of the contract period. Otherwise, the withheld amount will be forfeited. In no case the Liquidated damages levied as per milestone 4 will be refunded, irrespective of the fact of having been granted extension of time for such delay, unless such delay is beyond the control of the Contractor at any point of time.

2.2 Payment Certificates

- The Contractor shall submit to the Authority stage payment invoices of the estimated value of the work completed less the cumulative amount certified previously.
- The Authority’s Engineer shall check the Contractor’s interim invoices against stage completion within 10 days and certify the amount to be paid to the Contractor.
- The value of work executed shall be certified by the Engineer and approved by the Authority.

2.3 Scheduled Completion Date

- The Scheduled Completion Date shall be the 24 months from the date of agreement.
- On or before the Scheduled Completion Date, the Contractor shall have completed construction in accordance with this Agreement.

2.4 Extension of time

- Upon extension of any or all of the aforesaid Project Milestones or the Scheduled Completion Date, as the case may be, under and in accordance with the provisions of this Agreement, the Project Completion Schedule shall be deemed to have been amended accordingly.

SCHEDULE – J

TESTS ON COMPLETION

1 Schedule for Tests

- 1.1 The Contractor shall, no later than 30 (thirty) days prior to the likely completion of construction, notify the Authority's Engineer and the Authority of its intent to subject the Project to Tests, and no later than 15 (fifteen) days prior to the actual date of Tests, furnish to the Authority's Engineer and the Authority detailed inventory and particulars of all works and equipment forming part of Works.
- 1.2 The Contractor shall notify the Authority's Engineer of its readiness to subject the Tests at any time after 15 (fifteen) days from the date of such notice, and upon receipt of such notice, the Authority's Engineer shall, in consultation with the Contractor, determine the date and time for each Test and notify the same to the Authority who may designate its representative to witness the Tests. The Authority's Engineer shall thereupon conduct the Tests itself or cause any of the Tests to be conducted in accordance with Article 12 and this Schedule-J.

2 Tests

- 2.1 Visual and physical test: The Authority's Engineer shall conduct a visual and physical check of implementing works to determine that all works and equipment forming part thereof conform to the provisions of this Agreement. The physical tests shall include [***].
- 2.2 Deleted.
- 2.3 Deleted
- 2.4 Other tests: The Authority's Engineer may require the Contractor to carry out or cause to be carried additional tests, in accordance with Good Industry Practice, for determining the compliance of the Project with Specifications and Standards.
- 2.5 Environmental audit: The Authority's Engineer shall carry out a check to determine conformity of the Project with the environmental requirements set forth in Applicable Laws and Applicable Permits.
- 2.6 Safety Audit: The Authority's Engineer shall carry out, or cause to be carried out, a safety audit to determine conformity of the Project with the safety requirements and Good Industry Practice.

i. Agency for conducting Tests

All Tests set forth in this Schedule-J shall be conducted by the Authority's Engineer or such other agency or person as it may specify in consultation with the Authority.

ii. Completion Certificate

Upon successful completion of Tests, the Authority's Engineer shall issue the Completion Certificate in accordance with the provisions of this RFP.

SCHEDULE – K
PROVISIONAL CERTIFICATE

- 1) I/We, (Name of the Authority's Engineer), acting as the Authority's Engineer, under and in accordance with the Agreement dated..... (the "**Agreement**"), Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis (the "**Project**") (Name of Contractor), hereby certify that the Tests in accordance with Article 12 of the Agreement have been undertaken to determine compliance of the Project with the provisions of the Agreement.
- 2) Works that are in complete on account of Time Extension have been specified in the Punch List appended here to, and the Contractor has agreed and accepted that it shall complete all such works in the time and manner set forth in the Agreement. In addition, certain minor works are incomplete and these are not likely to cause material inconvenience to the Users of the Project or affect their safety. The Contractor has agreed and accepted that as a condition of this Provisional Certificate, it shall complete such minor works within 30 (thirty) days hereof. These minor works have also been specified in the aforesaid Punch List.
- 3) In view of the foregoing, I/We am/are satisfied that the Projectcan be safely and reliably placed in service of the Users thereof, and in terms of the Agreement, the Project is hereby provisionally declared fit for entry into operation on this the day of 20.....

ACCEPTED, SIGNED, SEALED AND DELIVERED		ACCEPTED, SIGNED, SEALED AND DELIVERED
For and on behalf of		For and on behalf of
Contractor by:		Authority's Engineer by:
Signature		Signature
Name & Designation		Name & Designation
Address		Address

COMPLETION CERTIFICATE

- a) I/We,(Name of the Authority's Engineer), acting as the Authority's Engineer, under and in accordance with the Agreement dated..... (the "**Agreement**"), for Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis. (the "**Project**").....through.....
(Name of Contractor), hereby certify that the Tests in accordance with Article 12 of the Agreement have been successfully undertaken to determine compliance of the Project with the provisions of the Agreement, and I/We am/are satisfied that the Project can be safely and reliably placed in service of the Users thereof.
- b) It is certified that, in terms of the aforesaid Agreement, all works forming part of Project have been completed, and the Project is hereby declared fit for entry into operation on this the day of 20.....

SIGNED, SEALED AND DELIVERED

For and on behalf of the Authority's Engineer by:

(Signature)

(Name)

(Designation)

(Address)

SCHEDULE – L

SELECTION OF AUTHORITY’S ENGINEER

1.0 Selection of Authority’s Engineer

1.1 The provisions of the Model Request for Proposals for Selection of Technical Consultants, issued by the Ministry of Finance, Government of India vide OM 24(23)/PF-II/2008 dated 21, May 2009, or any substitute thereof shall apply for selection of an experienced firm to discharge the functions and duties of an Authority’s Engineer. Provided, however, that no entity which is owned or controlled by the Authority shall be eligible for appointment as the Authority’s Engineer hereunder.

1.2 In the event of termination of the Technical Consultants appointed in accordance with the provisions of Paragraph 1.1, the Authority shall appoint another firm of Technical Consultants forthwith and may engage a government-owned entity in accordance with the provisions of Paragraph 3 of this Schedule-L.

2.0 Terms of Reference

The Terms of Reference for the Authority’s Engineer (the “**TOR**”) shall substantially conform with Annex 1 to this Schedule L.

3.0 Appointment of Government entity as Authority’s Engineer

Notwithstanding anything to the contrary contained in this Schedule, the Authority may in its discretion appoint a government-owned entity as the Authority’s Engineer; provided that such entity shall be a body corporate having as one of its primary functions the provision of consulting, advisory and supervisory services for engineering projects; provided further that a government-owned entity which is owned or controlled by the Authority shall not be eligible for appointment as Authority’s Engineer.

Annex – I
(Schedule - L)

Terms of reference for Authority's Engineer

1 Scope

1.1 These Terms of Reference (the “**TOR**”) for the Authority’s Engineer are being specified pursuant to the EPC Agreement dated (the “**Agreement**”), which

has been entered into between the (insert name and address of the Authority) (the “**Authority**”) and (the “**Contractor**”) for construction of Open Space on Engineering, Procurement, Construction (EPC) basis, and a copy of which is annexed hereto and marked as Annex-A to form part of this TOR.

1.2 The TOR shall apply to construction of the Project .

2 Definitions and interpretation

2.1 The words and expressions beginning with or in capital letters and not defined herein but defined in the Agreement shall have, unless repugnant to the context, the meaning respectively assigned to them in the Agreement.

2.2 References to Articles, Clauses and Schedules in this TOR shall, except where the context otherwise requires, be deemed to be references to the Articles, Clauses and Schedules of the Agreement, and references to Paragraphs shall be deemed to be references to Paragraphs of this TOR.

2.3 The rules of interpretation contained in Clauses 1.2, 1.3 and 1.4 of the Agreement shall apply, *mutatis mutandis*, to this TOR.

3.0 General

3.1 The Authority’s Engineer shall discharge its duties in a fair, impartial and efficient manner, consistent with the highest standards of professional integrity and Good Industry Practice.

3.2 The Authority’s Engineer shall perform the duties and exercise the authority in accordance with the provisions of this Agreement, but subject to obtaining prior written approval of the Authority before determining:

a) any Time Extension;

b) any additional cost to be paid by the Authority to the Contractor;

c) the Termination Payment; or

d) any other matter which is not specified in (a), (b) or (c) above and which creates an obligation or liability on either Party for a sum exceeding Rs. 5,00,000 (Rs. five lakh).

3.3 The Authority’s Engineer shall submit regular periodic reports, at least once every month, to the Authority in respect of its duties and functions under this Agreement. Such reports shall be submitted by the Authority’s Engineer within 10 (ten) days of the beginning of every month.

3.4 The Authority’s Engineer shall inform the Contractor of any delegation of its duties and responsibilities to its suitably qualified and experienced personnel; provided, however, that it shall not delegate the authority to refer any matter for the Authority’s prior approval in accordance with the provisions of Clause 18.2.

3.5 The Authority's Engineer shall aid and advise the Authority on any proposal for Change of Scope under Article 13.

3.6 In the event of any disagreement between the Parties regarding the meaning, scope and nature of Good Industry Practice, as set forth in any provision of the Agreement, the Authority's Engineer shall specify such meaning, scope and nature by issuing a reasoned written statement relying on good industry practice and authentic literature.

4.0 Construction Period

4.1 During the Construction Period, the Authority's Engineer shall review the Drawings furnished by the Contractor along with supporting data, including the geo-technical and hydrological investigations, characteristics of materials from borrow areas and quarry sites, topographical surveys, and the recommendations of the Safety Consultant in accordance with the provisions of Clause 10.1.6. The Authority's Engineer shall complete such review and send its observations to the Authority and the Contractor within 15 (fifteen) days of receipt of such Drawings; provided.

4.2 The Authority's Engineer shall review any revised Drawings sent to it by the Contractor and furnish its comments within 10 (ten) days of receiving such Drawings.

4.3 The Authority's Engineer shall review the Quality Assurance Plan submitted by the Contractor and shall convey its comments to the Contractor within a period of 21 (twenty-one) days stating the modifications, if any, required thereto.

4.4 The Authority's Engineer shall complete the review of the methodology proposed to be adopted by the Contractor for executing the Works, and convey its comments to the Contractor within a period of 10 (ten) days from the date of receipt of the proposed methodology from the Contractor.

4.5 The Authority's Engineer shall grant written approval to the Contractor, where necessary, for interruption and diversion of the flow of traffic in the existing lane(s) of the Project for purposes of maintenance during the Construction Period in accordance with the provisions of Clause 10.4.

4.6 The Authority's Engineer shall review the monthly progress report furnished by the Contractor and send its comments thereon to the Authority and the Contractor within 7 (seven) days of receipt of such report.

4.7 The Authority's Engineer shall inspect the Construction Works and the Project and shall submit a monthly Inspection Report bringing out the results of inspections and the remedial action taken by the Contractor in respect of Defects or deficiencies. In particular, the Authority's Engineer shall include in its Inspection Report, the compliance of the recommendations made by the Safety Consultant

4.8 The Authority's Engineer shall conduct the pre-construction review of manufacturer's test reports and standard samples of manufactured Materials, and such other Materials as the Authority's Engineer may require.

4.9 For determining that the Works conform to Specifications and Standards, the Authority's Engineer shall require the Contractor to carry out, or cause to be carried out, tests at such time and frequency and in such manner as specified in the Agreement and in accordance with Good Industry Practice for quality assurance.

4.10 The Authority's Engineer shall test check at least 20 (twenty) percent of the quantity or number of tests prescribed for each category or type of test for quality control by the Contractor.

4.11 The timing of tests referred to in Paragraph 4.9, and the criteria for acceptance/ rejection of their results shall be determined by the Authority's Engineer in accordance with the Quality Control Manuals. The tests shall be undertaken on a random sample basis and shall be in addition to, and independent of, the tests that may be carried out by the Contractor for its own quality assurance in accordance with Good Industry Practice.

4.12 In the event that results of any tests conducted under Clause 11.10 establish any Defects or deficiencies in the Works, the Authority's Engineer shall require the Contractor to carry out remedial measures.

4.13 The Authority's Engineer may instruct the Contractor to execute any work which is urgently required for the safety of the Project, whether because of an accident, unforeseeable event or otherwise; provided that in case of any work required on account of a Force Majeure Event, the provisions of Clause 21.6 shall apply.

4.14 In the event that the Contractor fails to achieve any of the Milestones, the Authority's Engineer shall undertake a review of the progress of construction and identify potential delays, if any. If the Authority's Engineer shall determine that completion of the Project is not feasible within the time specified in the Agreement, it shall require the Contractor to indicate within 15 (fifteen) days the steps proposed to be taken to expedite progress, and the period within which the Project Completion Date shall be achieved. Upon receipt of a report from the Contractor, the Authority's Engineer shall review the same and send its comments to the Authority and the Contractor forthwith.

4.15 The Authority's Engineer shall obtain from the Contractor a copy of all the Contractor's quality control records and documents before the Completion Certificate is issued pursuant to Clause 12.4.

4.16 Authority's Engineer may recommend to the Authority suspension of the whole or part of the Works if the work threatens the safety of the Users and pedestrians. After the Contractor has carried out remedial measures, the Authority's Engineer shall inspect such remedial measures forthwith and make a report to the Authority recommending whether or not the suspension hereunder may be revoked.

4.17 In the event that the Contractor carries out any remedial measures to secure the safety of suspended works and Users, and requires the Authority's Engineer to inspect such works, the Authority's Engineer shall inspect the suspended works within 3 (three) days of receiving such notice, and make a report to the Authority forthwith, recommending whether or not such suspension may be revoked by the Authority.

4.18 The Authority's Engineer shall carry out, or cause to be carried out, all the Tests specified in Schedule-J and issue a Completion Certificate or Provisional Certificate, as the case may be. For carrying out its functions under this Paragraph

4.18 And all matters incidental thereto, the Authority's Engineer shall act under and in accordance with the provisions of Article 12 and Schedule-J.

5 Determination of costs and time

5.1 The Authority's Engineer shall determine the costs, and/or their reasonableness, that are required to be determined by it under the Agreement.

5.2 The Authority's Engineer shall determine the period of Time Extension that is required to be determined by it under the Agreement.

5.3 The Authority's Engineer shall consult each Party in every case of determination in accordance with the provisions of Clause 18.5.

6.0 Payments

6.1 The Authority's Engineer shall withhold payments for the affected works for which the Contractor fails to revise and resubmit the Drawings to the Authority's Engineer in accordance with the provisions of Clause 10.2.4 (d).

6.2 Authority's Engineer shall

10. within 10 (ten) days of receipt of the Stage Payment Statement from the Contractor pursuant to Clause 19.4, determine the amount due to the Contractor and recommend the release of 90 (ninety) percent of the amount so determined as part payment, pending issue of the Interim Payment Certificate; and

11. within 15 (fifteen) days of the receipt of the Stage Payment Statement referred

to in Clause 19.4, deliver to the Authority and the Contractor an Interim Payment Certificate certifying the amount due and payable to the Contractor, after adjustments in accordance with the provisions of Clause 19.10.

7.0 Other duties and functions

The Authority's Engineer shall perform all other duties and functions as specified in the Agreement.

8 Miscellaneous

8.1 A copy of all communications, comments, instructions, Drawings or Documents sent by the Authority's Engineer to the Contractor pursuant to this TOR, and a copy of all the test results with comments of the Authority's Engineer thereon, shall be furnished by the Authority's Engineer to the Authority forthwith.

8.2 The Authority's Engineer shall retain at least one copy each of all Drawings and Documents received by it, including 'as-built' Drawings, and keep them in its safe custody.

8.3 Within 90 (ninety) days of the Project Completion Date, the Authority's Engineer shall obtain a complete set of as-built Drawings, in 2 (two) hard copies and in micro film format or in such other medium or manner as may be acceptable to the Authority, reflecting the Project as actually designed, engineered and constructed, including an as-built survey illustrating the layout of the Project and setback lines, if any, of the buildings and structures forming part of Project Facilities; and shall hand them over to the Authority against receipt thereof.

8.4 The Authority's Engineer, if called upon by the Authority or the Contractor or both, shall mediate and assist the Parties in arriving at an amicable settlement of any Dispute between the Parties.

8.5 The Authority's Engineer shall inform the Authority and the Contractor of any event of Contractor's Default within one week of its occurrence

SCHEDULE-M

FORMS OF PAYMENT STATEMENTS

1. Project Milestone

Payment Certificates

- The Contractor shall submit to the Authority interim payment invoices of the estimated value of the work completed less the cumulative amount certified previously for a particular component.
- The Authority's Engineer shall check the Contractor's interim invoices towards stage payment within 15 days and certify the amount to be paid to the Contractor.
- The value of work executed shall be certified by the Engineer and approved by the Authority.

Scheduled Completion Date

- The Scheduled Completion Date shall be the 24 months from the notice to start the work.
- On or before the Scheduled Completion Date, the Contractor shall have completed construction in accordance with this Agreement.

Extension of time

- Upon extension of any or all of the aforesaid Project Milestones or the Scheduled Completion Date, as the case may be, under and in accordance with the provisions of this Agreement, the Project Completion Schedule shall be deemed to have been amended accordingly.

Stage Payment Statement for Works

The Authority Engineer shall define stage payment work for different stages of Construction of all the components specified in the agreement of the project.

SCHEDULE – N

INSURANCE

1.0 Insurance during Construction Period

1.1 The Contractor shall affect and maintain at its own cost, from the Appointed Date till the date of issue of the Completion Certificate, the following insurances for any loss or damage occurring on account of Non-Political Event of Force Majeure, malicious act, accidental damage, explosion, fire and terrorism:

- a) Insurance of Works, Plant and Materials and an additional sum of [15% (fifteen per cent)] of such replacement cost to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature; and
- b) insurance for the Contractor's equipment and Documents brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.

1.2 The insurance under paragraph 1.1 (a) and (b) above shall cover the Authority and the Contractor against all loss or damage from any cause arising under paragraph 1.1 other than risks which are not insurable at commercial terms.

2. Insurance for Contractor's Defects Liability

The Contractor shall effect and maintain insurance cover for the Works from the date of issue of the Completion Certificate until the end of the Operation & Maintenance Period for any loss or damage for which the Contractor is liable and which arises from a cause occurring prior to the issue of the Completion Certificate. The Contractor shall also maintain other insurances for maximum sums as may be required under Applicable Laws and in accordance with Good Industry Practice.

3. Insurance against injury to persons and damage to property

3.1 The Contractor shall insure against its liability for any loss, damage, death or bodily injury, or damage to any property (except things insured under Paragraphs 1 and 2 of this Schedule or to any person (except persons insured under RFP Clause, which may arise out of the Contractor's performance of this Agreement. This insurance shall be for a limit per occurrence of not less than the amount specified below with no limit on the number of occurrences.

The insurance cover shall be not less than estimated cost.

3.2 The insurance shall be extended to cover liability for all loss and damage to the Authority's property arising out of the Contractor's performance of this Agreement excluding:

The Authority's right to have the construction works executed on, over, under, in or through any land, and to occupy this land for the Works; and damage which is an unavoidable result of the Contractor's obligations to execute the Works.

4 Insurance to be in joint names

The insurance under paragraphs 1 to 3 above shall be in the joint names of the Contractor and the Authority.

SECTION - 5

SECTION 5: SPECIAL CONDITIONS OF CONTRACT

- 5.1 **General:** The special conditions are supplementary instructions to the tenders and shall form part of the contract.
- 5.2 **Drawing:** All Drawings shall be submitted by the Bidder. The Bidder shall also submit the detailed Contract execution plan within 15 days from date of issuing Work Order or Agreement whichever is earlier. The same shall be reviewed and approved by BSCL or the PDMC. These 15 days period is included in stipulated time of Contract Period. Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis shall be carried out as per the drawings submitted by the Bidder and approved by BSCL or PDMC.
- 5.3 **Data to be furnished by the Bidder:** The Bidder shall submit the following information to BSCL:
Proposed constructions Programme and time schedule showing sequence of operations within **15 days** of receipt of notice to proceed with the work in pursuance of the conditions of contract.
- 5.4 **Action when the progress of any item of work is unsatisfactory:** If the progress of an item of work during construction, which is important for timely completion of work is unsatisfactory, BSCL shall notwithstanding that the general progress of work is satisfactory, after giving the Bidder **15 days'** notice in writing get the said work executed by employing other means including other labour / Bidder etc. and the Bidder will have no claim for compensation for any loss sustained by him owing to such action.
- 5.5 In case if any of the works under this contract are found unsatisfactorily by BSCL, the BSCL shall either request the bidder to rectify the defect immediately or at his discretion may have it done by others (vendor or contractor) and deduct the actual amount incurred as per market rate plus 15 % extra incurred in such works from the bidders.
- 5.6 **Inspection and Tests:** Except as otherwise provided in here of all material and workmanship if not otherwise designated by the specifications shall be subject to inspection, examination and test by BSCL at any and all times during manufacture and/or construction and at any/all places where such manufacture or constructions are carried on. The BSCL shall have the right to reject defective materials and workmanship or require its corrections. Rejected workmanship shall be satisfactorily replaced with the proper material without charge thereof and the Bidder shall properly segregate and remove the rejected material from the premises. If the Bidder fails to proceed at once with the replacement of the rejected material and/or the construction of defective workmanship BSCL may replace such material and/or correct such workmanship and charge the cost thereof to the Bidder.
The Bidder shall be liable for replacement of defective work up to the time of completion of Operation & Maintenance Period in accordance with the conditions of contract of all work to be done under the contract. The Bidder shall furnish promptly without additional charge all facilities, labour and material necessary for the safe and convenient inspection and tests that may be required by BSCL. All inspections and tests by the departments shall be performed in such a manner as to not unnecessarily delay the work. Special full size and performance test shall be charged with any additional cost of inspection when materials and workmanship are not kept ready by the Bidder at the time of inspection.
- 5.7 **Removal of temporary work, Plant & Surplus materials:** Prior to final acceptance of the completed work, but excepting as otherwise expressly directed or permitted in writing, the Bidder shall, at his own expenses remove from the site and dispose of all the temporary

structures including buildings, all plant and surplus materials, and all rubbish and debris for which he is responsible to the satisfaction of BSCL.

- 5.8 **Possession prior to completion:** BSCL shall have the right to take possession of or use any completed part of the work. Such possession or use shall not be deemed as an acceptance of any work not completed in accordance with the contract.
- 5.9 **Damage to works:** The works whether fully completed or incomplete, all the materials, machinery, plants, tools, temporary building and other things connected there with shall remain at the risk and in the sole charge of the Bidder until the completed work has been delivered to BSCL and till completion certificate has been obtained from BSCL. Until such delivery of the completed work, the Bidder shall at his own cost take all precautions reasonably to keep all the aforesaid works, materials, machinery, plants, temporary buildings and other things connected there with free from any loss, damages and in the event of the same or any part thereof being lost or damaged, he shall forth with reinstate and make good such loss or damages at his own cost.
- 5.10 **Examination and tests on completions:** On the completion of the work and not later than three months thereafter, BSCL shall make such examination and tests of the work as may then seem to him to be possible, necessary or desirable, and the Bidder shall furnish free of cost any materials and labour which may be necessary thereof and shall facilitate in every way all operations required by BSCL, in making examination and tests.
- 5.11 **Climatic Conditions:** BSCL may order the Bidder to suspend any work that may be subject to damage by climatic conditions and no claims of the Bidder will be entertained by the department on this account.
- 5.12 As per the Ministry of Environment and Forest Guidelines 2010 and Ministry of Urban Development notifications, the Site area shall be protected from dust by fixing Green Fencing around the Construction site area.

The Contractor is instructed to strictly adhere to the following at his own cost.

- a) Supply and Fixing Green barriers and wind breaking walls around their sites.
 - b) Cover tarpaulin on scaffolding around area of construction,
 - c) Do not store construction material, particularly sand, on any part of the street, roads in any colony,
 - d) Cordon the work area with proper fencing by other means with due consideration of safety of workers, public, etc.
 - e) Dust emissions from construction site are controlled.
 - f) Sprinklers should be compulsorily used at the site and Wet jets in grinding and stone cutting must be used.
 - g) The work area shall be well illuminated during nights.
- 5.13 **Safety regulations:** During the entire contract period, while carrying out this works indicated in this tender, the Bidder will ensure compliance of all safety regulations as provided in the Safety Code (**Annexure - D**). The bidder will be responsible for safety of the works.
- 5.14 **The Bidder will make his own arrangement:** for supply of water, light & power for his works and labour camps etc.: The Bidder will make his own arrangement for supply of water, light and power for his works and labour camps etc. BSCL will not entertain any claim what so ever for any failure or break down etc. in supply of to the Bidder. The Bidder

will supply and fix his own tested meter of the approved make but the meter will be kept in the custody of the department.

- 5.15 **Interference with other Bidders:** The Bidder must not interfere with other Bidders who may be employed simultaneously or otherwise by the department at the Site. He will at no time engage departmental labour or that of other Bidders without the written permission of BSCL. **Bidder is fully responsible for cause of damages of the adjoining works of different works at site and the same cost of rectification of damages shall be recovered from the Bidder as per BSCL's instructions.**
- 5.16 **Regulations and bye laws:** The Bidder shall conform to the regulations, bye-laws any other statutory rules made by any local authorities or by the Government and shall protect and indemnify BSCL, against any claim or liability arising from or based on the violation of any such laws, safety, theft, ordinance, regulation, orders, decrees etc.
- 5.17 **Site Order Book:** A site order book shall be kept in the site of the work. As far as possible all orders regarding the works are to be entered in this book. All entries therein shall be signed by the BSCL or PDMC in direct charge of the work and the Bidder or his representatives. In the important cases the Senior Manager of BSCL will countersign the entries which the Bidders or his representative shall be bound to take note of all instructions meant for the Bidder as entered in the site order book without having to be called for separately to note them. BSCL shall submit periodically copies of the remarks of the site order book to the Senior Manager, BSCL for record and to the Bidder for compliance and report.
- 5.18 **Conversion of units:** Whenever in the contract agreement dimensions and units have been expressed in F.P.S. system, the same will be converted in to metric system units by applying the standard conversion table of Indian Standard Institution so as to derive the corresponding figure arithmetically and the Bidder will have to accept the figures so derived without any claim or compensation whatsoever.
- 5.19 **Rights of other Bidders and persons:** If, during the progress of the work covered by this contract, it is necessary for other Bidders or persons to do work in or about the site of work, the Bidder shall afford such facilities, as BSCL may require.
- 5.20 **Employment of technical persons:** The Bidder shall employ or produce evidence of having in his employment of the qualified technical person as indicated in the RFP from the Institution recognized by the Government of Bihar / Govt. of Other State / Govt. of India.
- 5.21 The above is the minimum requirement of Manpower. However, contractor shall access the actual requirement and deploy the necessary manpower. No extra cost will be paid for deployment of extra manpower if required.
- 5.22 The technical staff shall be got approved in writing from BSCL (whose approval may be withdrawn any time) for supervision of works and to receive direction from the Engineer of the work on behalf of the contractor. The supervisory staff of the contractor will not be changed without the approval of BSCL.
- 5.23 **Bonus for early completion:** In the event that the Project Completion Date occurs prior to the Scheduled Completion Date, the Contractor shall be entitled to receive a payment of bonus equivalent to 1% (one percent) of the Contract Price per month computed on per day basis, shall be payable to the contractor subject to a maximum of 5% (five per cent) of the Contract Price. Provided, however, that the payment of bonus, if any, shall be made only after the issue of the Completion Certificate.

Additional Special Conditions

1. Contractor is advised to read carefully all chapters and give complete information regarding his proposals, substantiating the same with calculations, drawings literature, with clear reference to any standards adopted (which are not mentioned in the tender), in such manner that there is no ambiguity or nothing is left to chance. All relevant information, so as to make the proposal understandable shall be given. Vague remarks and remarks like “will be given later” are not acceptable. If in the opinion of BSCL, the proposal is grossly incomplete, this will form sufficient reason for complete rejection of the tender on technical grounds.
2. Contractor shall note that this is an Engineering Procurement and Construction tender. The bidder shall quote his price for complete work. However, his proposals are subject to scrutiny and approval for unit wise / component wise / sub-component wise progressive payments by the competent authority. He shall therefore take utmost precaution to offer very standard equipment manufactured by only reputed manufacturers (wherever the makes are specified, the same shall be offered). However, the bidder should note that after the tenders are opened, all modifications, corrections, changes should be carried out entirely to the satisfaction of BSCL at no extra cost to BSCL. The contractor shall not be allowed to change the price quoted.
3. All the equipment installed shall be thoroughly tested at the time of commissioning of the plant and all initial defects shall be rectified to the entire satisfaction of the engineer. Damaged or non-working parts shall be replaced at no extra cost to BSCL.
4. **Training of the BSCL, staff before Handling over the Equipment/Instruments.** As there is fair amount of automation specified, there will be very large number of small components, which form units of equipment. In order that the BSCL staff engaged on operations and maintenance becomes proficient in understanding and handling the equipment correctly, the contractor will have to organize training programme in the manufacturers’ shops as well as on site during actual operation of the plant. For this purpose, he will have to employ suitably qualified, trained personnel to carry out this training. The training period is for 7 days after commissioning of the plant or for such extra period before commissioning in the workshops. A mutually agreed programme shall be formulated during the execution, which will be binding on the contractor.
5. **Third Party Test & Inspection:** BSCL reserves the right to appoint any organization/ institution for checking of design, & quality & quantity checks of all works at least 5% of total frequency during the contract & no additional cost shall be payable by BSCL on this account.
6. The overall development of site at which processing sheds shall be constructed inclusive of roads, horticulture, lights and other utilities services such as water supply, sewerage, drainage etc. shall be provided by contractor agency as per drawings approved by BSCL if required.
7. The Bidder shall liable for all statutory clearances inclusive from Bihar Pollution Control Board for execution and till operation period.
8. Bidder shall liable to all consequences arising there upon.
9. During the Construction Period, the Contractor shall maintain, at its cost, the Project Site and the assets thereon so that the traffic and commercial worthiness and safety thereof are at not immaterially inferior as compared to their condition 7 (seven) days prior to the date of this Agreement, and shall undertake the necessary repair and maintenance works for this

purpose.

10. The Construction work shall be executed by the bidder strictly as per technical specification/as per standard work manual of state & central govt. In case of ambiguity or dispute arises, Building Construction Department (BCD) specification will prevail over.
11. The bidder shall strictly abide the General Conditions of contract and Special Conditions of Contract of the RFP document. In no case, the bidder may violate the above conditions and no amendments should be made in the GCC or SCC.
12. In case of arbitration or dispute of the Contract, the Hon'ble High court of Patna, Bihar is the Jurisdiction.
13. The RFP document shall form part of Contract Agreement. The bidder should download all pages of the RFP document and must sign all pages (authorized signatory of the Contract agency) before uploading the RFP document in the www.eproc2.bihar.gov.in portal

SECTION 6

CONTRACT DATA

CONTRACT DATA

Clause Reference With respect to Section 4.

S. No.	Description	Clause Reference with respect to Section- 2
1.	Name of the Employer is Chief Executive Officer, Bhagalpur Smart City Limited, Bhagalpur	[C1. 1.1]
2.	The last five years	[Cl. 4.5 A (a)]
	2020- 2021	
	2021- 2022	
	2022- 2023	
	2023- 2024	
	2024- 2025	
3.	Minimum annual financial turnover amount is 50% of estimated cost (annual financial turnover shall be 50% of the estimated cost & that 50% shall be calculated in Rs.) (all class of similar nature of work as defined in any one financial year from last five years).	[C1.4.5A(a)]
4.	Minimum work Completion Experience (value calculated and mentioned)	[C1.4.5A(b)]
5.	Liquid assets and/or availability of credit facilities is 25 % of the project cost. (Value calculated and mentioned)	[C1.4.5B(c) & Cl.4.3(h)]
6.	Payment Schedule shall be finalized after submission of final work program with mutual consent.	[C1.14]
7.	The pre-bid meeting will take place at – BSCL Office, Bhagalpur	[C1. 9.2.1]
8.	The Technical bid will be opened at BSCL Office, Bhagalpur	[C1.23.1.]
9.	Address of the Employer: Bhagalpur Smart City Limited	
10.	Submission of Bid:	[Cl. 19]
11.	NIT No.	BSCL/Bhairva Talab/2021/...
12.	The bid should be submitted online	[C1. 20.1]
13.	The bid will be opened at the time, date and venue mentioned in NIT	[C1.23.1]
14.	The Bank Guarantee shall be in favor of Chief Executive Officer, Bhagalpur Smart City Limited.	[C1.32.2]
15.	Escalation factors (For bringing the cost of works executed in different financial year to a common base value and annual financial turnover)	[Cl.4.7]
	Duration	Multiply factor
	2020-21	1.61
	2021-22	1.46
	2022-23	1.33
	2023-24	1.21

	2024-25	1.10	
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VOLUME-II

SECTION 7

TECHNICAL SPECIFICATION

Disclaimer: *The technical specifications provided herein for “Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis”. In the absence of any definite provisions on any particular issue in the aforesaid specifications, reference may be made to the specifications of Government of Bihar/India which provides the specifications of various items of works which may be taken as minimum and any item of lower specifications shall not be allowed.*

The Contractor shall submit the design drawings, Structural drawings, Working Drawings and Goods for construction drawings for approval to the authority and Subsequently shall obtain vetting of the drawings from a reputed institutes like IITs or NITs.

The Contractor Shall submit detailed bill of Quantities for all works and components pertaining to project to authority for approval along with the payment schedule and project Mile stones. The payment to the contractor shall be made as per the approved Payment schedule and upon meeting the submitted milestones.

Details of Materials and Specifications:

Note:-

1.In foundation & Upto Sub Structure Red Clay Bricks Class Designation 100A shall be used and above Sub Structure Red Clay Bricks/Fly Ash Bricks may be used after prior approval from Authority Engineer/Authority.

Proposed Project Design:

Design Consideration:

Waterfront Development design considerations:

1. Iconic Entry Gate structure with security guard room, ticket counter and suitable infrastructure
2. Complete Renovation of existing temple with painting works.
3. Construction of Lake Embankment.
4. Provision of platforms and steps leading to the water body to facilitate a safe approach, development of lake ghats.
5. Toilet, washroom and drinking water facilities at the Ghats..
6. Appropriate number of benches for sitting of people at all locations, Directional Signages.
7. Public space Lighting and landscaping of area.
8. Installation of CCTV cameras for round the clock surveillance
9. Development of approach roads, parking lots to facilitate easy access to users
10. Construction of a high standard restaurant or a cafeteria
11. Fish display Pond and Glass bridge
12. Water Laser and Light Show based fountain with Light and Sound show Projection based system
13. Surprise fountain for kids play area and music and sound area for youth
14. parking space, and Bhairva Talab.

Structures and facilities at Proposed Ghat: -

15. Platform for rituals (Plaza), steps, Planters
16. Toilet block, Drinking Water, Changing Room
17. Kiosk, Bench, Lamp Post details
18. Signage/ inauguration stone, Dustbin
19. Boundary wall / railing /footpath/ Bank Protection with Pitching, Retaining wall near foot of river
20. Pathway, Gate complex

Salient Area Details:

- Waterbody Area = 22.1 Acres
- Land Area = 2.2 Acres
- Parking Area = min 2000 Sqm
- New Boundary wall length =minimum 1050 m
- Site Area = 25.237 Acres

Detailed Components for Development of Bhairva Talab**1. Desilting of Pond, Soil filling and cleaning**

S.No.	Items
1	Pond Soil Filling & Cleaning
a	Removing of water plants/Jal khumbi/ Water Hyacinth etc from Water body
b	Surface dressing of Pond base
c	Desilting of pond surface by 3 M Average depth
d	Soil Filing to make New Pond edge
e	Evacuating Pond water for cleaning

- Removing of water hyacinth, sewage dump, garbage, immersed idols etc. all kind of garbage from water body through mechanical or manual means in the entire 25.237 acres of campus and 22.1 acres water body area.
- Surface dressing of pond:
- Pumping out water and earthwork in bed clearance or desilting of pond base having full supply discharge between 8.5 cumecs and 0.14 cumecs (5 cusecs) and renovation of Pynes etc. In ordinary soil and disposal of excavated earth etc. including rough dressing. With all lead and lift all complete including royalty as per specifications and direction of E/I. Desilting of pond to be performed for minimum 3m depth from the existing surface bed of pond.
- Supplying and Filling in plinth with local sand and under floors including, watering, ramming, consolidating and dressing complete, Excavation and earthwork for establishing the new water body shore line of pond along the existing shore line of 1230 m approx. with minimum 4m wide and 3m depth approximately to create new water edge line. and soil filling at the same edge line as per drawing and as per instruction of E/I.
- Formation of Slope at the water edge line of length 1230 m or as per approved design drawings and 4m wide and upto the base of the pond bed, with slope as defined in design/ Drawings and as per instruction of E/I .

- Providing laying and filling **two layers of Geo bags** of size 1m X 0.7m (Type A 300 GSM nonwoven) Weight 420gm, volume of filled bag 0.07 cum, weight of filled Geo Bag 126 kg with local sand including stitching in four lines by approved Nylon thread with stitching machine and generator, stacking and placing after loading, unloading and carriage with the help of Trolley within 150m lead and by boat all complete as per specification and direction of E/I where boat is used.
- Laying of Geo textile fabric between the layer of Geo bags and pitching to prevent escape of pitching of materials from the voids of stone and allow free movement of water, without creating any uplift head on pitching as per specification mentioned below or as per specified by and direction of E/I
- Geotextile 120 gm. Non-woven 100% polyester of thickness 1.0 to 1.25 mm manufactured by a company of repute shall be used.
- Geotextile of the specified thickness is bonded to the water proofing membrane with intermittent touch by heating the membrane by Butane torch as per manufacturing recommendations.
- Providing and laying of boulder pitching with Boulder minimum size 200 mm over the geo textile membrane. Along the length of the new formed edge line in two layers of total approx. 1230 m length, 3m width and flush pointing of the laid boulder pitching with cement (1:3), with standard water proofing compound including curing, scaffolding wherever required and its removal, royalty all complete. All job completes as per specification and direction of E/I.
- Shoring with z section MS sheet pile along the side by side in all kinds of soil shall be done.
- Creation of RCC M-25 grade, toe wall at the bottom of the edge shore line as per approved design and drawings with minimum height of 2.0 m and including buttress resting on continuous toe wall slab at regular intervals to handle water and soil pressures at two sides at minimum 3.6 m c/c or as per approved design and drawing.

2. Dismantling of Existing Structure and ghats steps at Talab

S.No.	Items
2	Dismantling Works
a	Dismantling of Existing Boundary wall
b	Dismantling of Existing ghat steps
c	Dismantling of Existing Well
d	Dismantling of Existing Structures (Shops/Small temple sheds etc.)
e	Dismantling of Existing Drain
f	Dismantling of Existing PCC road
g	Dismantling of Existing Bitumen road
h	Dismantling of Existing Culvert

- Demolishing cement concrete including disposal of material within 3 Kilometre lead: 1:3:6 or richer mix
- Demolishing R.C.C. work including stacking of steel bars and disposal of unserviceable material within 3 Kilometres lead:
- Extra for cutting reinforcement bars in R.C.C. or R.B. work (Payment shall be made on the cross-sectional area of R.C.C. or R.B. work).
- Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work.

- Prior to approval required before dismantling of component to Authority or PDMC Engineer along with measurement.
- Demolishing brick work including stacking of serviceable material and disposal of unserviceable material within 3 kilometers lead: In cement mortar.
- Removing mortar from bricks and cleaning bricks including stacking within a lead of 50m.
- Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 3 kilometers lead. For thickness of tiles 10 mm to 25 mm.
- Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 3 kilometres lead.
- Demolishing R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1 kilometre, stacking serviceable and unserviceable material separately including cutting\ reinforcement bars.
- Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer- in-charge, beyond 50 m initial lead, for all leads including all lifts involved.

3. Reconstruction of Talab:

S.No.	Items
3	New Works
3.1	Pond Work (15.61 Acres)
a	Making of Retaining wall along Pond edge & Fish display area
b	Fixing of Ceramic Tiles in fish Display area
c	Stone Boulder Pitching in pond surface area
d	Stainless steel 304 grade & 12mm Toughened glass railing all around pond

- Construction of Shear Wall along the pond edge. Performing excavation including dressing of sides and ramming of bottoms, getting out surplus excavated soil and disposal of same within a lead of 3km. up to a depth of 1.8m and 450mm wide for development of shear wall along the new edge of the pond length 1083m length or as per approved design and drawings and as per direction of E/I, and 166 m approx. creation of shear wall for fish display pond of length 166 m., creation of foundation for shear wall length.
- Providing and driving hydraulic piling rigs with power units and installing cast in situ reinforced cement concrete piles approx. 417 nos in total at a distance of 2.5m c/c along the pond edge line length 1250m approx. with min. pile dia of 400mm and min. depth 12m as per specification and design drawings with M-25 grade concrete and reinforcement as per drawing and instruction of E/I. Providing and laying of machine mixed and machine vibrated design mix M-25 for all pile caps of 0.36 sqm area and 750mm depth with shuttering centering, labour all complete as per drawing and instruction of E/I.
- Providing machine batched and machine mixed and machine vibrated design mix concrete M-25 grade including shuttering centering and reinforcement all complete for 1250m length retaining wall, 200 mm width and 2.4 m height and for tie beam as per drawing.
- Provision of 18mm thick gang saw cut Granite over the exposed external sides of the retaining wall and over the visible exposed surface of the fish display pond.

- Fish display pond walls to be laid with ceramic glazed tile of standard size all along the area as defined in drawing for fish display pond from pond edge till fish display pond shear wall and as per instruction of E/I.
- Laying of ceramic glazed tiles standard size tiles in the base of fish display pond.
- Development of fish display pond as a swimming pool with cleaning mechanism, pumping of fresh water and extraction of soiled water all complete along with installation of cleaning plant of suitable capacity minimum 1 MLD and supply of all necessary motors, equipment fixtures all complete as per design and direction of E/I.
- Installation of 304 Grade stainless steel railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.). Along the new pond edge retaining wall height 1.00 m and 1083 m length approximately. Along with provision of 12mm thick toughened glass in between the stainless steel railings c/c from railing columns with breadth of each piece no less than 1.2 m as per approved drawing and direction of E/I.
- Installation of LED bollard lights along the wall with all connections and fittings complete with minimum 9W LED, casement, and fittings and circuit all complete as per approved make and model at max. 5m C/C interval.

Civil Works in the Talab complex

S.No.	Items
3.2	Land Work related (8.07 Acres)
a	Making of New Boundary wall
b	Making of secondary emergency entry/Exit gate 2 Nos
c	Making of Ghats
d	Making of Seating Shades
e	Making of Shaded Avenue
f	Making of Soil Mound restaurant
g	Making of drain all along boundary wall
h	Making of Footpath both side of road (North side of plot)
i	Making of New CC Road
j	Making of parking space for Two & four-wheeler, Taxi, Auto & Buses
k	Marking on Road & Parking space
l	Surprise fountain
m	Children Play area
n	Semi open café
o	Toilet & public Utility
p	Glass Overbridge

4. Construction of New Boundary wall:

- Complete earth in excavation for foundation trenches, pile foundation, pile caps including getting out excavated soil and disposal of surplus excavated soil as directed within a lead of 50m for entire wall length of approximate 1050 m in length.
- Providing and driving with hydraulic piling rigs and installing cast in situ reinforced cement concrete piles of no less than grade M-25 including reinforcement Centering, shuttering curing all complete as per approved design of piles and foundation and as per direction of E/I.
- Construction of tie beams between columns over pile caps and construction of columns over the pile foundation and support beam as per design drawing with concrete grade no less than M-20 including reinforcement as per drawing, centering shuttering, scaffolding etc. all complete.
- Brick work (Up to 2m height above G.L throughout length) in boundary wall as per approved design of class designation 100 A with cement mortar 1:4 (1 cement, 4 coarse sand)
- Finishing of boundary wall with 15mm thick cement plaster (1:3), 1 cement, 3 coarse sand on both sides of the wall. And finishing with white cement putty work with average thickness of 2 mm of approved brand and manufacturer with preparation of smooth and even finish surface on both sides. Application of Distemper with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ liter, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.
- Finishing of Boundary wall with acrylic smooth exterior paint of approved shade, of approved brand and manufacturer, two or more coat applied at 1.67 liter per 10 sqm and including priming coat of exterior primer applied @ 2.20 kg/10 sqm with Manjusa painting as design.
- Providing SS grill (height 1.8m per meter) works Grade -304 as per design and drawing and directed by E/I. SS grill made of hollow tubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)
- **Electric work:** Installation of LED Post top lights along the wall with all connections and fittings complete with minimum 36W LED, casement, and fittings, MCB, DB, Earthing (min. 4 set) and circuit all complete as per approved make and model at max. 6m C/C interval.
- **Plumbing Work:** water treatment of the external surface, provision of weep holes as required as per site requirement.

5. Making of Secondary Emergency Gate (2 Nos. :)

- Design and approval of Design of two emergency gate with minimum area requirement as follows

- Planning and placement of location of two no's, Emergency Gate and approval of same.
- Entrance gate : 9 m of total span
- Guard room: 2.0m X 2.5 m
- Toilet for the Guard room attached minimum size 1.5m X 1.2m.
- Entrance gate with Name board in Acrylic sheet Glow Board or material as per approved drawing and design.
- Complete earth in excavation for foundation trenches, pile foundation, pile caps including getting out excavated soil and disposal of surplus excavated soil as directed within a lead of 50m for excavation in foundation or pile caps as per design and structural design for Emergency Gate. And filling of available excavated earth in trenches, or foundations, including consolidation, ramming and watering as per direction of E/I.
- Providing and laying of PCC minimum Grade M-15 at the foundation base of the footing with minimum thickness of 75 mm as per approved design and drawings. including centering, shuttering, strutting, propping and removal of shuttering all complete.
- Construction of all Columns, beams, tie beams with reinforced Cement Concrete grade no less than M-25 with centering, shuttering, propping, scaffolding and removal of formwork all complete as per approved design and reinforcement cutting, bending, straightening all complete as per approved design and drawings.
- Fly ash Brick/ Brick work in all substructure, foundations, plinths all in class designation 100A and in cement mortar 1:4 (1 Cement, 4 Sand) as per approved design and drawing.
- Brick flat soling in floors for flooring in guard room, entry steps to guard room, toilet, foundation with brick of class designation 100A, 700 mm thick
- Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 thickness and colour as per approved make and manufacturer and design over external walls, internal walls, treads, risers, skirtings, columns external surfaces, gate external fascia, as per approved design and drawing. The wall tiles to be laid over 12mm thick bed of cement mortar 1:3 (1 cement, 3 sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.
- Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. In floor of guard room, dado skirting. Tile size 600 mm X 600 mm.
- **Providing wood door and window frame and window shutters:** 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). Kiln seasoned and chemically treated hollock wood. anti-termite treatment of wood frames and shutters, Treatment at points of contact of wood work by chemical emulsion chlordane. (in oil or kerosene based solution)® 0.5 liters per hole by drilling 6 mm dia holes at downward angle of 45 degree at 150 mm center to center and sealing the same.
- **Door Shutter:** Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard

wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: and Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete:. Providing and fixing flush doors with decorative veneering instead of non-decorative ISI marked flush door shutters conforming to I.S. 2202 (part I). On one side only

- Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.75 ltr/ 10 sqm of approved brand and manufacture.
- Providing SS grill works Grade -304 as per design and drawing and directed by E/I . SS grill made of hollow tubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) in entrance gate of size 9.0m and suitable height and as per approved design and direction of E/I.
- Appropriate Water proofing treatment at the top roof of the gate.
- **Electrical Works.:** All electric fixtures to be provided as per Approved design and drawing with following specifications but not limited to and as per direction of E/I
 - Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit with modular switch, modular plate, suitable size G.I. box etc as required.
 - Providing and fixing M.S. fan clamp type I or II of 16 mm dia. M.S. bar bent to shape with hooked ends in R.C.C slabs during laying including painting the exposed portion of loop, all as per standard design complete.
 - Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.
 - Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc. as required.
 - Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required.6 Module (200mmX75mm)
 - Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required, 40 Amps
 - Recess mounting LED round down light (12W) with all accessories and replacable electronic driver, LED shall be with BIS certification or certified by NABL lab

- Regular make 1200mm Sweep ceiling fan
- LED lamp 10/12 W.
- 12"(300mm) metal exhaust fan of approved make
- Earthing and Lightning conductor to be provided and fixed done as per design requirements all complete and as per instruction of E/I.

● **Plumbing works:**

- Providing and installing 1 H.P. working condition water pump of approved make and model to pump water from supply to overhead tank with all required electrical connections, junction boxes, circuit all complete.
- Providing & fixing Chlorinated polyvinyl Chloride (CPVC) Pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, 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 cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in charge. 15mm nominal outer dia pipes, 20mm nominal outer dia pipes, 25 mm nominal outer dia pipes. Making connections with brass unions of appropriate nominal bore as applicable. and direction of E/I.
- Providing and fixing GI pipes for external works including trenching, filling and making connections etc. 25 mm nominal dia bore and 32 mm dia nominal bore and making all connections as required. And fixing with stainless steel press fit design
- Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 liter low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid.
- Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.
- Providing and fixing wash basins with C.P. brass pillar tap, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls and floors where required. White Vitreous china Wash basin of size 630 x 450mm with single 15mm C.P brass pillar tap. And fixing of PVC water drainage pipe fixed to wash basin.
- Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.
- Providing and fixing C.P. brass angle valve and long body bib cock for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore
- Providing and fixing PTMT Grating of approved quality and colour, circular type.

- Providing and placing 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 fitting and base support for tank of minimum 300 ltr capacity
- For sewerage and drainage: Laying of RCC pipes, stone ware pipes, S.W. pipes, gully traps, manholes with common burnt clay (FPS) non modular bricks of class designation 7.5. or
- Construction of khurra 450 mm X 450 mm and providing and fixing unplasticized RIGID PVC pipes IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, including all kinds of accessories, coupler, Single T with door, bends, with clips on wall and fixing iron grating 15 cm dia at inlet mouth of rain water pipe all complete with accessories as per approved drawing, design and direction of E/I.

6. Making of Ghats.:

- Design and approval of Design of minimum one ghat with minimum shore length of Approx. 400m at the northern entry of the site with 15m wide and up to depth of 4.2 m.
 - Planning and placement of location of 370m X 15m X 4.2 m ghat steps design and drawings of ghat to be approved from the respective authority or E/I or BSCL.
- Complete earth in excavation for foundation trenches, pile foundation, pile caps, or as per requirement through mechanical or manual means, including dressing of sides and ramming of bottoms, including getting out excavated soil and disposal of surplus excavated soil as directed within a lead of 50m for excavation and filling of available excavated earth in trenches, or foundations, including consolidation, ramming and watering as per direction of E/I.
- Providing Boulder pitching by gabion structure with mechanically woven double twisted hexagonal shaped wire mesh gabion boxes as per IS 16014:2012, MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/ selvedges with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2mm, supplied @3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge
- Laying of PCC Cement Concrete (1:4:8, 1 cement, 4 coarse sand, 8 graded stone) 100mm over the area.
- Laying of Red sand Stone in cement mortar 1:6 (1 cement: 6 coarse sand) including pointing with cement mortar 1:2 (1 white cement: 2 stone dust) with an admixture of pigment matching the stone shade. Sand Stone to be minimum, red sand stone slab, 40mm thick and undressed, tile size 600mm X 600mm minimum.
- **Electrical Works.** All electric fixtures to be provided as per Approved design and drawing with following specifications but not limited to and as per direction of E/I.
 - Installation of lighting bollards at the ghat steps and street pole lighting over a suitable constructed RCC foundation base of approved design and height not less than 600mm from the ground level with lightning conductor and earthing all

complete as per approved design and drawings illuminating the ghat area. The wiring and lighting shall follow minimum specified specifications as follows or above.

- -Bollards: LED bollard 20 Lux and 9 W minimum.

- **Plumbing works:**

- **Provision of Water outlets at minimum 8 locations or as per approved design and drawings to clean the ghat area.**

- Providing & fixing Chlorinated polyvinyl Chloride (CPVC) Pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, 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 cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in charge. 25mm nominal outer dia pipes and 32 mm nominal outer dia pipes.
- Providing, fixing and making connections to GI pipes for external works including trenching, filling and making connections etc. 25, 32 and 40 mm or higher dia nominal bore as per approved design and making all connections as required. And fixing with stainless steel press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material and Painting of GI pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality 32 and 40 mm or higher dia nominal Bore as per approved design .with proper gun metal gate valve with C.I. wheel of approved quality (screwed end) for 32 and 40 mm dia nominal bore or higher as per approved design.
- For sewerage and drainage: Laying of RCC pipes, stone ware pipes, S.W. pipes, gully traps, manholes with common burnt clay (FPS) non modular bricks of class designation 7.5.
- Construction of khurra 450 mm X 450 mm and providing and fixing unplasticized RIGID PVC pipes IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, including all kinds of accessories , coupler, Single T with door, bends, with clips on wall and fixing iron grating 15 cm dia at inlet mouth of rain water pipe all complete with accessories as per approved drawing, design and direction of E/I.

- **Electrical Works.** All electric fixtures to be provided as per Approved design and drawing with following specifications but not limited to and as per direction of E/I.

- Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit with modular switch, modular plate, suitable size G.I. box etc as required.
- Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.

- Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc. as required.
- Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required. 6 Module (200mmX75mm)
- Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required, 40 Amps
- Recess mounting LED round down light (12W) with all accessories and replaceable electronic driver, LED shall be with BIS certification or certified by NABL lab
- LED lamp 10/12 W.
- Earthing and Lightning conductor to be provided and fixed done as per design requirements all complete.
- **Plumbing works:**
 - fixing unplasticized RIGID PVC pipes IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, including all kinds of accessories , coupler, Single T with door, bends, with clips on wall for drainage of rainwater to ground.

7. Making of Shaded Avenue.

- **Wood work in Door Frames:** Second class teak wood fixed in position with hold fast lugs or with dash fasteners of required length. And 40 x 5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm dia bolts, nuts, and wooden plugs embedding in cement concrete block 30 X 10 X 15 cm (1:3:6mix)
- **Flush Doors:** Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: fixing with stainless steel butt hinges, with decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S including cost of adhesive of approved quality:1.0 mm thick pasted on both sides, with all accessories including tower bolts, door stopper, door latch sliding door bolts of appropriate size as per direction of E/I.
- **Windows:** Provision of UPVC windows of size as per approved drawing and uPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of uPVC multi chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers

(weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealant shall be paid separately), and Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of (small series) frame 92 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension.

- **Glazing:** Glazing in UPVC windows as per drawing and approved design, with float glass pane 4.0 mm thick with EPDM, Neoprene gasket complete as per architectural drawings and direction of E/I
- **Toughened Glass Door for Entry and Exit Purpose: 2 nos. Toughened glass door minimum 2.4m wide and 2.4 m height double shutter :**
 - Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double action hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer- incharge
- **Steel Truss work in roof for curved roof:** Steel work in built up tubular trusses including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, welded and bolted including special shaped washers etc. complete: Hot finished welded type tubes with minimum 55 kg/ sqm weight work over area of 1684 sqm cumulative area of roof surface, or as per approved architectural drawing.
- **Galvanized Roofing Sheet:** Providing corrugated G.S. sheet roofing fixed with G.I.J. or hooks, bolts and nuts 8 mm diameter with bitumen and G. I. limpet washers or with G.I. limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on over lapping of sheets complete (upto a pitch of 60°) excluding the cost of purlins, rafters and trusses. 0.8mm thick with zinc coating not less than 275 gm/sqm. Over the area of 1684 Sqm approx. or as per approved architectural Design Drawings.
- **Roof Thermal Insulation:** Thermal Insulation of roofing with Expanded polystyrene fixed with suitable adhesive to the false ceiling as per the directions of the Engineer-in charge with Type SE Self Extinguishing type, Providing and applying two coats of High Albedo paint having minimum Solar Reflective Index (SRI) 108 (with solar reflectance & thermal emittance tested as per ASTM) C 1549 and ASTM C 1371 respectively), VOC less than 10 cc/gm. The coating thickness and the methodology of application shall strictly as per manufacturer's specifications and as approved by E/I
- Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 thickness and colour as per approved make and manufacturer and design over external walls, internal walls, treads, risers, skirtings, columns external surfaces, gate external facia, as per approved

design and drawing. The wall tiles to be laid over 12mm thick bed of cement mortar 1:3 (1 cement, 3 sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. Size

- **In general flooring in the food court:** Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. In floor of Food court, dado skirting. Tile size 1000 mm X 100 mm.
- **In general flooring in the Toilet:** Providing laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such shades except white , Ivory , Grey , Fume Red , Brown , laid on 20 mm thick Cement mortar 1:4 (1 cement: 4 coarse sand) including pointing the joints with white cement and matching pigment etc., complete.
- **In general wall tiles in the Toilet: and kitchen** Providing laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such shades except white , Ivory , Grey , Fume Red , Brown , laid on 20 mm thick Cement mortar 1:4 (1 cement: 4 coarse sand) including pointing the joints with white cement and matching pigment etc., complete.
- **Plaster Work on walls:**
 - **External Wall:** 15 mm cement plaster work in 1:3 (1 cement and 3 coarse sand)
 - **Internal wall:** 12 mm cement plaster work in 1:3 (1 cement and 3 coarse sand)
 - Internal and External Putty Work: providing and applying white cement-based putty of average thickness 1mm of approved brand and manufacturer over plastered surface. On external and internal wall and ceiling. Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and color.
 - External Paint works: Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm) over external wall surface.
 - Internal Paint Work: Wall painting with plastic emulsion paint of approved brand and manufacturer to a given shade of minimum two coats or higher.
 - **Paint on wood works:** Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.75 ltr/ 10 sqm of approved brand and manufacture. On wooden frames and door shutters wherever applicable and as per direction of E/I.
 - **Water Proofing in Toilet area:** in situ five course water proofing treatment with glass fibre tissue reinforced bitumen over roof consisting of first coat of bitumen primer @ 0.40 kg. per sqm, 2nd & 4th courses of bonding material® 1.60 kg. per sqm which shall consist of blown type bitumen of grade 85/25 conforming to IS:

702, third layer of glass fibre tissue course as specified, fifth, the top most layer of stone grit 6 mm and down size or pea-sized gravel spread @ 6 dmJ per sqm including preparation of surface excluding grading for slope etc. complete. Over toilet floor area approximately 78 Sqm.

- **Plumbing:**
- **Construction of Large scale Kitchen(s) for appropriate capacity for multiple food outlets as required and as per approved design and drawing within Food court for with each having minimum stainless steel wash sinks, water supply by CPVC pipes, and fittings as specified below**
- **Construction of two nos. toilet block within Food court for Gents and Ladies (minimum 39 Sqm each) with each having minimum 6 W.C., 4 Urinals in each toilet block with Mirrors, Wash basin and bathroom fittings as specified below**
 - Stainless steel kitchen sink - with drain board 510 x 1040 mm bowl depth 225 mm.
 - Providing and installing minimum 1 H.P or higher. Working condition water pump to of approved make and model to pump water from supply to overhead tank with all required electrical connections, junction boxes, circuit all complete.
 - Providing & fixing Chlorinated polyvinyl Chloride (CPVC) Pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, 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 cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in charge. 15mm nominal outer dia pipes, 20mm nominal outer dia pipes, 25 mm nominal outer dia pipes. Making connections with brass unions of appropriate nominal bore as applicable. and direction of E/I.
 - Providing and fixing GI pipes for external works including trenching, filling and making connections etc. 25 mm nominal dia bore and 32 mm dia nominal bore and making all connections as required. And fixing with stainless steel press fit design
 - Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid.
 - Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.
 - Providing and fixing wash basins with C.P. Brass pillar tap, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls and floors where required. White Vitreous china Wash basin of size 630 x 450mm with single 15mm C.P brass pillar tap. And fixing of PVC water drainage pipe fixed to wash basin.

- Providing and fixing stainless steel
- Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.
- Providing and fixing C.P. brass angle valve and long body bib cock for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore
- Providing and fixing PTMT Grating of approved quality and colour, circular type.
- Providing and placing 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 fitting and base support for tank. of minimum **1000 ltr** capacity
- For sewerage and drainage: Laying of RCC pipes, stone ware pipes, S.W. pipes, gully traps, manholes with common burnt clay (FPS) non modular bricks of class designation 7.5. or
- Construction of khurra 450 mm X 450 mm and providing and fixing unplasticized RIGID PVC pipes IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, including all kinds of accessories , coupler, Single T with door, bends, with clips on wall and fixing iron grating 15 cm dia at inlet mouth of rain water pipe all complete with accessories as per approved drawing, design and direction of E/I.
- All electric fixtures to be provided as per Approved design and drawing with following specifications but not limited to and as per direction of E/I.
 - SS Grade chimney exhaust system for heat exhaust
 - Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit with modular switch, modular plate, suitable size G.I. box etc as required. For the entire area of 1500 Sqm as per approved electrical layout drawings and design form approving authority.
 - Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.
 - Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and flxing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc. as required.
 - Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required.6 Module (200mmX75mm)
 - Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required, 40 Amps or as per requirement

- Recess mounting LED round down light (12W) with all accessories and replicable electronic driver, LED shall be with BIS certification or certified by NABL lab
- Regular make 1200mm Sweep ceiling fan
- 12"(300mm) or higher as per requirement metal exhaust fan of approved make
- LED lamp 10/12 W.
- Earthing and Lightning conductor to be provided and fixed done as per design requirements all complete.

8. Storm Water Drainage and Drainage system in Campus:

S.No.	Description	Location	Nos.	Length	Size
1	Storm Water Drainage along the boundary wall	periphery of Boundary wall	1	1000	1.2m X 1.5m
2	Storm Water Drainage along the CC Road	Along the extrenal CC Road	1	400	0.8 m X 1.0 m
3	Culverts Conneting Drains to Pond	At 5 locations connecting drain to pond	5	30	0.8 m X 1.0 m
4	Cross Drainage	at 2 locations on cc road	2	30	1.8 m X 1.5 m
5	Chamber1	At Five locations	5	1	1.8 m X 1.8 m X 2.5 m
6	Chamber2	At Twelve locations in boundary wall	12	1	1.5 m X 1.5 m X 2.0 m
7	Underground Water Tank	At two locations for inlet purpose of outside water	2	1	8.0m X 8.0m X 5.0m
8	Portable water treatment plant to treat incoming water and existing pond water. Gem Id: 5116877-79700670690	CECON--CECON POLLUTECH SYSTEMS PRIVATE LIMITED Mild Steel Single Tank Sewage/Effluent Treatment Plant 1 year, 50 KLD at 4 locations			4 units

- **Length of the drain mentioned above is for illustrative purpose only, it may vary as per site condition.**
- **Design and Drawings of storm water drainage all along the boundary wall of approximate length 1000 m in length. Drain must be 1.20m wide and 1.5 m depth. Architectural and structural drawings to be prepared by the contractor and get approved by the approving authority.**
- **Depth may be increased as per survey and discharging capacity require on basis of design.**
- **Design and Drawings of storm water drainage all along the CC Road of approximate length 4000 m in length. Drain must be 0.80m wide and 1.0 m depth. Architectural and structural drawings to be prepared by the contractor and get approved by the approving authority.**

- **Design and Drawings of Culvert(s) connecting Drains to pond all boundary wall of approximate length 1000 m in length, 5 in nos. Culvert must be 0.80m wide and 1.0 m depth or as per requirement. Architectural and structural drawings to be prepared by the contractor and get approved by the approving authority.**
- **Design and Drawings of Cross Drainage(s) to pond at two locations on the CC Road of approximate. Drainage must be minimum 30 m in length and must be 1.80m wide and 1.5 m depth. Architectural and structural drawings to be prepared by the contractor and get approved by the approving authority.**
- **Design and Drawings of Chamber(s) to pond at Five (5) locations for cross drainage and must be 1.80m wide, 1.8 m length and 2.5 m depth. Architectural and structural drawings to be prepared by the contractor and get approved by the approving authority.**
- **Design and Drawings of Chamber(s) to pond at Twelve (12) locations for boundary wall drainage system be 1.50m wide, 1.5 m length and 2.0 m depth. Architectural and structural drawings to be prepared by the contractor and get approved by the approving authority.**
- **Design and Drawings of Underground Water tanks to store water from outside coming inside the pond at two locations at north and south side system be 8.0 wide, 8.0 m length and 5.0 m depth. Architectural and structural drawings to be prepared by the contractor and get approved by the approving authority.**
- **Installation of 2 Nos. Water treatment plant of 50 KLD to treat water from outside entering into pond and regular slow cleaning of existing water in the pond as per standard specification.**
- **Complete earthwork in excavation for foundation trenches, pile foundation, pile caps including getting out excavated soil and disposal of surplus excavated soil as directed within a lead of 50m for excavation in foundation or pile caps as per design and structural design for Emergency Gate. And filling of available excavated earth in trenches, or foundations, including consolidation, ramming and watering as per direction of E/I. in length of 1100 m approx. and with average width of and 1.9 m and 1.5 m depth as working area.**
- **Pumping out water caused by springs or water seepage broken water mains or drains etc.**
- **Supply & providing 150mm thick sand bed below the PCC base including watering, tampering and ramming, all operational, incidental charges.**
- **Clearing of surface from unserviceable materials, soil and disposal up to 1000 m and replacement by suitable soil.**
- **Providing and laying of cement concrete at the base of minimum 200 mm of specified grade of 1:4:8 (1 Cement, 4 coarse sand and 8 stone aggregate of 40 mm nominal size.) at the base.**
- **Providing and laying in position specified grade of reinforced cement concrete 1:1.5:3 (1 Cement: 1.5 coarse sand: 3 graded stone aggregate 20 mm nominal size) at the base and sides of the drain. Including centering, shuttering, propping, finishing removal of formwork**

and providing, Straightening, cutting bending and placing in position and binding all complete reinforcement works no less than 74.5 Kg/m length or as per Approved drawing and direction of E/I.

- Providing and filling in blown bitumen at expansion joints as per design.
- Providing sal ballah barricading with departmental sal ballah of average dia 150mm across the entire length of the drain at interval of 2.5m C/C with minimum length of horizontal runners at 2m placed horizontally 0.5m average above the below ground level and packed with eart and brick bats, horizontal runners fixed with iron spikes and wires, white washing one coat to exposed surface and dismantling the sal ballah after barricading and filling up the holes, and carriage of sal ballah from and to the go down and stacking them in countable stacks in godown including cost of all labour and materials and taxes all complete job as specification and direction of E/I.
- Laying of precast RCC grating with MS iron frame 450 x 100 mm vertical grating of approved design and RCC M-25 grade minimum. Size minimum 1.2 m X 3.0m
- Constructing brick masonry road gully chamber at every 50m distance of size 50 x 45 x 60 cm with bricks in cement mortar 1:4 (1 cement: 4 coarse sand) including 500 x 450 mm pre - cast R.C.C horizontal grating with frame complete as per standard design: with common burnt clay F.P.S. (non modular bricks of class designation 7.5
- Providing weep holes at every 5m location in brick masonry /plain / reinforced concrete abutment with 100 mm dia AC pipe extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications
- Precast RCC grating with frame 450 X 100 mm vertical grating
- Constructing brick masonry road gully chamber 50 x 45 x 60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500 x 450 mm pre - cast R.C.C horizontal grating with frame complete as per standrd design :with common burnt clay F.P.S. (non modular bricks of class designation 7.5)

9. Making of Footpath both side of road (North side of plot).

- **Design and Drawings of footpath of approximate length 830 m in length (both side of the CC road). Minimum 3.60 m wide. Architectural and structural drawings to be prepared by the contractor and get approved by the approving authority.**
- Dismantling existing laid footpath in brick work, tile work, and pavement as per requirement.
- Complete earthwork in excavation for foundation trenches, pile foundation, pile caps including getting out excavated soil and disposal of surplus excavated soil as directed within a lead of 50m and filling of available excavated earth in trenches, or foundations, including consolidation, ramming and watering as per direction of E/I. in length of 830 m approx. and with average width of and 1.9 m and 1.5 m depth as working area.
- Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete.

- Providing and laying in position cement concrete of specified grade 1:1.5:3 (1 Cement: 1.5 coarse sand: 3 graded stone aggregate 20 mm nominal size). of 200mm thickness across the footpath on both the sides of road
- Paver Block Providing and laying factory made chamfered edge Cement Concrete paver blocks of required strength, thickness & size/shape, made by table vibratory method, to attain superior smooth finish using PU or equivalent moulds, laid in required Grey colour & pattern over 50mm thick compacted bed of coarse sand, compacting and proper embedding / laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with jamuna sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. all complete as per Manufacturer's specifications & direction of Engineer -in-Charge: (a) 80 mm thick c.c. paver block of M-35 grade with approved colour design and pattern.
- Cast-in-Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 408.).

10. Making of parking space for Two & four-wheeler, Taxi, Auto & Buses.

- **Design and Drawings of Parking Space area in minimum 2100 sqm area for parking approximately 70 ECS in appropriate proportion for parking 4 wheelers, 2 wheelers and large Commercial vehicles. Architectural and structural drawings to be prepared by the contractor and get approved by the approving authority. Parking may be segregated in to two locations north and south side of the entry to talab complex in required appropriate proportion of area and ECS (S) as per the requirement of the client.**
- Dismantling existing laid footpath in brick work, tile work, and pavement as per requirement on the specified area. In 2100 sqm. of approximately 200 mm thickness/ depth
- Clearing of surface from unserviceable materials, soil and disposal up to 1000 m and replacement by suitable soil.
- Complete earthwork in excavation for foundation trenches, pile foundation, pile caps including getting out excavated soil and disposal of surplus excavated soil as directed within a lead of 50m and filling of available excavated earth in trenches, or foundations, including consolidation, ramming and watering as per direction of E/I. in area of 1800 sqm of 200mm depth
- Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete. in the parking area. 50 mm
- Supplying and filling Granular Sub-Base with Coarse Graded Material (Table: - 400- 2) Construction of granular sub-base by providing coarse graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401., Grading I material filling upto 250 mm thickness.

- Providing and laying in position cement concrete thickness of layer 200mm of specified grade including the cost of centering and shuttering - all work up to plinth level.1:1.5:3 (1 Cement: 1.5 coarse sand: 3 graded stone aggregate 20 mm nominal size)
- Paver Block Providing and laying factory made chamfered edge Cement Concrete paver blocks of required strength, thickness & size/shape, made by table vibratory method , to attain superior smooth finish using PU or equivalent moulds, laid in required Grey colour & pattern over 50mm thick compacted bed of coarse sand, compacting and proper embedding / laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with jamuna sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. all complete as per Manufacturer's specifications & direction of Engineer -in-Charge:(a) 80 mm thick c.c. paver block of M-35 grade with approved colour design and pattern. In 1800 sqm area for parking.
- Providing, laying and fixing of Cast-in-Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete made using concrete mixer on entire perimeter of the parking area and between defined parking space and maneuvering lanes. As per approved architectural and parking design layout. And direction of E/I.
- Marking and paint of all kerb stones and parking space lines for four wheelers, two wheelers commercial vehicles, buses, autos etc. maneuvering and driving lanes, edge lines and all necessary markings as per approved design in parking space with 1 st quality synthetic enamel paint of approved brand and manufacturer of required colour and even shade over concrete surface as per the approved pattern etc., complete for finished item of work, as directed by Engineer-in-Charge and MORT&H specification no.803.

11. Marking on Road and Parking Space:

- **Design and Drawings of Parking Space, Road and Pavement design of the road and site.**
- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes. For following and as per approved design layout for road, internal roads and parking area works.

Centre line @4.0 m
Edge line
Zebra crossings
Rumble strip
Stop signs
Advanced direction signs
Compulsory keep left signs
Directional arrows
Red reflectors

Add extra chevrons, continuous lines

- Providing and fixing Road Markers/Road Stud with tense Reflector (Providing and fixing of road stud 100X 100 mm, die cast in aluminum, resistant to corrosive effect of salt and grit, fitted with lense reflectors, instated in concrete or asphaltic surface by drilling hole 30 mm up to a depth of 60 mm and bedded in a suitable bituminous grout or epoxy mortar, ail as per BS 873 part 4:1973) as per approved design and direction of Engineer in Charge.
 - Zebra Crossing
 - Driving lane in parking area
 - Category lane.
- Providing and fixing of Retro- reflectorized Traffic signs (Providing and fixing of retro-reflectorized cautionary, mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminum sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M20 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing.) Of following sizes at appropriate location as per approved design.
 - 80 cm X 60 cm rectangular traffic signs
 - 60 cm equilateral Traffic signs.
- Direction and Place Identification signs up to 0.9 sqm size board. (Providing and erecting direction and place identification retro-reflectorized sign asper IRC: 67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminum sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing.) of size approx. 1m X 1m or of approved size at 4 locations to identify the developed park.

12.Development of Children's play area

- **Preparation of Design and Layout Drawings for Children's Play Area of. and approved from the approving authority including plumbing and electrical drawings all complete.**
- Earth work in excavation 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, lift upto 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.. with excavation up to depth of 500 mm
- Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete.
- Approx 800 Sqm area to be developed for creating hardscape in form of walkways, platforms, seating areas etc. to be developed as softscapes installing children rides and swings.
- play equipment, open Gym equipment are installed of standard specification minimum 800 sqm spread across children play area wherever required.

- Providing designation 100 A one brick flat soling joints filled with local sand including cost of watering, taxes, royalty all complete as per building specification and direction of E/I.
- Providing and laying Granular Sub-Base with Coarse Graded Material (Table:- 400-2) Construction of granular sub-base by providing coarse graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401 for Grading I material
- Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plinth level.1:1.5:3 (1 Cement: 1.5 coarse sand: 3 graded stone aggregate 20 mm nominal size). 200 mm Thick Cement Concrete. Over the 800 Sqm area.
- Providing and laying factory made chamfered edge cement concrete paver blocks in foot path, park and lawns drive way or light & traffic parking etc. of required strength, thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of coarse sand, compacting and proper embedding/laying of inter locking paver blocks in to the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand cutting of paver blocks as per size required size and pattern, finishing and sweeping extra sand, all complete as per manufacturer's specifications & direction of E/I.
- Cast-in-Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 408.) to be laid over the boundary line segregating hardscape from soft scape.
- Supplying and stacking of good earth at site including royalty and carriage up to 5 km complete (earth measured in stacks will be reduced by 20% for payment). For assuming good earth to be used, 200mm thick layer of Good earth to layered and stacked over area to be developed as soft scape.
- Supplying and stacking sludge at site including royalty and carriage upto 5 km complete (sludge measured in stacks will be reduced by 8% for payment). For assuming sludge to be used, 200mm thick layer of sludge to layered and stacked to be developed as soft scape.
- Supplying and stacking at site dump manure from approved source, including carriage upto 5 km complete (manure measured in stacks will be reduced by 8% for payment) : 23.4.3 Screened through sieve of I.S. designation 4.75 mm. For assuming dump manure to be used, 200mm thick layer of dump manure to be layered and stacked over 1500 Sqm area to be developed as soft scape.
- the sludge, dump manure and good earth to mixed thoroughly and then to be used for preparation of beds for landscaping and horticulture purpose.
- Preparation of beds for hedging and shrubbery by excavating 60 cm deep and trenching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by

8%),flooding with water, filling with earth if necessary, watering and finally finedressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50 m, lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately) to be done in the area of 1500 sqm as per approved drawing and design and direction of E/I.

- Providing and laying Neelgiri/Mexican grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with tools wooden (Dhurmos) and then rolling the surface with light roller make the surface smoothen and light watering with sprinkler and maintenance for 30 days or more till the grass establish properly, as per direction of officer-in-charge. as per approved drawing and design and direction of E/I.
- **Wood work in Door Frames:** Second class teak wood fixed in position with hold fast lugs or with dash fasteners of required length. And 40 x 5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm dia bolts, nuts, and wooden plugs embedding in cement concrete block 30 X 10 X 15 cm (1:3:6mix)
- **Flush Doors:** Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: fixing with stainless steel butt hinges, with decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S including cost of adhesive of approved quality:1.0 mm thick pasted on both sides, with all accessories including tower bolts, door stopper, door latch sliding door bolts of appropriate size as per direction of E/I.
- **Windows:** Provision of UPVC windows of size as per approved drawing and uPVC white colour sliding glazed window up to 1.50 m in height dimension comprising of uPVC multi chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealent shall be paid separately), and Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of (small series) frame 92 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension.

- **Glazing:** Glazing in UPVC windows as per drawing and approved design, with float glass pane 4.0 mm thick with EPDM, Neoprene gasket complete as per architectural drawings and direction of E/I
- **Toughened Glass Door for Entry and Exit Purpose: 1 nos. Toughened glass door minimum 2.0 m wide and 2.4 m height double shutter :**
 - Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double action 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
- **MS Steel Trellis work in roof for glass roof:** Steel work in built up tubular trusses including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, welded and bolted including special shaped washers etc. complete: Hot finished welded type tubes with minimum 55 kg/ sqm weight work over area of 1684 sqm cumulative area of roof surface, or as per approved architectural drawing.
- Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 thickness and colour as per approved make and manufacturer and design over external walls, internal walls, treads, risers, skirtings, columns external surfaces, gate external fascia, as per approved design and drawing. The wall tiles to be laid over 12mm thick bed of cement mortar 1:3 (1 cement, 3 sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. Size
- **In general flooring in the café:** Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. In floor of Food court, dado skirting. Tile size 1000 mm X 100 mm.
- **Plaster Work on walls:**
 - **External Wall:** 15 mm cement plaster work in 1:3 (1 cement and 3 coarse sand)
 - **Internal wall:** 12 mm cement plaster work in 1:3 (1 cement and 3 coarse sand)
 - Internal and External Putty Work: providing and applying white cement-based putty of average thickness 1mm of approved brand and manufacturer over plastered surface. On external and internal wall and ceiling. Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and color.
 - External Paint works: Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm) over external wall surface.

- Internal Paint Work: Wall painting with plastic emulsion paint of approved brand and manufacturer to a given shade of minimum two coats or higher.
- **Paint on wood works:** Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.75 ltr/ 10 sqm of approved brand and manufacture. On wooden frames and door shutters wherever applicable and as per direction of E/I.
- **Plumbing works:** Preparation of detailed Plumbing layout as per requirement and approval of same from the approving authority.
 - Stainless steel kitchen sink - with drain board 510 x 1040 mm bowl depth 225 mm.
 - Providing and installing minimum 1 H.P or higher. Working condition water pump to of approved make and model to pump water from supply to overhead tank with all required electrical connections, junction boxes, circuit all complete.
 - Providing & fixing Chlorinated polyvinyl Chloride (CPVC) Pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, 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 cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in charge. 15mm nominal outer dia pipes, 20mm nominal outer dia pipes, 25 mm nominal outer dia pipes. Making connections with brass unions of appropriate nominal bore as applicable. and direction of E/I.
 - Providing and fixing Stainless Steel (1 nos.) AISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless-steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required:
 - Providing and fixing GI pipes for external works including trenching, filling and making connections etc. 25 mm nominal dia bore and 32 mm dia nominal bore and making all connections as required. And fixing with stainless steel press fit design.
 - Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) completes with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.
 - Providing and fixing wash basins with C.P. brass pillar tap, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls and floors where required. White Vitreous china Wash basin of size 630 x 450mm with single 15mm C.P brass pillar tap. And fixing of PVC water drainage pipe fixed to wash basin.
 - Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.
 - Providing and fixing C.P. brass angle valve and long body bib cock for basin mixer and geyser points of approved quality conforming to IS: 8931 a) 15 mm nominal bore.
 - Providing and fixing PTMT Grating of approved quality and colour, circular type.

- Providing and placing 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 fitting and base support for tank. of minimum **1000 ltr** capacity
- For sewerage and drainage: Laying of RCC pipes, stone ware pipes, S.W. pipes, gully traps, manholes with common burnt clay (FPS) non modular bricks of class designation 7.5. or
- Construction of khurra 450 mm X 450 mm and providing and fixing unplasticized RIGID PVC pipes IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, including all kinds of accessories , coupler, Single T with door, bends, with clips on wall and fixing iron grating 15 cm dia at inlet mouth of rain water pipe all complete with accessories as per approved drawing, design and direction of E/I.

13.Development of Toilet and Public Utility (8 nos.).

- **Preparation of Design and Layout Drawings for Toilet as public utility for gents and ladies with area of 56.80 Sqm. With gents and ladies toilet in one block separated duly and two different entrances, Gents toilet with 2 nos. WC, 3 nos. urinals , 2 nos. wash basin minimum and ladies toilet with 3 W.C., 3 nos. wash basin minimum but not limited to and as per Approved drawing and design catering to project requirement**
- Complete earthwork in excavation for foundation trenches, pile foundation, pile caps including getting out excavated soil and disposal of surplus excavated soil as directed within a lead of 50m for excavation in foundation or pile caps as per design and structural design for Toilet Block. And filling of available excavated earth in trenches, or foundations, including consolidation, ramming and watering as per direction of E/I.
- Providing and laying of PCC at the foundation base of the footing with minimum thickness of 75 mm as per approved design and drawings. including centering, shuttering strutting, propping and removal of shuttering all complete.
- Construction of all Columns, beams, tie beams and roof slabs with reinforced Cement Concrete grade no less than M-25 with centering shuttering, propping, scaffolding and removal of formwork all complete as per approved design and reinforcement cutting, bending straightening all complete as per approved design and drawings.
- Brick work class designation 100A and brick tile masonry with tiles of Class designation 100A in all substructure, foundations, plinths all in and in cement mortar 1:4 (1 Cement, 4 Sand) as per approved design and drawing.
- **Anti-termite Treatment** over the external wall of the structure with chlorpyriphos /Lindone E.C. 20% with 1% concentration through Diluting and injecting chemical emulsion for POSTCONSTRUCTIONAL anti-termites' treatment (including the cost of chemical emulsion)chemical emulsion @ 7.5 liters / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete. Laying of 50 mm thk. Damp Proof course, applying coat of residual petroleum bitumen of grade VG-10 of approved quality using 1.7 kg per square metre on DPC and 50mm thick 1:3:6 (1 Cement, 3 coarse sand 6 graded stone aggregate 20 mm nominal size

over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.

- **Wood work in Door Frames:** Second class teak wood fixed in position with hold fast lugs or with dash fasteners of required length. And 40 x 5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm dia bolts, nuts, and wooden plugs embedding in cement concrete block 30 X 10 X 15 cm (1:3:6mix)
- **Flush Doors:** Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: fixing with stainless steel butt hinges, with decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S including cost of adhesive of approved quality:1.0 mm thick pasted on both sides, with all accessories including tower bolts, door stopper, door latch sliding door bolts of appropriate size as per direction of E/I.
- **Windows:** Provision of UPVC windows of size as per approved drawing and uPVC white colour sliding glazed window up to 1.50 m in height dimension comprising of uPVC multi chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealant shall be paid separately), and Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of (small series) frame 92 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension.
- **Glazing:** Glazing in UPVC windows as per drawing and approved design, with float glass pane 4.0 mm thick with EPDM, Neoprene gasket complete as per architectural drawings and direction of E/I
- **PVC Door frame and PVC Shutters in all W.C. / toilets :**
 - **PVC door frame Size: (750 mm X 2100 mm)** Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5 mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos. of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM

rubber gasket weather seal to be provided throughout the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer-in- Charge.

- **PVC Door Shutter Size: (750 mm X 2100 mm)** 30 mm thick factory-made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless-steel screws. The styles of the shutter reinforced by inserting galvanized M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanized M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.

- **Ceramic Tiles in Flooring:**

- laying Ceramic glazed floor tiles 600x600 mm (thickness to be specified by the manufacturer) of ist quality conforming to IS: 15622 of approved make in colours such shades except white,Ivory,Grey, Fume Red,Brown, laid on 20 mm thick Cement mortar 1:4 (1 cement: 4 coarse sand) including pointing the joints with white cement and matching pigment etc., complete.

- **Plaster Work on walls:**

- **External Wall:** 15 mm cement plaster work in 1:3 (1 cement and 3 coarse sand)
- **Internal wall:** 12 mm cement plaster work in 1:3 (1 cement and 3 coarse sand)
- Internal and External Putty Work: providing and applying white cement-based putty of average thickness 1mm of approved brand and manufacturer over plastered surface. On external and internal wall and ceiling. Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and color.
- External Paint works: Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm) over external wall surface.
- Internal Paint Work: Wall painting with plastic emulsion paint of approved brand and manufacturer to a given shade of minimum two coats or higher.
- **Paint on wood works:** Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of

primer applied @ 0.75 ltr/ 10 sqm of approved brand and manufacture. On wooden frames and door shutters wherever applicable and as per direction of E/I.

- **Water Proofing in Toilet area:** in situ five course water proofing treatment with glass fibre tissue reinforced bitumen over roof consisting of first coat of bitumen primer @ 0.40 kg. per sqm, 2nd & 4th courses of bonding material@ 1.60 kg. per sqm which shall consist of blown type bitumen of grade 85/25 conforming to IS: 702, third layer of glass fibre tissue course as specified, fifth, the top most layer of stone grit 6 mm and down size or pea-sized gravel sprad @ 6 dmJ per sqm including preparation of surface excluding grading for slope etc.complete. Over toilet floor area approximately 78 Sqm.
- **Plumbing works:** Preparation of detailed Plumbing layout as per requirement and approval of same from the approving authority.
 - Providing and installing minimum 1 H.P or higher. working condition water pump to of approved make and model to pump water from supply to overhead tank with all required electrical connections, junction boxes, circuit all complete.
 - Providing & fixing Chlorinated poly vinyl Chloride (CPVC) Pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, 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 cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in charge. 15mm nominal outer dia pipes, 20mm nominal outer dia pipes, 25 mm nominal outer dia pipes. Making connections with brass unions of appropriate nominal bore as applicable. And direction of E/I.
 - Providing and fixing GI pipes for external works including trenching, filling and making connections etc.25 mm nominal dia bore and 32 mm dia nominal bore and making all connections as required. And fixing with stainless steel press fit design
 - Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid.
 - Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete. at all wash basins.
 - Providing and fixing wash basins with C.P. brass pillar tap, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls and floors where required. White Vitreous china Wash basin of size 630 x 450mm with single 15mm C.P brass pillar tap. And fixing of PVC water drainage pipe fixed to wash basin.

- Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.
- Providing and fixing C.P. brass angle valve and long body bib cock for basin mixer and geyserpoints of approved quality conforming to IS:8931 a) 15 mm nominal bore
- Providing and fixing PTMT Grating of approved quality and colour, circular type.
- Providing and placing 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 fitting and base support for tank. of minimum **500 ltr** capacity
- For sewerage and drainage: Laying of RCC pipes, stone ware pipes, S.W. pipes, gully traps, manholes with common burnt clay (FPS) non modular bricks of class designation 7.5. or
- Construction of khurra 450 mm X 450 mm and providing and fixing unplasticized RIGID PVC pipes IS:13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, including all kinds of accessories , coupler, Single T with door, bends, with clips on wall and fixing iron grating 15 cm dia at inlet mouth of rain water pipe all complete with accessories as per approved drawing, design and direction of E/I.
- All electric fixtures to be provided as per Approved design and drawing with following specifications but not limited to and as per direction of E/I.
 - Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit with modular switch, modular plate, suitable size G.I. box etc as required. For the entire area of 1500 Sqm as per approved electrical layout drawings and design form approving authority.
 - Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.
 - Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc. as required.
 - Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required. 6 Module (200mmX75mm)
 - Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required, 40 Amps
 - Recess mounting LED round down light (12W) with all accessories and replaceable electronic driver, LED shall be with BIS certification or certified by NABL lab

- Regular make 1200mm Sweep ceiling fan
- 12"(300mm) metal exhaust fan of approved make
- LED lamp 10/12 W.
- Earthing and Lightning conductor to be provided and fixed done as per design requirements all complete.

14. Development of Septic Tanks for Toilet and Public Utility (8 nos.).

- **Preparation of Design and Drawings and construction of same for Septic Tank of Size 7m X 4m X 3m but not limited to and as per Approved drawing and design catering to project requirement**
 - Complete earthwork in excavation for foundation trenches, pile foundation, pile caps including getting out excavated soil and disposal of surplus excavated soil as directed within a lead of 50m for excavation in foundation or pile caps as per design and structural design for Toilet Block. And filling of available excavated earth in trenches, or foundations, including consolidation, ramming and watering as per direction of E/I.
 - Providing Brick Flat Soling with bricks of class designation 100 B in the septic tank base.
 - Providing and laying of PCC at the foundation base of the footing with minimum thickness of 75 mm as per approved design and drawings. including centering, shuttering strutting, propping and removal of shuttering all complete.
 - Construction of all walls, beams and slabs with reinforced Cement Concrete grade no less than M-25 with centering shuttering, propping, scaffolding and removal of formwork all complete as per approved design and reinforcement cutting, bending straightening all complete as per approved design and drawings.
 - Brick work with bricks of class designation 100A in foundations and plinth in : cement mortar 1:4 (1 cement: 4 coarse sand).
 - Making bell mouth opening/ entrance of size 100x50x50 cm for drainage pipe under footpath, including providing cement concrete 1:3:6 (1 cement : 3 coarse sand: 6 graded stone aggregate 20 mm nominal size) for shape of bell mouth, including plastering providing and fixing precast R.C.C./ S.F.R.C. slab including plastering with cement mortar 1:3 (1 cement : 3 fine sand) of 6 mm thickness on exposed surface of the slab & bell mouth including centring, shuttering & neat cement punning inside the bell mouth etc. all complete.
 - Supply and fixing of CI cover with frame for manholes of 500mm dia ci cover, medium duty weight of cover not less than 58 kg.

Other Civil works and installation of equipment,

15. Landscape Works .

- **Preparation of Detailed Design and Layout horticulture and landscape drawings for the new land of approximate as per approved design, within revised shore line for the**

landscape area to be developed, the landscaping comprising of both hardscape, internal pathways, and soft scape the design to be approved by the approving authority. the proposed landscape may be developed as theme parks with specific type of landscaping style like butterfly gardens, Mughal gardens, stepped gardens, Japanese garden style of landscaping.

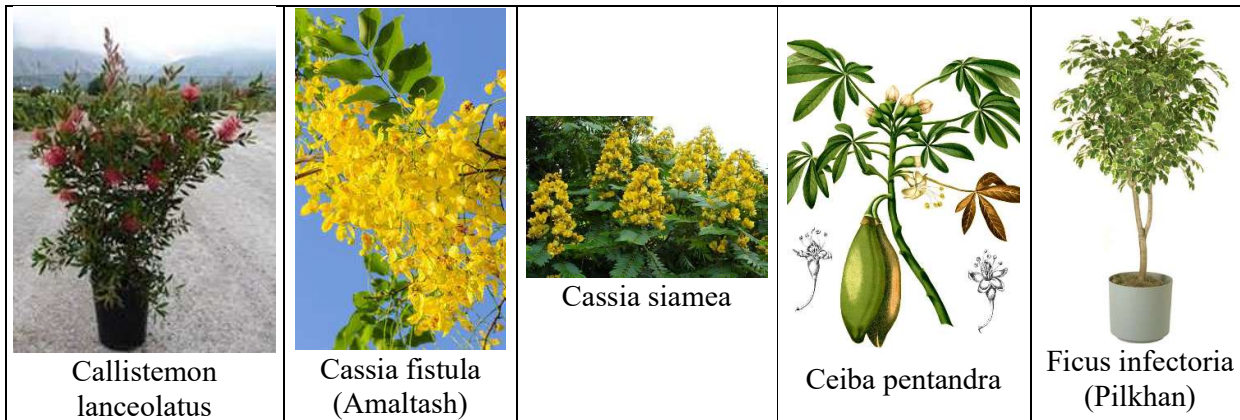
- The hardscape material can be following but not limited to
 - Chamfered edge cement concrete paver blocks,
 - Outdoor wooden deck flooring with water drainage facility below, , 22.5 mm (Thickness) | 138 mm (W) x 2800 mm (L), Water resistance, Non inflammable, Temperature resistance, microbial and insect infestation resistance
- **Landscaping:**
- Trenching in ordinary soil up to a depth of 60 cm including removal and stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly leveling within a lead of 50 m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or / and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure). Approximately 1000 cum in volume. Across the pond complex. At all available open space and ground area.
- Supplying and stacking of good earth at site including royalty and carriage up to 5 km complete (earth measured in stacks will be reduced by 20% for payment) approximately 1000 Cum in volume or as per approved design requirements
- Supplying and stacking sludge at site including royalty and carriage up to 5 km complete (sludge measured in stacks will be reduced by 8% for payment) approximately 800 cum in volume. or as per approved design requirements
- Supplying and stacking at site dump manure from approved source, including carriage upto 5 km complete (manure measured in stacks will be reduced by 8% for payment) Screened through sieve of I.S. designation 4.75 mm. approximately 1800 cum in volume or as per approved design requirements.
- Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation. In an area of 32650 Sqm approximately
- Mixing earth and sludge or manure in the required proportion specified or directed by the Officer-in-charge
- Spreading of sludge, dump manure and/or good earth in required thickness as per direction of officer-in-charge (cost of sludge, dump manure and/ or good earth to be paid separately).
- Providing and laying Neelgiri/Mexican grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with tools wooden (Dhurmos) and then rolling the surface with light roller make the surface smoothen and light watering with sprinkler and maintenance for 30 days or more till the grass establish properly, as per direction of officer-in-charge. In area over 2000 Sqm in landscaping across the talab complex.

- Preparation of beds for hedging and shrubbery by excavating 60 cm depend trenching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%),flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50 m, lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately)
- **Horticulture plants to be planted:**
- **All plant species to be provided as per specification and in HDPE bags or in big poly bags or earthen pot/ Plastic/ Cement pot as available or specified otherwise and as per direction of officer in Charge**
- Providing and laying Neelgiri /Mexican grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with tools wooden (Dhurmos) and than rolling the surface with light roller make the surface smoothen and light watering with sprinkler and maintenance for 30 days or more till the grass establish properly, as per direction of officer-in-charge. Wherever applicable as softscape as per approved design and drawing.
- Providing and stacking of Fishtail palm of ht. 270-300 cm bottom girth 40- 50 cm well developed.
- Supply and stacking of Delonix regia (Gulmohar) plant of height 150-165 cm.
- Providing and displaying of Brassia Variegated having ht. 30 cm, well developed with fresh and healthy foliage in 20 cm size of Earthen pot/Plastic pot.
- Providing and displaying of Croton Petra Bangalore variety having ht. 60 cm to 75 cm with 4 to 6 branches, well developed, fresh and healthy colorful leaves in 25 cm size of Earthen pot/Plastic pot.
- Providing and Displaying Bougainvillea named variety, Sobhra, Thima, Marry palmar, Cherry Blossom etc. well developed with fresh & healthy bushy in full bloom 75 to 90 cm ht. in 40 cm Cement Pot.

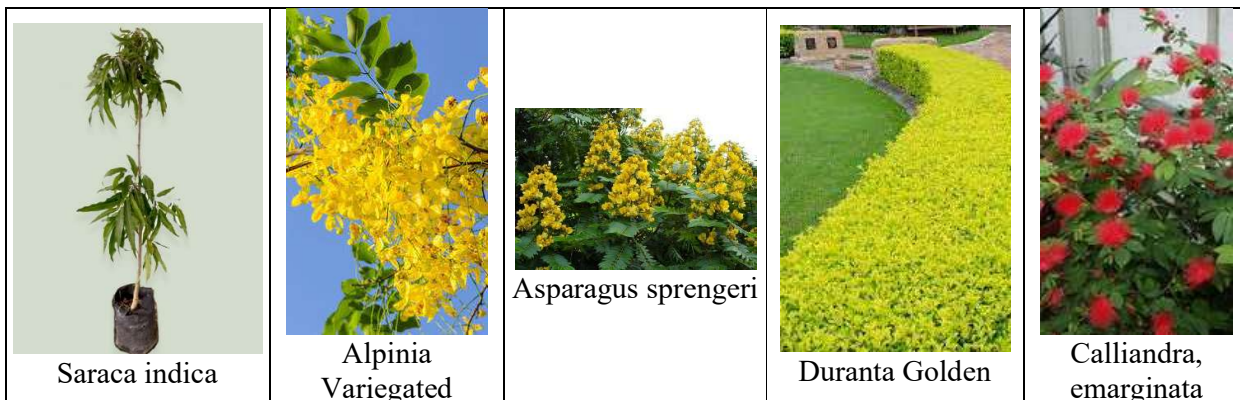


- Providing and stacking of Callistemon lanceolatus of height 150-165 cm.
- Providing and stacking of Cassia fistula (Amaltash) of height 120-135 cm.

- Providing and stacking of *Cassia siamea* of height 150-165 cm.
- Providing and stacking of *Ceiba pentandra* of height 150-165 cm
- Providing and stacking of *Ficus infectoria* (Pilkhan) of height 150-165 cm.



- Providing and stacking of *Saraca indica* (Sita Ashok) of height 105-120 cm.
- Providing and stacking of *Alpinia Variegated* (three in one) having ht. 30 cm and above, with fresh and healthy variegated foliage.
- Providing and stacking of *Asparagus sprengeri* of height 15 cm to 20 cm,.
- Providing and stacking of *Duranta Golden*, having ht.15 to 20 cm bushy shape with fresh and healthy leaves,
- Providing and stacking of *Calliandra, emarginata* of height 45-60 cm,



- Providing and stacking of *Cassia biflora* of height 60-75 cm. with 4-5 branches
- Providing and stacking of *Excoecaria bicolor* of height 45-60 cm
- Providing and stacking of *Ficus reginald* well branched, bushy of height 60-75 cm
- Providing and stacking of *Hamelia patens* of height 30-45 cm. with 3-4 branche.



Cassia biflora



Excoecaria bicolor



Ficus reginald



Hamelia patens

- Complete maintenance of the entire garden features having as per yard stick in the garden area i.e. lawn trees, shrubs, hedge, flower beds, foliage's, creepers etc. including hoeing, weeding pruning replacement of plants, gap filling, watering, mowing of lawn, grass cutting by lawn mover and brush cutter , removal of garden waste, applying insecticide, pesticide & fertilizers(whenever required) top dressing of lawn with good earth and menure and maintenance of other garden related works as directed by office-in-charge (Cost of Good Earth, Manure, Fertilizer, Insecticide , Pesticide will be provided by the Department & lawn mover and brush cutter with fuel , other T & P material/articles shall be provided by the contractor. For the entire landscape area of the Talab complex comprising of Hardscape, soft scape and water body all complete.
- Providing and laying factory made chamfered edge cement concrete paver blocks in foot path, park and lawns drive way or light & traffic parking etc. of required strength, thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted berd of course sand, compacting and proper embedding/laying of inter locking paver blocks in to the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand cutting of paver blocks as per size required size and pattern, finishing and sweeping extra sand, all complete as per manufacturer's specifications & direction of E/I. in the entire marked hardscape area
- Construction of cages of steel wire mesh around plants to prevent them from being eaten by animals or damage by any activity. Mesh: mechanically woven double twisted hexagonal shaped wire meshMesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) zinc coated, Mesh wire diameter 2.2 mm, mechanically edged/ selvedge with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2mm.

16.Garden Maintenance based equipments

- Purchase of following equipment for maintenance purpose of Landscape of Bhairva Talab Complex with technical specifications matching with product mentioned below and as per their corresponding GemID:

Horticulture Maintenance items		
BRUSH CUTTER HUSQVARNA, Gem Id 5116877-12058540082 	nos	5
Husqvarna Petrol Engine Hedge Trimmer/Cutter With 600 to 624 mm Blade Gem Id: 5116877-77201811702 	nos	2
Husqvarna 2 stroke BACKPACK LEAF BLOWER Gem Id: 5116877-97327655280 HusqvarnaR 	nos	2
Bosch 0 Cold Water High Pressure Washer BoschR GeM Id: 5116877-7317625469 	nos	2
AERATOR MACHINE GL GLEWS BTI, Gem Id: 5116877-52730223983 	nos	1

17. Supply, and installation of Outdoor Playing /Gym Equipment.

- **Preparation of PCC bed for fixing and installation of outdoor recreational equipment. Including required excavation and footing and pedestal formation in RCC of minimum M-25 grade of concrete and installation of equipments with required nut bolts, welding all job complete as per direction of E/I.**
- Following outdoor equipment's from the below listed to be installed and with all job including casting RCC base, fixing over the base with nut bolt, washers, greasing, setup all complete. Providing and laying of Rubberized flooring
 - Frame of outdoor equipment to be made of 80 NB and 40NB G.I. pipe bend and G.I. sheet.
 - Handles are made up 40NB G.I. pipe bend with PVC grip on top end. Handles are attached to main frame with help of 50X10 mm thick plates.
 - Foot rest wherever applicable is made with the help of high quality FRP (Fiber Reinforced Plastic) material. Total structure is supported on base frame made up of rectangular pipe of 80x40 mm. Side frames are made up of 25NB galvanized pipes.
 - All pipes are uniformly powder coated up to minimum 60 micron thickness to avoid corrosion. All open ends of pipe been closed by GI / HDPE caps for user safety against entrapment.

Estimate for Beautification of Bhairva Pond, Bhagalpur, Out Door Playing Equipmnets				
S.No	Market Rate(as per quotations)	ITEM OF WORK	Qty	Unit
MR Items				
1	Aerial Stroller:		Nos	1
2	double Shoulder Exercise		Nos	1

3	Double Chest Press		Nos	1
4	Aero Rider		Nos	1
5	Leg Extension		Nos	2
6	Forearm Twirl		Nos	1
7	Skywalker		Nos	1

8	ABS Board		Nos	2
9	Hip Twister Double Circular		Nos	1
10	Leg Press Double Standard gem Id : 5116877-26060386933		Nos	1
11	Hand Rower		Nos	1
12	Back Extension		Nos	2

13	Surf Board		Nos	1
14	Arm and Paddle Bike		Nos	1
15	Elliptical cross trainer		Nos	1
16	Pull up station		Nos	2
17	Seated Twister Gem Id: 5116877-12937449035		Nos	1
18	4 seater see saw(2 nos)		Nos	2

19	Round Iron Playground Spinning Wheel		Nos	2
20	4 seater Swing (heavy Duty) 2 nos.		Nos	2
21	Twister Climber/ Monkey Bar (heavy Duty)		Nos	1
22	Double Roller Slide		Nos	2

23	ROPE CLIMBER		Nos	1
24	MILITARY CLIMBER		Nos	2
25	Adventure Challenging Climber (28'0" X 14'0" X 10'0") or similar		Nos	1
26	Multiplay system 3 nos. or similar		Nos	1

27	8 activity Multiplay system 2 nos. or similar		Nos	1
28	EPDM flooring Gem Id: 5116877- 56528776550	EPDM Rubberized flooring	sqm	478.5
29		EPDM Rubberized flooring below children Outdoor play equipments	sqft	5150.6
30	DELUXE BENCH (GI) Gem Id: 5116877- 87429785202	Cast Iron Bench with FRP strips 	Nos	80
31	Steel dust bin Gem Id: 5116877- 60024189276	SBJ STEELS 100 Litres litres Stainless steel waste containers or rigid liners- Dust bin or Garbage Bin or Household Bin	Nos	80

- The multi play system shall be a play system as per approved by approving authority and an LLDPE (linear Low Density Polyethylene) material / HDPE (High Density Poly Ethylene)/ FRP (Fiber Reinforced Polymer) material made product. Preferable LLDPE product
- The EPDM flooring as per standard specification shall be done as per approved design and drawing in the children's play area of minimum 1500 Sqm
- Installation of deluxe bench is of attractive kind and can be used in gardens or at swimming pools. It can comfortably occupy 3 adults at a time. The main frame is made up of 25 NB powder coated GI pipe. The seat is made from GI perforated 18 SWG sheet, which is bent to give maximum support to the human body, minimum 80 nos. or higher as per requirement and as per approved numbers by approving authority across the 32,658 Sqm area of campus in Talab Complex.
- Installation of attractive dustbin made in stainless steel of approved design in minimum 80 nos or higher as per requirement. across the 32,658 sqm area.



Figure: Waste Bins

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Figure : Signages

18. Water Sports Facility:-

- **To provide and install a floating pontoon at north side or at an appropriate selected location for a minimum area of 500 sqm as per design and architectural drawings and approved by the approving authority and Architectural and detail drawings as vetted by IIT/ NIT.**
- Steel Enveloped Pontoon 15m x 4.5m x 0.8m Nos Manufactured using double layer universal floating HDPE cubes and hot dip galvanized steel MS powder Human Guard Rails on 3 sides of the pontoon 8 Cylindrical Fenders, 4 Lifebuoys, 2 Extinguishers and emergency alarm Plan reviewed by Classification Societies /Agencies / institutes (300Sqm)
- Floating Gangway for the above Steel Enveloped Pontoon constructed by joining steel enveloped single layer segments of size 3m x 2m x 0.4m for a minimum length of 25 m Each segment manufactured by enveloping single layer HDPE floating cubes with a hot dip galvanized steel framework an Aluminum anti-skid flooring and MS powder coated human guard rails Inclusive of solar beacons.(200sqm)
- **ZENITH 2 Strokes 25 horsepower 4.2 M Rubberised Inflatable Boat (Rescue boats), 1 nos. Gem Id: 5116877-23311101693**



Exterior Size of Boat , Min (Length X Breath in mm)	4200 x 1800
Interior Size of Boat , Min (Length X Breath in mm)	2925 x 1000
Carrying capacity, considering per person weight of 825/10 Kgs	8 Persons
Speed	At light load with three persons not less than 15 Knots and at full load not less than 6 Knots
Floor Board (nos & Size) interlocked together to form a rigid platform (mm x mm x mm)	5, 775 x 1000 x15 MM
Total Min Inflatable Chambers including inflatable Keel	5
Diameter of Buoyancy tube, Min (mm)	500 millimeter
Inflatable Mechanism of Boat	Foot Pump as well as Electric Pump (12 V DC)
The Hull, Air Tube (buoyancy Chambers) , floor, Keel must made of composite fabric consisting Hypalon (outside layers) and Neoprene (inside layers) with 1670 Dtex, 1500 GSM as per ISO 15372	Yes
Transom - FRP Coated marine plywood as per IS 710 to form waterproof Cocoon as per ISO, OBM mount on transom should of marine grade aluminium alloy plate	Yes
Over lapping of seam of Boat	Quadruple
5/8" Grab line nylon braided (as per IS 4227) all along the side for safety	Yes
Inflatable Keel of suitable Diameter for rigidity & stability during operation and swift water rescue	Yes
Two nos drain valve akin to NRV on the lower most part of the transom board near the rear end fitment of the keel close to the centre line	Yes
Air Valve one way type Conforming to International Standards (Inflation/Deflation Valve) for each compartment	Yes
Make of OutBoard Motor Engine (OBM); OBM make should have proven indigenous product support throughout India	Suzuki
Model No of OutBoard Motor Engine (OBM)	SUZUKI 25 HP 2S
Fuel	Petrol
No of Strokes	2
No of Cylinders	2
Fuel Capacity; The OBM shall be provided with OEM supplied standard fuel tank, connecting fuel hoses	25 liter
Power (HP)	25 horsepower

Engine Starting; OBM Shall be provided with suitable storage stand	Manual starting
Engine Stopping Switch	Yes
Fuel Injection System (write NA if not applicable)	NA
Engine Cooling System	Watercooled with Thermostat
Engine Lubrication	Premix with petrol in two stroke engine
Engine Exhaust	Through Propeller
Trim System	Manual Type
Type of Steering System	Manual with hand tiller
Length of Engine Shaft suitable for transom (in cm)	50 centimeter
Colour of the Boat	Orange
2 paddle for Emergency Rowing	Yes
Floor Board shall be interlocking type of High Strength Tempered Anodised marine grade aluminium alloy/ Marine plywood encapsulated in FRP coating Polygon (Al alloy) & U Channel (Al alloy) for fitment of floorboard - as per offered design	Yes
Boat Shall have Round/ Conical ends for Rapid Planning	Yes (Conical)
Built in oarlocks for easy Rowing	Yes
Two Stainless Steel SS 316 "D " Rings for Towing	Yes
Two Layer of Material on Lower Tubes for better Puncture resistance and abrasion	Yes
Standard Tool Kit including Open Spanner, Socket, T Handle, Extension for Socket, Screw Driver , Feeder Gauge, Box Spanner, and Torque Spanner of Required Numbers and Sizes	Yes
Mandatory Fittment on Collar including 100 mm Rubbing Stake of Vinyl/urethane/EPDM/Neoprene, Anti chafing strip of 2" inch under keelson, Chafing patch for coxswain's position, Bow rubbing strip 4", D rings, Anti Skid Coating etc as per standards	Yes
Minimum Four Carrying handles shall be provided, two on each side and one front lifting handle One additional handle to be provided near Coxwain to provide grip to helmsman while operating OBM	Yes
Additional Fittment on Collar including 2 paddle blade Pocket, 2 rope Stowage pocket, 4 securing Rings SS 316, 1 bow Ring SS 316 etc	Yes
Life saving Equipments in a wooden Box Carrying First Aid Kits	Yes
Instruction Manual	Yes

No of Life jackets	8
No of Life Buoys	2
Repair Kit	fabric patches 05, adhesive tube (Dendrite) 500 gm, roughing tool 1 set
PVC coated nylon fabric Valises and Store bags	(i) Heavy duty storage bag for Hull – 01 (ii) Heavy duty storage bag for Floorboard – 01 (iii) Storage bag for oars & other accessories – 01
Additional spares	(i) Inflation/ Deflation Valves - 10 Nos (ii) Pressure guage - 01 No (iii) Plugs for Water Drain - 04 Nos (iv) NRV for Water Drain - 10 Nos (v) Electric Inflation pump - 01 No (vi) Bellow Inflation Foot Pump - 2 Nos (vii) Patching material with adhesive to repair leak/damage in buoyancy tube.
OBM Spares	1.1 Engine oil filter - 03 nos. 1.2 Fuel Filter - 06 nos. 1.3 Air Filter - 02 nos. 1.4 Fuel line with priming valve and connectors – 01 no. 1.5 Propeller - 01 No. 1.6 Spark plug - 03 nos. 1.7 Spark plug wrench -01 no. 1.8 Water pump repair kit – 01 set 1.9 Water pump impeller – 01 no. 1.10 Gear oil drawn screw washer – 06 nos. 1.11 Lubrication oil drain plug washer – 02 nos. 1.12 Fuses of all system complete - 02 set
Test & trials	As per IRS rules and norms
Marking on builder's plate fitted on inner side of the transom	BOAT GENERAL PURPOSE INFLATABLE NO., DATE OF SUPPLY, NAME OF MANUFACTURER, MAX LOAD CARRYING CAPACITY (KG), MAX MOTOR RATING (KW), MAX NO. OF PERSONS, RECOMMENDED WORKING PRESSURE
Generic	
Functions performed	The inflatable boat shall perform the following tasks :- (a) Search & Rescue during floods (b) Transport men and material
Conformity to Standards for Boat Accordance with IRS Classification Society Rules and Norms issued and ISO 6185-3	Yes
Performance	
Conformity to Standards for Rubberised Inflated Boat As per ISO 6185-3	4.2 m (For 8 Persons)
Weight of Boat without OBM	120 kilogram
Weight of Boat max with passengers without OBM considering per person weight of 82500 gm	780logram

- **FRP made Paddle boat, 8 Nos., FRP made paddle boat with 4 people seating in attractive shape, swan, paddle boat generic shapes, with safety standards**



- **SOLAS Jacket Polyurethane coated Nylon Fabric Life Jacket-NDRF SOLAS Jacket R, 50 Nos. Gem id: 5116877-53374664498**



IRS Approved

High Visibility Orange Colour Fabric Cover

Adjustable buckle for tightening and specially designed with velcro fitment for easy /quick donning in an emergency

Special Construction of the jacket allows the wearer quick turning in case of being knocked unconscious in water

Chemically resistant to sea water and petroleum products

Retro reflective type Solas Approved

Inner Foam, Soft Polyethylene

Size: 68 X 37 X 10 cms

Floatability: 16.5 kgs +

Accessory: Whistle

Shelf Life: 05 Years

Colour Orange

- **Zorbing Ball -2nos Gem Id: 5116877-87081602611**



- Material TPU
 - Size: 12'-0" Dia
 - Thickness: 1.5mm thickness TPU material
- **Hitachi NA 24 Liters C1054E Oil Lubricated air compressors HitachiR- 2nos,**



Compressor	
Type of air compressor	Positive displacement - reciprocating piston type
Duty cycle	Continuous
Type of mounting	Tank mounted
Number of stages for compression	Two
Cooling system	Air cooled

Lubrication type	Oil lubricated
Air filter	Without
Rated discharge pressure (kg/cm ²)	7.0 to 7.9
Gauranteed free air delivery (fad) at rated pressure (test procedure as per is: 5456 - latest / iso: 1217 - latest(cfm)	6
Conformity to standards	Is: 6430 - latest
Prime mover	
Type of prime mover	Spdp (screen protected drip proof) electric motor
Power supply	Na
Type of drive	Belt drive
"engine oil capacity (may indicate '0' if not applicable)"	1 liter
"fuel tank capaci y (may indicate '0' if not applicable)"	0 liter
Make of engine	Na
Model number of engine	Na
Power rating of prime mower	1 kilowatt
Air receiver	
Capacity of air receiver (liters)	24
"maximum working pressure (may indicate '0' if not applicable)"	10 bar
Instrumentation and safety devices	
Instrumentation and safety devices	Safety valve on air/oil separator vessel
Operating conditions	
Minimum operating temperature	5 degree celsius
Maximum operating temperature	50 degree celsius
Operating humidity, rh at 40 deg c	65
Maximum altitude without derating correction	500 meter

19. Water Slides Amusement Park and Toy Train:

- A replica functional Indian train with below mentioned specification shall be procured with track laid around the shoreline of the pond, with approximate length of 1100 m in length, setting up the toy train setup as per below mentioned specifications

S. No.	Item Description	Nos.
	Supply and Commissioning of Diesel Engine Toy Train, Kirloskar Engine, 10 HP, MS steel Make Fabricated with 48 people capacity boggie boggie 3 nos. luxury make	1

		
	Laying of Train Track in around the shore line of Pond as per design drawings and Engineer incharge of approximate 1000 m	
	Structure for Replica Train Platform and Ticket Station	1

- **As an added facility the contractor shall be given the liberty to increase footfall and revenue and may add a water and amusement park within the Bhairva Complex connected to the Water Body in addition to the components already stipulated in the Scope, where water slides and related facilities for setting up the water amusement park shall be self funded / investment by the contractor and setup as per his business model and created site conditions, upon its own discretion and this opportunity may increase his customer reach and popularity and subsequently enhance revenue generation through entrance tickets to the water amusement park and swimming facility.**

20.LIGHTNING AUTOMATION AND OCCUPANCY SENSORS:-

- **Entire campus area to be fitted with automated lighting sensors with occupancy sensors and wireless sensors which automatically switch on the lights, street lights, bollards, flood lights upon evening. The occupancy sensors shall be enabled in built up structures wherever applicable enabling the lights and appliances to switch off upon non presence of people in the rooms. The layout plan for installation of sensors shall be submitted to PDMC for review and further forwarded for vetting by IIT/NIT, and approval by approving authority.**
- **Supplying, installation,testing and commissioning of Passive Infrared(PIR) technology based occupancy sensor having high preformance, non regulating programmable type, suitable for connected load upto 10Amp , for mounting height up to 2.8 mtr and for 5 m diameter coverage area along with necessary**
- **Supplying,installation,testing and commissioning of Passive Infrared(PIR) technology based occupancy sensor with day light dimming(lightning level shall be regulated as per availability of natural day light in an area along with occupancy detection.) having high preformance, regulating programmable type, suitable for connected load upto 10Amp , for mounting height up to 2.8 mtr and for 5 m diameter coverage area along with necessary fixing arrangements i/c programming at site etc. complete as required.**

- Supplying, installation, testing and commissioning of Microwave technology based occupancy sensor having high performance, non regulating programmable type, suitable for connected load upto 10Amp , for mounting height up to 2.6 mtr and for 5m X 20m coverage area along with necessary fixing arrangements i/c programming at site etc. complete as required.
- Supplying, installation, testing and commissioning of Astronomical time switch of following configuration to be mounted in feeder pillars / Lighting DBs for automatic switching On & OFF of street lights at sun set & sun rise or twilight (Auto ON, Auto OFF, Auto modes) with manual override facility with 12/24 hour display format with suitable battery and indication for relay status i/c programming at site complete as required.

21. Electrification works:-

- **The electrification works comprises of all electrification works, installation of outdoor and indoor lightning and all electrical fixtures as per the requirement, and as per approved drawing and direction of E/I.**
- **Complete electrification work including all works adhering to mentioned specifications in the respective scope of work of components or adhering to same specifications and scope of work wherever required for all components in the Bhairva talab complex, listed below and not limited to including completion and handover of work with all job complete as per approved design and drawing and as per direction of Engineer In-charge:**
 - **Electrical works for Sculpture Gate, 2730 Sqm**
 - **Electrical works for Soil Mound Restaurant (Food Court, 1600 Sqm)**
 - **Electrical works for Open Café**
 - **Electrical Works for Toilet Module (s)**
 - **Electrical works for Emergency gate(s).**
 - **Electrical supply for Water ATM(s)**
 - **Electrical supply for CCTV Camera and safety and security devices**
 - **Electrical supply for Water Pump(s) and Pumping Stations, Water Treatment Plant**
- **A detailed Lighting Plan for All outdoor areas comprising of following but not limited to , to be submitted by the contractor for review to the Authority before vetting and approval from Approving Authority.**
 - **Placement of Street Lights @ 70 W LED Street Light with 8 mtr high pole at CC Road at north side Entry of Bhairva Talab (Tilka manjhi-Champanagar marg) for 550 m length approximately @ 20 m c/c..**
 - **Supply and installation of 9W LED bollards at all walkways, around the water body perimeter @ 5m c/c, in the open space of entire campus, green spaces with min. total nos. 750 units or higher as per submitted and approved design drawings and as per direction of E/I.**

- **Supply and installation of 20/24W LED lamp post with 6mtr high articulated design pole, around the water body perimeter, and the open space walkways @ 10 m c/c approximate nos. of units to be installed minimum 260 or higher as per submitted and approved design drawings and as per direction of E/I.**
- **Supply and installation of 36W LED lamp post over boundary wall over alternate columns/@ 6m c/c approximate nos. of units to install 233 nos. or higher as per submitted and approved design drawings and as per direction of E/I.**
- **Supply and installation of LED Foot lights at ghat steps of 4 W Lights/ @ 5m c/c on steps in staggered manner approximate nos. of units to be installed 280 units or higher as per submitted and approved design drawings and as per direction of E/I.**
- **Supply and Installation of LED Tree Uplighter/ LED garden Light with spike, aluminium body power : 3W, approximate nos. to be installed 250 or higher as per approved design and drawing and as per direction of E/I.**
- All electric fixtures to be provided in built up area as per Approved design and drawing with following specifications but not limited to and as per direction of E/I.
 - 4 core, 16 sq. mm XLPE/PVC insulated PVC sheathed (Heavy duty) armoured electric cable with aluminium conductor as per requirement, as per approved drawing and direction of E/I
 - Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. and lugs and other accessories as required. as per requirement, as per approved drawing and direction of E/I
 - Wiring for light point/ fan point/ exhaust fan point/ call bell/ twin control point, single point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit with modular switch, modular plate, suitable size G.I. box etc as required. For the entire campus of Bhairva Talab as per approved electrical layout drawings and design form approving authority.
 - Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.
 - 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire
 - 4 X 6 sq. mm + 1 X 6 sq. mm earth wire
 - 4 X 10 sq. mm + 1 X 10 sq. mm earth wire
 - Supplying and drawing following sizes of PVC insulated aluminium conductor, single core cable in the existing surface/ recessed PVC conduit as required.
 - 6 x 2.5 sq. mm
 - 9 x 2.5 sq. mm
 - Wiring for light/ power plug with 2X4 sq. mm and 4 X 4 sq mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit

alongwith 1 No 4 sq. mm and 2 Nos. 4 sqmm respectively FRLS PVC insulated copper

- Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch and connection etc. as required.
- Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.
- Supplying and fixing 20 amps and 30 amps, 415 volts, TPN industrial type, socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 30 amps "C" curve, TP MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.
- Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required. 1 or 2 module (75 mm X 75 mm), 4 Module (125mm X 75 mm), 6 Module (200mm X 75mm) and 8 module (125mm X 125mm) with module bases, cover plate and modular metal boxes etc.. as required.
- Supplying and fixing stepped type electronic fan regulator on the existing modular plate/ switch box including connections, modular plate etc. as required.
- Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required, 40 Amps, 63 Amps, 80/100 Amps or higher as per requirement of the electrical fittings
- Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milli amperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.
- Supplying and fixing following rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive loads of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.
- Providing and fixing H.T. danger notice plate of 250 mm X 200 mm, made of mild steel at least 2 mm thick, vitreous enameled white on both sides, and with inscription in single red colour on front side as required.
- Recess mounting LED round down light (12W) with all accessories and replaceable electronic driver, LED shall be with BIS certification or certified by NABL lab
- Regular make 1200mm Sweep ceiling fan
- 12" (300mm) metal exhaust fan of approved make, with fixing louvers shutters and frame all complete
- LED lamp 10/12 W.

- Earthing and Lightning conductor to be provided as per standard specifications and fixed done as per design requirements all complete.

b) High mast lighting to be installed at multiple locations minimum 2 nos. with minimum below specification or higher specification.

High Mast Structure	
Height of Mast	12 Mtr
Make	As approved by Engineer in Charge
No of Section	Two Section
Material Construction	As per BS-EN 10025 :1993 or equiv. IS
Thickness of the section	Top: 3 mm (Minimum) Bottom: 4 mm (Minimum)
Bottom(A/F)	360mm
Top(A/F)	150mm
Lantern Carriage	
Luminaries	9 Nos.
Orientation	Symmetrical
Number of arms	9 Arms
Dynamic Loading	
Wind Speed	180 kmph
Type	Double Drum
Stainless Steel Wire Rope	
Grade	AISI 316
Construction	7/19
Number of Ropes	2 for winch 3 for Lantern Carriage
Diameter	6mm
Breaking Load Capacity	2350 kg
Trailing Cable	
Conductor	5 Core 2.5 Sq mm
Insulation	Flexible
No. of Circuits per mast	One
Power Tool	
Input Supply	415 V
Method of Operation	Integral Motor

c) LED Luminaries Flood Light

195 W 23500lm LED Flood Light Specifications	
System Power Configuration	190W – 200W (Nominal)
CCT	5700K
CRI/ SDCM	70, <5
Electrical Insulation	Class – 1
IP Rating	IP66 with heat resistant silicon gasketing (No Glue)
Impact Resistance (IK rating)	IK 08
Serviceability	Class B
Mounting	Via U shaped Bracket, Aiming Scale Angle, Universal Installation
System Efficacy	>120Lm/W (Nominal) @ max. 830mA driving current, 50Hz
Lifeclass	L70B50 @ 50K burning hrs
Surge Protection	4KV Internal and 10 KV External (built in within the luminaire)

Driver	Fully Potted & Encapsulated with Fixed output
Operating Voltage Range	120-277V AC, 50 Hz
Protections	440V (P2P) Stress Voltage protection for atleast 8 Hrs, High Cut off @ 325V(+/-15V) and Auto Restart
LED Type	High Power SMD types LEDs of 1W-3W
LED Make	Philips/Osram/Nichia
Housing Material/ Finishing	Pressure Die Cast Housing ADC12 Alloy/ Anti Dust Exposed Lens
THD	<= 10%(At Full Load)
Optical Covers	UV Stabilised PC
Photometric Distribution	Asymmetric Beam
Weight	<=7 Kg including the driver
Test Reports	LM80, LM79, TTC test reports and IES files from valid NABL accredited Labs to be submitted @ the time of bidding
BIS	Separate valid BIS for both the luminaire and the driver
Reliability	Product should be atleast for 1 year in the OEM portfolio for reliable performance. The luminaire and the driver should be of same make for reliable performance
OEM Logo	Only embossing is allowed, No engraving, Sticker, Screen Printing allowed for brand equity



Figure:Outdoor Lightings

d) Audio System to Installed for Public Announcement System in entire campus of Bhairva talab complex:

- **NGS 80L 2 Way 60 W High IP Rated Green Color Garden Speaker 8Ω /100V, specification as mentioned below and of Approved make including installation , Complete PA system, amplifier, transmitters, cable connection, power connections , Sound system and outdoor speakers all complete as per Direction of E/I :**



Figure 1: NGS 80L 2 Way 60 W High IP Rated Green Color Garden Speaker

- Configuration: Two way
- Frequency response: 20-20,000 Hz
- Sound Pressure Level (SPL) (1W/1m) (dB): 98
- Coverage pattern: Omnidirectional
- Maximum Level sound Pressure: (dB): 112
- Enclosure Polycarbonate
- Power rating (Watt): 60
- AC Power input: 230- 50/60 Hz

e) Diesel Generator Set to be installed for Power backup: 250 KVa with radiator cooled specification and similar Specifications as listed below:

Ashok Leyland Fully build Leypower 250 KVA Silent D.G. Set comprising with Ashok Leyland Model AL8NTIG3 or equivalent , 6 Cylinder, Water Cooled, rated to develop 314.02 BHP at 1500 RPM Engine coupled with Leypower make 0.8pf, 3Phase, 4 wire, 50Hz, 250 KVA A.C. Alternator, complete with Manual Control Panel and CPCB-II compliant Sound Proof Acoustic Enclosure.

f) Transformer to be procured and installed for Power connection and standard specification as per .:415 KVa, gem Id: 5116877-27896193632

STANDARDS	
Conformity of the specification	Conformity of the specification
ISI Marked	Yes
BIS License Number - Must declare	870003718
Energy efficiency level	3
BEE Star Rating	4
Installation, Testing and Demonstration	No
Minimum warranty on receipt of stores (in Months)	30
Minimum warranty from the date of installation (in Months)	24
RATINGS	
Nominal system voltage, HV (in kV)	11
Nominal system voltage, LV (in V)	415
Standard ratings (in kVA)	400
Rated frequency	50 Hz +/-5%
Minimum basic insulation level (in kVP)	75
No load voltage ratios (in Volts)	11000/433-250
Highest system voltage for equipment (in kV)	12
Rated lightning impulse withstand voltage (in kV Peak) (Refer IS:1180 (Part 1):2014 Annex-D)	75

CONSTRUCTION	
Core material	CRGO (as per IS:3024 latest)
Conductor (Winding) material	Copper
Insulating paper	Kraft Paper (as per IS:9335 latest)
Vector Group	Dyn-11
Type of Mounting	Ground Mounted
Method of system earthing	solidly earthed
Standard fittings shall be provided with each distribution transformer	as per Cl.20.1 of IS:1180 (Part 1):2014 Amdt.1
Noise level at rated voltage and frequency, Maximum (in dB)	51
TRANSFORMER TANK	
Transformer tank cover construction	Non-sealed, Bolted
Tank configuration with	With radiator fins
Type of cooling	ONAN
Material of transformer tank	Mild Steel
Minimum thickness of top and bottom material of transformer tank (in mm)	5
Minimum thickness of side material of transformer tank (in mm)	4
Material of Bolts/Nuts/Washers exposed to atmosphere	Stainless steel (for upto 12 mm size), Brass (for upto 12 mm size), Electro Galvanized (for above 12 mm size), Hot Dip Galvanized (for above 12 mm size)
Gaskets wherever used shall conform to	Type III (as per IS:11149) Type C (as per IS:4253 (Pt.2))
Provision of conservator	Yes, for Non sealed type with Plain tank construction
Insulating Oil	Mineral oil (as per IS:335 latest)
Quantity of Insulation oil required (in litres) - Must declare	inclusive
Transformer to be supplied with transformer oil	Yes
Shape of transformer tank	Rectangular
Pressure and Vacuum requirements	as per Cl.15.2 of IS:1180 (Part 1):2014 latest
Painting	
Type of painting on inside of tank (hint: Refer Table 12 of IS:1180 (Pt.1):2014)	Oil resistant paint
Type of painting on External surface of tank (hint: Refer Table 12 of IS:1180 (Pt.1):2014)	Epoxy (Primer), Polyurethane (finish coat)
TAP CHANGER	
Tap changing arrangement	Off circuit, externally operated switch with mechanical locking device and a position indicator
Winding tapped	HV
No. of positions (in Nos.)	7
Voltage variation	+5% to -15% in steps of 2.5% for variation of HV
TERMINAL ARRANGEMENT	

Transformer fitted with bushings of appropriate voltage and current ratings on HV side	Yes. 3 Nos. (Conforming to IS:2099)
Transformer fitted with bushings of appropriate voltage and current ratings on LV side	Yes. 4 Nos. (Conforming to IS:7421)
Suitable provision for adoption of cables of suitable size on LV side	Yes. For PVC/XLPE Cables
Cable End Box on HV side	Yes
Cable End Box on LV side	Yes
AIR CLEARANCE	
Minimum External air clearances between bushings mounted on transformers	as per Table 10 of IS:1180 (Part 1):2014 latest
Minimum air clearances in cable box	as per Table 11 of IS:1180 (Part 1):2014 latest
Suitable bimetallic connectors (clamp type) shall be provided on both HV and LV side in order to ensure sound and robust connection	Not applicable
MARKING	
Material of rating plate	Anodized aluminium
Marking method on rating plate	Engraved
Rating and terminal marking plates combined into one plate	Yes
Dimension of Rating Plate, Terminal Marking Plate and Combined Rating and Terminal Plate	as per OEM Specn.
Agreed to provide Departmental Logo/Identification marking (shall be engraved on the transformer) as prescribed by buyer separately	Yes
OPTIONAL FITTINGS	
Suitable rating lightning arrestors	No
Bird guard	No
Terminal connectors	No
Oil temperature indicator and winding temperature indicator	Yes
Jacking pads	No
Buchholz relay	Yes
Magnetic oil level gauge with low oil level alarm contact	No
Non return valve	Yes
Protection relay for sealed type transformers for internal parameters that is pressure, temperature, oil level and gas detection	No
Unidirectional flat rollers	Yes
Drain cum sampling valve	Yes with steel plug (for transformers upto 500 KVA)
Self protection / disconnection devices	No
Expulsion fuse as disconnection device	No

SERVICE CONDITION	
Maximum ambient air temperature (in deg. C)	50
Minimum ambient air temperature (in deg. C)	-5
Maximum average daily ambient air temperature (n deg. C)	45
Maximum yearly weighted average ambient temperature (in deg. C)	32
Min. Relative humidity (in %)	26
Max. Relative humidity (in %)	100
Max. Wind Pressure kg/sq.m	150
Maximum altitude	<1000 m
TEST REPORTS & CERTIFICATIONS	
Availability of type test reports to prove the confirmity of the specification from	NABL Accrediated
Agreed to furnish type test reports to the buyer / consingee on demand	Yes
Agreed to furnish routin test reports to the buyer / consingee on demand	Yes
Agreed to furnish valid BIS Licencse certifice to buyer / consignee on demand	Yes
Agreed to furnish valid Energy Star Rating certifice to buyer / consignee on demand	Yes
Agreed to furnish complete drawings of Distribution transformer to the buyer / consignee on demand	Yes
The design calculation in support of flux density shall furnish to the buyer / consignee	Yes
Agreed for stage Inspection as required by buyer	Yes
The product shall comply with all relevant Gazette notifications of Govt., of India with all latest amendments up to date, as applicable	Yes
SPECIAL TEST REPORTS	
Availability of test report for Determination of sound level test	No
Availability of test report for short circuit withstand test	No
Availability of test report for No load current at 112.5 % Voltage	Yes
Availability of test report for Paint adhesion test	Yes
BDV and moisture content of oil in the transformer	Yes

Other requirements

Losses and Impedance values as per Cl.7.8 and Table 6 of IS:1180 (Part 1):2014 latest, Limits of temperature-rise as per Cl.7.10 of IS:1180 (Part 1):2014 latest

22.Plumbing Works:

- The Plumbing works comprises of all Plumbing works, installation of outdoor and indoor Plumbing pipelines, water supply lines, Drainage pipes, Sanitary works and all Plumbing fixtures as per the requirement, and as per approved drawing and direction of E/I.
- Complete Plumbing work including all works adhering to mentioned specifications in the respective scope of work of components or adhering to same specifications and scope of work wherever required for all components in the Bhairva talab complex, listed below and not limited to including completion and handover of work with all job complete as per approved design and drawing and as per direction of Engineer In-charge:
 - Plumbing works for Sculpture Gate, 2730 Sqm
 - Plumbing works for Soil Mound Restaurant
 - Plumbing works for Open Café
 - Plumbing Works for Toilet Module (s)
 - Plumbing works for Emergency gate(s).
 - Plumbing supply for Water ATM(s)
 - Plumbing supply for CCTV Camera and safety and security devices
 - Plumbing supply for Water Pump(s) and Pumping Stations, Water Treatment Plant

S. No.	Description	Nos.	Unit
1.	Sculpture building (G+5 Building with 2730 Sqm Built up area)		
2.	Toilet Blocks		
3.	Open Café		
4.	Soil Mound Restaurant		
5.	Water Sports Facility Room		
6.	Water ATMs		
7.	PUMPS		
8.	Submersible pump 4 units 10 H.P. each		
9.	Centrifugal Pumps @ 15 H.P. each		
10.	Monoblock Pumps 4 @ 30 H.P. each		
11.	Pipe fittings		
12.	Providing and placing on terrace (at all floor levels) 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 fitting and base support for tank.		

- Providing & fixing Chlorinated polyvinyl Chloride (CPVC) Pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, 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 cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in charge. Concealed work, including cutting chases and making good the walls. With 15mm, 20mm, 25 mm, 32 mm, 40 mm, 50 mm nominal outer dia or higher as required
- Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete : With 15mm, 20mm, 25 mm, 32 mm, 40 mm, 50 mm nominal outer dia or higher as required
- Providing and fixing ball (brass) valve of approved quality. High or low pressure, with plastic floats complete: With 15mm, 20mm, 25 mm, 32 mm, 40 mm nominal outer dia or higher as required
- Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Reducer for
 - For 48.60 mm x 42.70 mm outer dia pipe.
 - For 42.70 mm x 34.00 mm outer dia pipe
 - For 34.00 mm x 22.22 mm outer dia pipe
 - For 22.22 mm x 15.88 mm outer dia pipe
 - or higher as required
- Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Connector
 - For 15.88 mm outer dia x 15 mm nominal dia threaded
 - For 15.88 mm outer dia x 15 mm nominal dia threaded
 - or higher as required
- Providing and fixing unplasticised PVC connection pipe with brass unions :
 - 30 cm length 15 mm nominal bore
 - or higher as required
- Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.
 - Flexible pipe 40 mm dia
- Painting of GI pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work. For 15mm, 20mm, 25 mm, 32 mm, 40 mm, 50 mm nominal outer dia or higher as required

- **SEWRAGE & DRAINAGE**

- Providing, laying and jointing glazed stone ware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1cement :1 fine sand) including testing of joints etc complete, 200 mm diameter
- Providing and laying cement concrete 1 : 5 : 10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. Pipes including bed concrete as per standard design, 200 mm diameter
- Providing and fixing square mouth S. W. Gully trap grade 'A' complete with C.I. grating brick masonry chamber with F.P.S bricks and water tight CI cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design, 150 x 100 mm. size P type, With common burnt clay F.P.S. (non modular) bricks of class.
- Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of jointsetc complete, 250 mm diameter R.C.C pipes or higher wherever required.
- Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :, 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 kgand weight of frame 15 kg) :With common burnt clay F.P.S. (non modular) bricks of class designation 7.5., and extra depth to be considered as per design and drawing wherever required.

• SEWRAGE & DRAINAGE

- Boring/drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS:2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer - in-charge, upto 180 metre depth below groundlevel.
- Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed/ plain ended casing pipes of required dia, conforming to IS: 4270, of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer- in-charge.
- 200 mm nominal size dia having minimum wall thickness 5.40 mm, till 50 metre or more.

- Gravel packing in tubewell construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer-in-charge.
- Development of tube well in accordance with IS:2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in- Charge.
- All works complete comprising of all accessories including Civil works, clamps, casing, housing, cap, spot, necessary bolts, nuts, etc.. as per standard specification and as per direction of E/I.

- **RAIN WATER PIPES AND FITTINGS**

- Making khurra 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20mm nominal size) over PVC sheet 1mx1mx400 micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete :
- Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. Of pipes of appropriate diameter as required minimum 100 mm dia. With all necessary accessories including Coupler, single T with door, Bend, PVC Pipe clips, rain water cast iron pipe grating.

9. Project Phasing, Operation & Maintenance

The project should be executed in phased manner. The execution can only start once a decision regarding vendors and encroachment is taken by BSCL jointly with Bhagalpur Municipal Corporation.

The implementing agency will have to carry out operation and maintenance activities on the completed portion of all the components, The selected agency will not only maintain the equipments and components but also be responsible for operation of the equipments, and components, Supply of manpower and regular functioning of Components.

A tentative and brief components wise operation activities but not limited to are listed below

1. **Desilting of Pond, Soil Filling & Cleaning:** Regular cleaning of Bhairva Talab, Operation of All water treatment equipments, Regular monitoring of water collected in pond from the nearby areas.
2. **Making of Retaining wall along Pond edge & Fish display area Fixing of Ceramic Tiles in fish Display area:** Regular cleaning of the edges of the Retaining wall to ensure its texture

and clean appearance, Regular cleaning of Retaining wall of Fish Display Area to prevent formation of Algae and support of Maintaining marine/ Fresh water fish and other aquatic species in water

3. **Making of New Boundary wall:** Regular cleaning of The boundary wall surface, Timely paint works to ensure the boundary wall appearance to be maintained as new
4. **Making of secondary emergency Entry/Exit gate 2 Nos :** Regular maintenance of the Entry and Exit gate, prevention of the gate fro getting Rusted, Presence of Security persone at gates to check unauthorised access to property.
5. **Making of Ghats:** Operation , crowd Management and regular cleaning of ghats steps
6. **Making of Seating Shades :** Regular cleaning and upkeep of Seating shades spaces, Upkeep of the seating area and surface
7. **Making of Shaded Avenue:** Regular cleaning and upkeep of Seating shades spaces, Upkeep of the seating area and surface
8. **Storm Water Drainage and Drainage system in Campus inclusive of Carriage of materials.:** Regular maintenance and cleaning of the drainage system, De clogging upon detectionof clog in drains, manpower supply to keep the drains clean on timely intervals
9. **Making of Footpath both side of road (North side of plot):** maintenance of the footpath, regular cleaning of footpath and manpower supply of sweeper to keep it clean.
10. **Making of New CC Road:** Maintenance of road
11. **Making of parking space for Two & four wheeler, Taxi, Auto & Buses:** Operation of Parking space, Permitting parking for entry to Bairva Talab complex.
12. **Marking on Road & Parking space:** regular paint of the strips and markings upon regular intervals and visible wear and tear.
13. **Installation of Surprise fountain in Children's Play area:** Operation of the Surprise fountain, all activities related to operation and maintenance of the Surprise fountain area and its components and equipments and supply of Manpower to operate the same
14. **Children Play area and Supply and Installation of Outdoor Playing Equipment's:** Operation of Childrens paly area, collection of revenue against tickets, regular upkeep of area, equipments, Surveillance, safety and security of children and visitors entering the area, Guides and operators to ensure crowdmanagement at playstations and at slides and gym equipments.
15. **Semi open café:** Operation of the Café, Provision of running café by the contractor, provision of finalization of food being served, manpower supply for operation.
16. **Toilet & public Utility and Septic Tank: :** Maintanace and cleanliness of public toilets. Regular cleaning staff for toilet. Maintenance of sanitary ware, toilet fixtures, structure all complete regulary ensuring hygiene, and cleanliness
17. **Glass Overbridge in between the north and the south Points:** Crowd Management, Regular Cleaning, Upkeep and manpower supply for maintenance of bridge, Regular assistance towards checking bridge alignment and condition of various equipments of bridge.
18. **Landscape works (8.07 Acres):** Miantenace of the entire landscape area present in the Bhairva Talab Complex, Supply of Appropriate Manpower to maintain the property on Daily basis.
19. **Procurement of Garden Maintenance equipments:** Regular usage of Maintenance equipments for upkeep of the landscape area, Trained Manpower to operate the equipments, running of Equipments, Manitenance of Equipments to be done.

20. **Fish/Dolphin Display Pond(Water submersed Aquarium):** regular functioning of the Aquarium, Operation of Underwater Aquarium component, Crowd management, Revenue Collection from tickets, Regular cleaning of Fish water tank, Aquarium cleanliness, Feeding and ensure maintenance of habitat for aquatic species in the tank and all related activities, regular check on various parameters of water quality needed for maintenance of habitat for species.
21. **Main Entrance Sculptural gate:** Maintenance of the entire building, Running the central command centre, and various activities in the Sculpture gate building, Maintenance of plumbing works, oorganizing of laser show, surveillance system, and various activities. Maintenance of all civil, electrical, mechanical and Oplumbing fixtures and components.
22. **Central Pond water cascade, water curtain show:** Regular showcase of the laser show, Content development, Maintenance of the nozzles, equipments etcc. All works related to successful operation of Water Laser show, maintenance of the equipments and supply of manpower to conduct the same.
23. **Security based Equipments:** supply of Manpower as security personnels for the developed facility, Manpower trained to operate the equipments and usage of equipments to ensure safety and security of campus and regular surveillance of the campus, regular maintenance and upkeep to ensure daily usability of the equipment.
24. **Water Slides Amusement Park and Toy Train:** Operation of Amusement Park Area, collection of revenue against tickets, regular upkeep of area, equipments, Surveillance, safety and security of children and visitors entering the area, Guides and operators to ensure crowdmanagement at pools and regular cleaning and hygiene of the pool area and related infrastructure, Operation of the pool activities and infrastructure, Trained personnels including trained swimmer personnel to ensure safety and seciurity of visitors.
25. **Supply and Installation of CCTV System:** Trained Security Personnel to monitor and surveillance the campus area, IT Personnel and engineer to operate the system and regular maintenace of the installed equipments across the campus.
26. **Fire Fighting System:** Trained Security Personnel for safety at the campus area, fire safety engineer to operate the system and regular maintenace of the installed equipments across the campus.
27. **Emergency Light & illuminated signages:** Regular upkeep and maintenance of lighting at the campus, A operator to ensure switch on and off of lights during operational hours though lights, ensure maintenance and workability of electric fixture installed in the campus
28. **Water Sports Facility:** Regular maintenance of pontoon, cleanliness, alignment, surface level of pontoon deck and gangway, regular maintenance of te motor boats, pedal boats. Security personnel to ensure distribution of safety jackets, personnels for usage of safety motor boat, personnel for usage of air compressor pump for inflatable boat, swimmer personnel to ensure safety of visitor and operator to operate, crowd management and revenue collection from the facility
29. **Lightening Automation Including Occupancy sensors:** Regular maintenance and working condition of fixtures and Equipmnets installed
30. **Electrification works in the Bhairva Campus:** Regular upkeep and maintenance of lighting at the campus, A operator to ensure switch on and off of lights during operational hours though lights, ensure maintenance and workability of electric fixture installed in the campus
31. **Plumbing Works in The Bhairva Campus:** Regular upkeep and maintenance of Pumps,

and plumbing equipments and fixtures at the campus, A operator to ensure switch on and off of Pumps during operational hours, ensure maintenance and workability of plumbing related fixture installed in the campus

the including maintenance of landscaping, minor and major repairs of civil infrastructure including like steps, tiles, paver blocks, street furniture etc. during construction period till the entire work is completed and during the Operation and Maintenance period of 5 years. The operation & maintenance of the project will be liability of BSCL or Bhagalpur Nagar Nigam once the site is handed over by the implementing agency. The following maintenance activities are anticipated:

- 1) Regular maintenance and finishing of tiles, paver blocks, kerbs etc.
- 2) Maintenance of street furniture including dustbins, benches, signage, tree guards etc.
- 3) Adequacy of street lighting and related maintenance
- 4) Replacement of damaged civil works.
- 5) Maintenance of landscaping and beautification works.

List of Approved Makes

(Deleted)

Note:-

- **All material shall be used as per direction of Engineer in charge.**

SECTION-8

FORM OF BID

FORM OF BID

Description of the Works:

BID

To :

Address :

- 1.0 We offer to execute the Work “Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis described above and remedy any defects therein in conformity with the Conditions of Contract, specification, drawings (Concept layout), Price Bid (EPC format) and Addenda along with reply to the pre-bid queries.
- 2.0 We undertake, if our Bid is accepted, to commence the Works as soon as is reason-ably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the document.
- 3.0 We agree to abide by this Bid for the period ofdays from the date fixed for receiving the same, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- 4.0 Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
- 5.0 We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____

Signature _____ in the capacity of _____ duly authorized to sign bids for and on behalf of (In block capitals or typed)

Address

Witness

Address

Occupation

SECTION 9

PRICE BID

PRICE BID

Preamble

- 1.0 The Indicative Bill of Quantities shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Technical Specifications and Conceptual / Layout Drawings.
- 2.0 The quantities given are provisional, and are given to provide an understanding for bidding. The basis of payment will be the approved milestone basis and the stage of payment due under the Submitted and Approved Bill of Quantities and verified by the Engineer and valued at the prices tendered in the Price Bid.
- 3.0 The prices tendered in the Price Bid shall, except in so far as it is otherwise provided under the Contract, include all constructional plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
- 4.0 The rates or prices shall be quoted entirely in Indian Currency.
- 5.0 A price shall be entered against each component in the Price Bid Format, whether quantities are stated or not. The cost of components against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Price Bid.
- 6.0 The whole cost of complying with the provisions of the Contract shall be included in the components provided in the Price Bid, and where no Items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
- 7.0 General directions and descriptions of work and materials are not necessarily repeated or summarized in the Price Bid. References to the relevant sections of the contract documentation shall be made before entering prices against each component in the Price Bid.
- 8.0 The method of measurement of completed work for payment shall be in accordance with Civil Engineering method of measurements (latest edition)
- 9.0 Errors will be corrected by the Employer for any arithmetic errors pursuant to Clause 27 of the Instructions to Bidders.
- 10.0 Rock is defined as all materials which, in the opinion of the Engineer, require blasting, or the use of metal wedges and sledgehammers, or the use of compressed air drilling for its removal, and which cannot be extracted by ripping with a tractor of at least 150 kW with a single rear mounted heavy duty ripper.
- 11.0 The price quoted by bidder are inclusive of all cost, carriage of material, royalty & other taxes in Price Bid. No extra payment should be made.

PRICE BID

I/we hereby tender to execute the whole of the work described in the:

Name of the Work: - Remaining work of Rejuvenation of Bhairva Talab in Bhagalpur, Bihar including 5 years of Defect Liability period and Operation & Maintenance under Bhagalpur Smart City Limited, on Engineering, Procurement & Construction (EPC) contract basis.

Sr. No.	Name of Work	Amount in digit	Amount in word
1	Remaining work of Rejuvenation of Bhairva Talab in Bhagalpur, Bihar including 5 years of Defect Liability period and Operation & Maintenance under Bhagalpur Smart City Limited, on Engineering, Procurement & Construction (EPC) contract basis.		

Note: The price quoted Shall be in Indian Rupees. The price quoted by bidder are inclusive of all cost, carriage of material, royalty, GST & other taxes in Price Bid. No extra payment should be made for any component beyond the quoted price.

Indicative Bill of Quantities

Name of Work: - Remaining work of Rejuvenation of Bhairva Talab in Bhagalpur, Bihar including 5 years of Defect Liability period and Operation & Maintenance under Bhagalpur Smart City Limited, on Engineering, Procurement & Construction (EPC) contract basis.

Note: Quantity mentioned in the table below is indicative however, the specification mentioned in the description if item shall be followed in the execution.

1 Pond Soil Filling & Cleaning

SL. No.	Description of Item	Unit	Quantity
1	Supplying and Filling in plinth with local sand and under floors including, watering, ramming, consolidating and dressing complete.	Cum	1,26,200
2	Earthwork in bed clearance or desilting of canals having full supply discharge between 8.5 cumecs and 0.14 cumecs (5 cusecs) and renovation of pond etc. In ordinary soil and disposal of excavated earth etc. including rough dressing. With all lead and lift all complete including royalty as per specifications and direction of E/I	Cum	3,21,800
3	Providing laying and filling Geo bags of size 1m X 0.7m (Type A 300 GSM nonwoven) Weight 420gm, volume of filled bag 0.07 cum, weight of filled Geo Bag 126 kg with local sand including stitching in four lines by approved Nylon thread with stitching machine and generator, stacking and placing after loading, unloading and carriage with the help of Trolley within 150m lead and bvoat all complete as per specifications and direction of E/I where boat is used	Nos.	31,000
4	Providing and laying of a Geo Textile filter between pitching and embankment slope on which pitching is laid to prevent escape of the embankment materials through the voids of the stone, Pitching/Cement concrete block as well as to allow the free movement of water without creating any uplift head on the pitching as per specification and direction of the E/I	Sqm	7,400
5	Supplying & laying Boulders	Cum	2,100
6	Labour Charge for pitching work on apron slope of Bank with stone boulder duly packed (Uncreated complete job) material within 150 m lead with all lifts including royalty, etc. All complete as per approved design specifications and directions of E/I	Cum	2,100
7	Providing Cement Flush Pointing (1:3) with approved quality sand of requisite F.M. washed and screened and standard water proofing compound including curing, scaffolding wherever required and their removal, royalty etc. Complete job as per specification and direction of E/I	Sqm	3,500
8	Shoring with Z Section MS Sheet Pile side by side in all kinds of soil mechanically or manually as per approved drawing with Contractor own arrangement complete in all respect as directed by E/I.	Sqm	14,700
9	Pumping out water caused by springs, tidal or river seepage, broken water mains or drains and the like	KL	4,17,000

10	Earth work in excavation 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, lift upto 1.5 m. including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m	Cum	1,000
11	Providing & laying cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	Cum	160
12	Providing and Laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering finishing and reinforcement, M-20 grade reinforced cement concrete., All works upto plinth level, walls, Columns, pillars, posts and struts, Providing M-25 grade R.C.C. instead of M-20 grade R.C.C.	Cum	1,300
13	Centring and shuttering including strutting, propping etc. and removal of form for Foundations, footings, bases of columns etc. for mass concrete.	Sqm	7,500
14	Thermo-Mechanically Treated bars TMTC-500-12mm dia	Kg	1,01,600

2 Dismantling Works

SL. No.	Description of Item	Unit	Quantity
1	Demolishing cement concrete including disposal of material within 50 metre lead: 1:3:6 or richer mix	Cum	860
2	Demolishing R.C.C. work including stacking of steel bars and disposal of unserviceable material withing 50 metres lead:	Cum	840
3	Extra for cutting reinforcement bars in R.C.C. or R.B. work (Payment shall be made on the cross-sectional area of R.C.C. or R.B. work)	Per RCC	1360
4	Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work.	kg	164400
5	Demolishing brick work including stacking of serviceable materials and disposal of unserviceable material within 50 meters lead in cement mortar	Cum	560
6	Removing mortar form bricks and cleaning bricks including stacking within a lead of 50m (stacks of cleaned bricks shall be measured):	Cum	560
7	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	Sqm	690
8	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	Sqm	90
9	Demolishing R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1 kilometre, stacking serviceable and unserviceable material separately including cutting\ reinforcement bars.	Cum	840
10	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer- in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	Cum	3630

3 Pond Work

SL. No.	Description of Item	Unit	Quantity
1	Supplying, filling, spreading & leveling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	Cum	19000
2	Earth work in excavation 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, lift upto 1.5 m. including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m - All kinds of soil.	Cum	1010
3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead	Cum	680
4	Providing, driving with hydraulic piling rigs with power units and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) - 400 mm dia piles	M	4100
5	Centring and shuttering including strutting, propping etc. and removal of form for		
	Foundations, footings, bases of columns etc. for mass concrete.	Sqm	740
	Columns, pillars, piers, Abutments, Posts, Struts	Sqm	11040
	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	1881
6	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and including retard setting of concrete, improve workability without impairing strength and admixtures in recommended proportions as per IS: 9103 to accelerate, reinforcement, durability as per direction of Engineer-in-charge. Note: Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.		
	- All works upto plinth level.	Cum	100
7	Providing and Laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering finishing and reinforcement, M-20 grade reinforced cement concrete.		
	All works upto plinth level.		
	Providing M-25 grade R.C.C. instead of M-20 grade R.C.C.	Cum	1050
8	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
	Thermo-Mechanically Treated bars TMTC-500-8mm dia.	kg	44700

	Thermo-Mechanically Treated bars TMTC-500- 12 mm dia.	kg	89400
	Thermo-Mechanically Treated bars TMT Fe-500- 16 mm dia.	kg	74500
	Thermo-Mechanically Treated bars TMT Fe-500- 20 mm dia.	kg	44700
	Thermo-Mechanically Treated bars TMT Fe-500- 25 mm dia.	kg	44700
9	Providing and fixing of expansion joint system related with wall joint (internal/external) location as per drawings and direction of Engineer-In- Charge. The joints shall be of extruded aluminium base members, self aligning / centering arrangement and support plates as per ASTM B221-02. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall/ wall to corner application, both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System\ shall utilize light eight aluminium profiles exhibiting minimal exposed aluminium surfaces mechanically snap locking the multicellular to facilitate movement. (Material shall confirm to ASTM 6063) - Wall Joint of 100 mm gap.	M	70
10	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-moulded and pre-polished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.		
	- Granite Area of slab over 0.50 sqm	Sqm	710
11	Providing edge moulding to 18 mm thick marble stone counters, vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.		
	Granite work	M	2360
12	Extra for providing opening of required size & shape for wash basins/kitchen sink in kitchen platform. Vanity counters and similar location in marble/granite/stone work including necessary holes for pillar taps etc. including rubbing, moulding and polishing of cut edges etc. complete.	Each	430
13	Providing and fixing SS (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)	kg	12120
14	Providing & Fixing Toughened glass 12 mm thickness	Sqm	1220

15	Laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of approved make in colours such shades except white, Ivory, Grey, Fume Red, Brown laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	Sqm	10410
16	Laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of approved make in colours such shades except white, Ivory, Grey, Fume Red, Brown, laid on 20 mm thick Cement mortar 1:4 (1 cement: 4 coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	Sqm	1050

4 Boundary Wall

SL. No.	Description of Item	Unit	Quantity
1	Earth work in excavation 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, lift upto 1.5 m. including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m - All kinds of soil.	cum	550
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead	cum	351
3	Providing, driving with hydraulic piling rigs with power units and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap).		
	400 mm dia piles	mtr	24
4	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering-all work upto plinth level.		
	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 20 mm nominal size)	cum	90
5	Brick work 7cm thick with brick of class designation 100A cement mortar 1:3 (1 cement : 3 coarse sand) in super structure	sqm	1200
6	Centering and shuttering including strutting, propping etc. and removal of form for		
	Columns, pillars, piers, Abutments, Posts, Struts	sqm	2100
	Lintels, beams, plinth beams, girders, bressumers and cantilevers	sqm	1900

7	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and including retard setting of concrete, improve workability without impairing strength and admixtures in recommended proportions as per IS: 9103 to accelerate, reinforcement, durability as per direction of Engineer-in-charge. Note: Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.		
	All works upto plinth level	cum	550
8	Providing and Laying in position, machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering finishing and reinforcement, M-20 grade reinforced cement concrete.		
	All works upto plinth level.		
	Walls, Columns, pillars, posts and struts.		
	Providing M-25 grade R.C.C. instead of M-20 grade R.C.C.	cum	100
9	Providing and Laying in position, machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering finishing and reinforcement, M-20 grade reinforced cement concrete.		
	Beams, plinth beams, girders, bressumers, cantilevers, Suspended floors lintels roofs and staircases including spiral staircases, shelves etc.		
	Providing M-25 grade R.C.C. instead of M-20 grade R.C.C.	cum	170
10	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
	Thermo-Mechanically Treated bars TMTC-500-8mm dia.	kg	22000
	Thermo-Mechanically Treated bars TMTC-500-10mm dia.	kg	37000
	Thermo-Mechanically Treated bars TMTC-500-12mm dia.	kg	37000
	Thermo-Mechanically Treated bars TMT Fe-500-16mm dia.	kg	51000
11	Brick work with bricks of class designation 100A in foundations and plinth in:		
	cement mortar 1 : 4 (1 cement : 4 coarse sand)	cum	675
12	15 mm cement plaster 1:3 (1 cement: 3 coarse sand)		
	External surface both side	sqm	6500
13	Providing and applying white cement based putty of average thickness 2 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm	6500
14	Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.		
	Two coats	sqm	6500

15	Painting with manjusha painting styles by local artists including 18% GST and 1 % Labour cess	sqm	70000
16	Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	5300

5 Secondary Emergency Entry / Exit Gate

SL. No.	Description of Item	Unit	Quantity
1	Earth work in excavation 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, lift upto 1.5 m . including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m - All kinds of soil.	Cum	41
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead	Cum	28
3	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering-all work upto plinth level.		
	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	Cum	3
4	Centring and shuttering including strutting, propping etc. and removal of form for.		
	Foundations, footings, bases of columns etc. for mass concrete.	Sqm	34
	Columns, pillars, piers, Abutments, Posts, Struts	Sqm	565
	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	Sqm	44
	Weather shade, chajjas, corbels etc., including edges	Sqm	14
5	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and including retard setting of concrete, improve workability without impairing strength and admixtures in recommended proportions as per IS: 9103 to accelerate, reinforcement, durability as per direction of Engineer-in-charge. Note- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.		
	All works upto plinth level	Cum	22

6	Providing and Laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering finishing and reinforcement, M-20 grade reinforced cement concrete.		
	All works upto plinth level		
	Walls, Columns, pillars, posts and struts		
	Providing M-25 grade R.C.C. instead of M-20 grade R.C.C.	Cum	4
	Beams, girders, cantilevers, suspended floors, lintels, roofs and staircases including spiral staircase and shelves etc.		
	Providing M-25 grade R.C.C. instead of M-20 grade R.C.C.	Cum	10
7	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
	Thermo-Mechanically Treated bars TMTC-500-8mm dia.	kg	1700
	Thermo-Mechanically Treated bars TMTC-500-10mm dia.	kg	2050
	Thermo-Mechanically Treated bars TMTC-500-12mm dia.	kg	1370
	Thermo-Mechanically Treated bars TMT Fe-500-16mm dia.	kg	1700
8	Brick work with bricks of class designation 100A in foundations and plinth in:		
	cement mortar 1 : 4 (1 cement : 4 coarse sand)	Cum	3
9	Brick work 7cm thick with brick of class designation 100A cement mortar 1:3 (1 cement : 3 coarse sand) in super structure	Sqm	35
10	Brick work with bricks of class designation 100A in foundations and plinth in:		
	cement mortar 1 : 4 (1 cement : 4 coarse sand)		
	Extra for Brick work in superstructure above plinth level upto floor V	Cum	35
11	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in- Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sqm	145
12	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete.	Sqm	12
13	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:		
	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws		
	Extra for Providing and fixing flush doors with decorative veneering instead of non-decorative ISI marked flush door shutters conforming to I.S. 2202 (part I). On one side only	Sqm	4

14	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).		
	Kiln seasoned and chemically treated hollock wood.	Cum	0.2
15	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete:		
	250x10 mm	Each	2
	150x10 mm	Each	6
	100x10 mm	Each	6
16	12 mm cement plaster 1:3 (1 cement : 3 coarse sand)		
	Internal wall (guard room)	Sqm	56
17	15 mm cement plaster 1:3 (1 cement : 3 coarse sand)		
	External surface	Sqm	70
18	6 mm cement plaster to ceiling of mix		
	1:3 (1 cement : 3 coarse sand)	Sqm	24
19	Providing and applying white cement based putty of average thickness 2 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	92
20	Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.		
	Two coats	Sqm	92
21	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:		
	Two or more coats on new work	Sqm	92
22	Finishing walls with Acrylic Smooth exterior paint of required shade:		
	New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	Sqm	142
23	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications.		
	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.75 ltr/ 10 sqm of approved brand and manufacture.	Sqm	12
24	SS (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	680

25	Providing and fixing M.S. fan clamp type I or II of 16 mm dia. M.S. bar bent to shape with hooked ends in R.C.C slabs during laying including painting the exposed portion of loop, all as per standard design complete.	Each	4
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6 Ghat

SL. No.	Description of Item	Unit	Quantity
1	Earth work in excavation 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, lift upto 1.5 m . including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.		
	All kinds of soil	Cum	444
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead	Cum	296
3	Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012, MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of $\pm 2\%$) zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/ selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2mm, supplied @3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.	Cum	2510
4	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering-all work upto plinth level.		
	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 20 mm nominal size)	Cum	554
5	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and including retard setting of concrete, improve workability without impairing strength and admixtures in recommended proportions as per IS: 9103 to accelerate, reinforcement, durability as per direction of Engineer-in-charge. Note- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.		
	All works upto plinth level	Cum	830
6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
	Thermo-Mechanically Treated bars TMTC-500-10mm dia.	kg	59745
	Thermo-Mechanically Treated bars TMTC-500-12mm dia.	kg	39830

7	Stone work in plain ashlar in super structure upto floor five level in cement mortar 1:6 (1 cement: 6 coarse sand) including pointing with cement mortar 1:2 (1 white cement: 2 stone dust) with an admixture of pigment matching the stone shade.		
	Red sand stone	Sqm	477

7 Seating Shades

SL. No.	Description of Item	Unit	Quantity
1	Earth work in excavation 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, lift upto 1.5 m . including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.		
	All kinds of soil.	Cum	17
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead	Cum	11
3	Providing, driving with hydraulic piling rigs with power units and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap)		
	400 mm dia piles	RM	168
4	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - all work upto plinth level.		
	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 20 mm nominal size)	Cum	4
5	Brick work 7cm thick with brick of class designation 100A cement mortar 1:3 (1 cement : 3 coarse sand) in super structure	Sqm	952
6	Centering and shuttering including strutting, propping etc. and removal of form for :		
	Columns, pillars, piers, Abutments, Posts, Struts	Sqm	47
7	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and including retard setting of concrete, improve workability without impairing strength and admixtures in recommended proportions as per IS: 9103 to accelerate, reinforcement, durability as per direction of Engineer-in-charge. Note- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.		

	All works upto plinth level	Cum	89
8	Providing and Laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering finishing and reinforcement, M-20 grade reinforced cement concrete.		
	All works upto plinth level		
	Walls, Columns, pillars, posts and struts		
	Providing M-25 grade R.C.C. instead of M-20 grade R.C.C.	Cum	9
9	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
	Thermo-Mechanically Treated bars TMTC-500- 8 mm dia.	kg	1913
	Thermo-Mechanically Treated bars TMTC-500- 10 mm dia.	kg	3189
	Thermo-Mechanically Treated bars TMTC-500- 12 mm dia.	kg	3189
	Thermo-Mechanically Treated bars TMT Fe-500- 16 mm dia.	kg	4464
10	Brick work with bricks of class designation 100A in foundations and plinth in :		
	Cement mortar 1 : 4 (1 cement : 4 coarse sand)	Cum	96
11	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-moulded and pre-polished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.		
	Area of slab over 0.50 sqm	Sqm	952
12	Providing & Fixing Toughened glass 12 mm thickness	Sqm	1597
13	SS (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	12775

8 Shaded Avenue

SL. No.	Description of Item	Unit	Quantity
1	Earth work in excavation 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, lift upto 1.5 m . including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.		
	All kinds of soil	Cum	34
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead	Cum	22
3	Providing, driving with hydraulic piling rigs with power units and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap)		
	400 mm dia piles	RM	340
4	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering-all work upto plinth level.		
	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 20 mm nominal size)	Cum	8
5	Brick work 7cm thick with brick of class designation 100A cement mortar 1:3 (1 cement : 3 coarse sand) in super structure	Sqm	104
6	Centering and shuttering including strutting, propping etc. and removal of form for:		
	Columns, pillars, piers, Abutments, Posts, Struts	Sqm	95
7	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and including retard setting of concrete, improve workability without impairing strength and admixtures in recommended proportions as per IS: 9103 to accelerate, reinforcement, durability as per direction of Engineer-in-charge. Note- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.		
	All works upto plinth level	Cum	180
8	Providing and Laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering finishing and reinforcement, M-20 grade reinforced cement concrete.		
	All works upto plinth level		
	Walls, Columns, pillars, posts and struts		
	Providing M-25 grade R.C.C. instead of M-20 grade R.C.C.	Cum	18

9	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
	Thermo-Mechanically Treated bars TMTC-500-8mm dia.	kg	3830
	Thermo-Mechanically Treated bars TMTC-500-10mm dia.	kg	6380
	Thermo-Mechanically Treated bars TMTC-500-12mm dia.	kg	6380
	Thermo-Mechanically Treated bars TMT Fe-500-16mm dia.	kg	8930
10	Brick work with bricks of class designation 100A in foundations and plinth in :		
	Cement mortar 1 : 4 (1 cement : 4 coarse sand)	Cum	300
11	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-moulded and pre-polished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.		
	Area of slab over 0.50 sqm	Sqm	3330
12	SS (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	54890

9 Soil Mound Restaurant

SL. No.	Description of Item	Unit	Quantity
1	Earth work in excavation 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, lift upto 1.5 m. including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.		
	All kinds of soil	Cum	2925
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead	Cum	1950
3	Providing, driving with hydraulic piling rigs with power units and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) :		
	400 mm dia piles	RM	1668
4	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering-all work upto plinth level.		

	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 20 mm nominal size)	Cum	6
5	Centring and shuttering including strutting, propping etc. and removal of form for.		
	Foundations, footings, bases of columns etc. for mass concrete.	Sqm	290
6	Diluting and injecting chemical emulsion for POST CONSTRUCTIONAL anti-termites' treatment (including the cost of chemical emulsion)		
	Along external wall where the apron is not provided using chemical emulsion @ 7.5 liters / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:		
	With chlorpyrifos / Lindone E.C. 20% with 1% concentration	M	280
7	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 20mm nominal size).	Sqm	234
8	Applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg. per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	Sqm	234
9	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone - III) : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	Sqm	126
10	Centering and shuttering including strutting, propping etc. and removal of form for:		
	Columns, pillars, piers, Abutments, Posts, Struts	Sqm	1157
	Suspended floors, roofs, landings, balconies and access platform	Sqm	938
	Shelves (Cast in situ)	Sqm	9
	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	1370
11	Providing and Laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering finishing and reinforcement, M-20 grade reinforced cement concrete.		
	All works upto plinth level	Cum	497
	Walls, Columns, pillars, posts and struts	Cum	96
	Beams, girders, cantilevers, suspended floors, lintels, roofs and staircases including spiral staircase ans shelves etc.	Cum	157
12	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
	Thermo-Mechanically Treated bars TMTC-500-8mm dia.	kg	26119
	Thermo-Mechanically Treated bars TMTC-500-12mm dia.	kg	8707
	Thermo-Mechanically Treated bars TMT Fe-500-16mm dia.	kg	43532
	Thermo-Mechanically Treated bars TMT Fe-500-20mm dia.	kg	52238
	Thermo-Mechanically Treated bars TMT Fe-500-25mm dia.	kg	43532

13	Providing and fixing of expansion joint system related with floor location as per drawings and direction of Engineer-In-Charge. The joints system will be of extruded aluminium base members, self aligning / self centering arrangement and support plates etc. as per ASTM B221-02. The system shall be such that it provides floor to floor /floor to wall expansion control system for various vertical location in load application areas that accommodates multi directional seismic movement without stress to it's components. System shall consist of metal profiles with a universal aluminium base member designed to accommodate various project conditions and finish floor treatments. The cover plate shall be designed of width and thickness required to satisfy projects movement and loading requirements and secured to base members by utilizing manufacturer's pre-engineered self- centering arrangement that freely rotates / moves in all directions. The Self - centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminium extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. Provision of Moisture Barrier Membrane in the Joint System to have watertight joint is mandatory requirement all as per the manufactures design and as approved by Engineer -in- Charge. (Material shall confirm to ASTM 6063). Floor Joint of 100 mm gap		
	Expansion joint	M	65
14	Providing and fixing of expansion joint system related with wall joint (internal/external) location as per drawings and direction of Engineer-In- Charge. The joints shall be of extruded aluminum base members, self aligning / centering arrangement and support plates as per ASTM B221-02. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall/ wall to corner application, both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System\ shall utilize light weight aluminium profiles exhibiting minimal exposed aluminium surfaces mechanically snap locking the multicellular to facilitate movement. (Material shall confirm to ASTM 6063).		
	Wall Joint of 100 mm gap.	M	18
15	Brick work 7cm thick with brick of class designation 100A cement mortar 1:3 (1 cement : 3 coarse sand) in super structure	Sqm	1588
16	Brick work with bricks of class designation 100A in foundations and plinth in:		
	cement mortar 1:4 (1 cement : 4 coarse sand)		
	Extra for Brick work in superstructure above plinth level upto floor V cum	Cum	160
17	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-moulded and pre-polished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.		
	Area of slab over 0.50 sqm	Sqm	385
18	Providing edge moulding to 18 mm thick marble stone counters, vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in- Charge.		
	Granite work	M	1500
19	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:		

	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	36
20	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).		
	Second class teak wood	Cum	0.25
21	Providing 40X5mm flat iron hold fast 40cm long including fixing to frame with 10 mm dia. Bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15 cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	Each	102.00
22	Area of window above 1.75 sqm) Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of uPVC multichambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealant shall be paid separately) Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of		
	Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of (small series) frame 92 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension (Area of window upto 1.75 sqm).	Sqm	115
23	Providing and fixing glazing in aluminium door, windows, ventilators, 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)		
	With float glass panes of 4.0 mm thickness.	Sqm	115
24	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 upto 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. Providing and fixing 50 mm bright finished brass cup board or wardrobe knob of approved quality with Providing and fixing bright finished	Each	34
25	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete:		
	250x10 mm	Each	25
	150x10 mm	Each	25
	100x10 mm	Each	25
26	Providing and fixing bright finished brass door latch with necessary screws etc. complete 300X16X5 mm	Each	50
27	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete		
	300x16 mm	Each	50

28	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS: 2046 Type S including cost of adhesive of approved quality:1.0 mm thick		
	1.0 mm thick	Sqm	72
29	30 mm thick factory-made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless-steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	Sqm	13
30	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5 mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos. of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided throughout the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer-in- Charge.	M	40
31	Steel work in built up tubular trusses including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, welded and bolted including special shaped washers etc. complete: Hot finished welded type tubes	kg	92620
32	Providing corrugated G.S. sheet roofing fixed with G.I.J. or hooks, bolts and nuts 8 mm diameter with bitumen and G. I. limpet washers or with G.I. limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on over lapping of sheets complete (upto a pitch of 60°) excluding the cost or purlins, rafters and trusses. 0.8mm thick with zinc coating not less than 275 gm/sqm	Sqm	1684
33	Thermal Insulation of roofing with Expanded polystyrene fixed with suitable adhesive to the false ceiling as per the directions of the E-I-C. With Type SE Self Extinguishing type	Sqm	1684
34	Providing and applying two coats of High Albedo paint having minimum Solar Reflective Index (SRI) 108 (with solar reflectance & thermal emittance tested as per ASTM C 1549 and ASTM C 1371 respectively), VOC less than 10 cc/gm. The coating thickness and the methodology of application shall strctly as per manufacturer's specifications and as approved by Engineer-in- Charge. Surface preparation includes cleaning with metal wire brush to remove all dust, fungus etc., washing with water all complete. The contractor shall give guarantee for the performance of SRI and also the durability of coating, all complete as per direction of Engineer-in-Charge.	Sqm	1684
35	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double action 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	12

36	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08% and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc.		
	Size of Tile 1000 x 1000 mm.	Sqm	1684
37	Providing & laying Ceramic glazed floor tiles 300mm x 300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of approved make in colours such shades except white, Ivory, Grey, Fume Red, Brown, laid on 20 mm thick Cement mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	Sqm	78
38	Laying Ceramic glazed wall tiles 300mm x 300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of approved make in colours such shades except white, Ivory, Grey, Fume Red, Brown, laid on 20 mm thick Cement mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	Sqm	324
39	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete.		
	Size of Tile 1000 x 1000 mm.	Sqm	96
40	12 mm cement plaster 1:3 (1 cement : 3 coarse sand)		
	Internal wall	Sqm	825
41	15 mm cement plaster 1:3 (1 cement : 3 coarse sand)		
	External surface	Sqm	4297
42	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	5122
43	Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.		
	Two coats	Sqm	5122
44	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:		
	Two or more coats on new work	Sqm	825
45	Finishing walls with Acrylic Smooth exterior paint of required shade:		
	New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	Sqm	4297
46	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.75 ltr/ 10 sqm of approved brand and manufacture.	Sqm	48

47	Providing & laying in-situ 5 course water proofing treatment with glass fibre tissue reinforced bitumen over roof consisting of 1 st coat of bitumen primer @ 0.40 kg/sqm, 2nd & 4th courses of bonding material @ 1.60 kg/sqm which shall consist of blown type bitumen of grade 85/25 conforming to IS:702, 3 rd layer of glass face excluding grading for slope etc. complete.	Sqm	78
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10 Storm Water Drainage & Drainage System

S.No.	Description	Unit	Qty.
1	RCC Storm Water Drain along the boundary wall (Inside Section: 1.2M x 1.5M)	M	1000
2	RCC Storm Water Drain along the CC Road (Inside Section: 0.8M x 1.0M)	M	400
3	Culverts connecting Drains to Pond at 5 locations (Section: 0.8M x 1.0M)	M	30
4	Cross-Drainage Structures at 2 locations (Section: 1.8M x 1.5M)	M	30
5	Chamber 1 at 3 locations (Size: 1.8M x 1.8M x 2.5M)	Each	3
6	Chamber 2 at 8 locations (Size: 1.5M x 1.5M x 2.0M)	Each	8
7	Underground Water Tank at 2 locations (Size: 8.0M x 8.0M x 5.0M)	Each	2
8	MS Single Tank Sewage / ETP, 1 year, 50 KLD at 2 locations	Each	2

11 Footpaths on both sides of Road

S.No.	Description	Unit	Qty.
1	Dismantling Brick / Tile work in cement mortar	Cum	525
2	Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete.	Cum	200
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plinth level. 1:1.5:3 (1 Cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	Cum	785
4	Paver Block Providing and laying factory made chamfered edge Cement Concrete paver blocks of required strength, thickness & size/shape, made by table vibratory method, to attain superior smooth finish using PU or equivalent moulds, laid in required Grey colour & pattern over 50mm thick compacted bed of coarse sand, compacting and proper embedding / laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with jamuna sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. all complete as per Manufacturer's specifications & direction of Engineer -in-Charge: (a) 80 mm thick c.c. paver block of M-35 grade with approved colour design and pattern.	Sqm	3924
5	Cast-in-Situ Cement Concrete M-20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 408.)	M	1090

12 New C.C Road

S.No.	Description	Unit	Qty.
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead 1000 meter.		
	Dismantling Prestressed / Reinforced cement concrete grade M-20 & above	Cum	406
2	Dismantling of flexible pavements and disposal of dismantled materials up to a lead of 1000 meter, stacking serviceable and unserviceable materials separately (Edge of carriageway to property line)		
	i) Bituminous courses	Cum	537
	ii) Granular courses	Cum	1238
3	Granular Sub-Base with Coarse Graded Material (Table:- 400- 2) Construction of granular sub-base by providing coarse graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401.	Cum	1650
4	Cement concrete pavement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete.	Cum	990
5	Construction of cement concrete kerb	M	1100
6	Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location within all lifts and lead upto 1000m.) including cost of watering, rolling and compaction	Cum	550

13 Parking Space

S.No.	Description	Unit	Qty.
1	Dismantling Brick/Tile work in cement mortar	Cum	420
2	Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete.	Cum	158
3	Granular Sub-Base with Coarse Graded Material (Table:- 400- 2) Construction of granular sub-base by providing coarse graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401.	Cum	525
4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plinth level.		
	1 : 1.5 : 3 (1 Cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	Cum	420

5	Paver Block Providing and laying factory made chamfered edge Cement Concrete paver blocks of required strength, thickness & size/shape, made by table vibratory method , to attain superior smooth finish using PU or equivalent moulds, laid in required Grey colour & pattern over 50mm thick compacted bed of coarse sand, compacting and proper embedding / laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with jamuna sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. all complete as per Manufacturer's specifications & direction of Engineer -in-Charge:		
	80 mm thick c.c. paver block of M-35 grade with approved colour design and pattern.	Sqm	1800
6	Cast-in-Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 408.)		
	using concrete mixer	M	379
7	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade		
	Two or more coats on new work over an under coat of suitable shade with ordinary plain of approved brand and manufacture	Sqm	315

14 Road Markings

S.No.	Description	Unit	Qty.
1	(Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes.)		
	Centre line @ 4.0 m, Edge line, Zebra crossings, Rumble strip, Stop signs, Advanced direction signs, Compulsory keep left signs, Directional arrows, Red reflectors, Add extra chevrons, continuous lines	Sqm	413
2	Road Markers/Road Stud with tense Reflector (Providing and fixing of road stud 100X 100 mm, die cast in aluminium, resistant to corrosive effect of salt and grit, fitted with tense reflectors, instated in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in a suitable bituminous grout or epoxy mortar, ail as per BS 873 part 4:1973)		
	3 side, Zebra crossing, Cat	Nos.	110

3	Retro- reflectorised Traffic signs (Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing.)		
	80 cm x 60 cm rectangular	Nos.	2
	60 cm equilateral triangle	Nos.	4
4	Direction and Place Identification signs upto 0.9 sqm size board. (Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing.)	Sqm	4

15 Surprise Fountain

S.No.	Description	Unit	Qty.
1	Dismantling Brick/Tile work in cement mortar	Cum	120
2	Earth work in excavation 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, lift upto 1.5 m . including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	Cum	200
2	Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete.	Cum	80
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plinth level.		
	1:1.5:3 (1 Cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	Cum	125
4	Brick work with bricks of class designation 100A in foundations and plinth in :		
	cement mortar 1:4 (1 cement:4 coarse sand)	cum	125
5	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete.		
	Size of Tile 600 x 600 mm.	Sqm	110

6	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-moulded and pre-polished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations, of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.		
	Granite of any colour and shade		
	Area of slab over 0.50 sqm	Sqm	120
8	Installation of Water Floor Fountain with installation of fountain, water connections, LED light, Sensor, and connections and Programming Hardware all complete, Size 15 mtr X 15 mtr	Piece	1

16 Children's Play Area

S.No.	Description	Unit	Qty.
1	Earth work in excavation 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, lift upto 1.5 m. including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.		
	All kinds of soil.	cum	1172
2	Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete.	Cum	1172
3	Providing designation 100 A one brick flat soling joints filled with local sand including cost of watering, taxes, royalty all complete as per building specification and direction of E/I,	Sqm	240
4	Granular Sub-Base with Coarse Graded Material (Table: 400- 2) Construction of granular sub-base by providing coarse graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401.	Cum	200
5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - all work upto plinth level.		
	1:1.5:3 (1 Cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	Cum	160
6	Supplying and stacking of good earth at site including royalty and carriage upto 5 km complete (earth measured in stacks will be reduced by 20% for payment).	Cum	309
7	Supplying and stacking sludge at site including royalty and carriage upto 5 km complete (sludge measured in stacks will be reduced by 8% for payment).	Cum	309
8	Supplying and stacking at site dump manure from approved source, including carriage upto 5 km complete (manure measured in stacks will be reduced by 8% for payment) - Screened through sieve of I.S. designation 4.75 mm	Cum	309
9	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.	% Sqm	16

10	Preparation of beds for hedging and shrubbery by excavating 60 cm deep and trenching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%),flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50 m, lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately)	Cum	926
11	Providing and laying Neelgiri / Mexican grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with tools wooden (Dhurmos) and than rolling the surface with light roller make the surface smoothen and light watering with sprinkler and maintenance for 30 days or more till the grass establish properly, as per direction of officer-in-charge.	Sqm	1543
12	EPDM Rubberized flooring for safe children flooring	Sqm	8612
13	Cast-in-Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 408.)		
	using concrete mixer	Mte	448

17 Semi Open Café

S.No.	Description	Unit	Qty.
1	Development of Semi Open Café Building Cost for RCC Framed Structure, Floor Hieght 3.60m	Sqm	170

18 Toilet Block

S.No.	Description	Unit	Qty.
1	Earth work in excavation 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, lift upto 1.5 m. including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.		
	All kinds of soil.	Cum	180
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth: consolidating each deposited layer by ramming and watering lead	Cum	120
3	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering-all work upto plinth level.		
	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	Cum	20
4	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level.		
	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 20 mm nominal size)	Cum	15

5	Centring and shuttering including strutting, propping etc. and removal of form for.		
	Foundations, footings, bases of columns etc. for mass concrete.	Sqm	140
6	Diluting and injecting chemical emulsion for POST CONSTRUCTIONAL anti-termites' treatment (including the cost of chemical emulsion)		
	Along external wall where the apron is not provided using chemical emulsion @ 7.5 liters / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:		
	With chlorpyrifos/Lindone E.C. 20% with 1% concentration	M	190
7	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 20mm nominal size).	Sqm	250
8	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone - III) : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	Sqm	81
9	Centering and shuttering including strutting, propping etc. and removal of form for:		
	Columns, pillars, piers, Abutments, Posts, Struts	Sqm	140
	Suspended floors, roofs, landings, balconies and access platform	Sqm	460
	Shelves (Cast in situ)	Sqm	15
	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	300
10	Providing and Laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering finishing and reinforcement, M-20 grade reinforced cement concrete.		
	All works upto plinth level	Cum	47
	Walls, Columns, pillars, posts and struts	Cum	9
	Beams, girders, cantilevers, suspended floors, lintels, roofs and staircases including spiral staircase and shelves etc.	Cum	32
11	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
	Thermo-Mechanically Treated bars TMTC-500-8mm dia.	kg	7500
	Thermo-Mechanically Treated bars TMTC-500-10mm dia.	kg	5315
	Thermo-Mechanically Treated bars TMTC-500-12mm dia.	kg	8500
12	Brick work with bricks of class designation 100A in foundations and plinth in:		
	cement mortar 1 : 4 (1 cement : 4 coarse sand)	Cum	9
13	Brick work with bricks of class designation 100A in foundations and plinth in:		
	cement mortar 1 : 4 (1 cement : 4 coarse sand)		
	Extra for Brick work in superstructure above plinth level upto floor V cum	Cum	138

14	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:		
	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	31
15	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).		
	Second class teak wood	Cum	0.2
16	Providing and fixing glazing in aluminium door, windows, ventilators, 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)		
	With float glass panes of 4.0 mm thickness.	Sqm	24
17	30 mm thick factory-made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless-steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	Sqm	64
18	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5 mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos. of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided throughout the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer-in- Charge.	M	200
19	Providing and laying Ceramic glazed floor tiles 400x400 mm (thickness to be specified by the manufacturer) of 1 st quality conforming to IS: 13755 of NITCO, ORIENT, SOMANY, KAJARIA or equivalent make in colours such as white, Ivory, Grey, Fume, Red, Brown, laid on 20mm thick cement mortar 1:4 (1 cement: 4 Coarse sand) including grouting the joints with white cement and matching pigments etc, complete.	Sqm	250

20	Laying Ceramic glazed wall tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of approved make in colours such shades except white , Ivory , Grey , Fume Red , Brown , laid on 20 mm thick Cement mortar 1:4 (1 cement: 4 coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	Sqm	752
21	12 mm cement plaster 1:3 (1 cement: 3coarse sand)		
	Internal wall	Sqm	325
22	15 mm cement plaster 1:3 (1 cement: 3 coarse sand)		
	External surface	Sqm	530
23	6 mm cement plaster of mix 1:3 (1 cement : 3 fine sand)	Sqm	455
24	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	1310
25	Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.		
	Two coats	Sqm	1310
26	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:		
	Two or more coats on new work	Sqm	777
27	Finishing walls with Acrylic Smooth exterior paint of required shade:		
	New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	Sqm	530
28	Providing and laying in-situ five course water proofing treatment with glass fibre tissue reinforced bitumen over roof consisting of first coat of bitumen primer @ 0.40 kg. per sqm, 2nd & 4th courses of bonding material@ 1.60 kg. per sqm which shall consist of blown type bitumen of grade 85/25 conforming to IS: 702, third layer of glass fibre tissue course as specified, fifth, the top most layer of stone grit 6 mm and down size or pea-sized gravel spread @ 6 dmJ per sqm including preparation of surface excluding grading for slope etc. complete.	Sqm	250

19 Septic Tank

S.No.	Description0	Unit	Qty.
1	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, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.		
	All kinds of soil	Cum	672
2	Centring and shuttering including strutting, propping etc. and removal of form for. Suspended floors, roofs, landings, balconies and access platform	Sqm	224

3	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable separately).		
	All works upto plinth level	Cum	28
4	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.		
	Thermo-Mechanically Treated bars TMTC-500-8mm dia.	kg	2100
5	Brick work with bricks of class designation 100A in foundations and plinth in:		
	cement mortar 1:4 (1 cement : 4 coarse sand)	Cum	175
6	Half brick masonry with bricks of class designation 100B in foundations and plinth in:		
	Cement mortar 1:3 (1 cement : 3 coarse sand)	Sqm	225
7	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:		
	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	Cum	24
8	20 mm External plaster work in		
	1: 4 (1 cement : 4 coarse sand)	Sqm	310
9	Making bell mouth opening/ entrance of size 100x50x50 cm for drainage pipe under footpath, including providing cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) for shape of bell mouth, including plastering providing and fixing precast R.C.C./ S.F.R.C. slab including plastering with cement mortar 1:3 (1 cement : 3 fine sand) of 6 mm thickness on exposed surface of the slab & bell mouth including centring, shuttering & neat cement punning inside the bell mouth etc. all complete.	Each	48
10	Supplying and fixing C.I. cover without frame for manholes:		
	500mm diameter C.I cover (medium duty) the weight of the cover to be not less than 58 kg	Each	32

20 Glass Deck Overbridge

S.No.	Description	Unit	Qty.
1	Survey, soil investigations, modelling, design, drawings, drawings approval/vetting, constructional and fabrication drawings. As per direction of E/I	Lot	1

2	Entire civil works for foundations with pile, pile caps for all points, abutments etc. which includes excavation, dewatering if required, concrete on all heights with all tools and tackles, reinforcement, entire construction as per drawings and design for fitting of superstructure as per direction of E/I.	Lot	1
3	Entire super-structure works which includes supply of ropes / cables, sockets, saddles, spacers and turnbuckles, suspenders, anchor assemblies, deck structure, deck terminations arrangements, bearings/hinges and all materials to stabilize the deck as per drawings and design as per direction of E/I.	Lot	1
4	Providing and fitting of Glass Deck on 2100 sq.ft area as per direction of E-I-C.	Lot	1
5	Entire super structure erection, fitting, stabilizing and load test of the bridge with colour finishing as per direction of E-I-C.	Lot	1

21 Landscaping works

S.No.	Description	Unit	Qty.
1	Trenching in ordinary soil up to a depth of 60 cm including removal and stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly leveling within a lead of 50 m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or / and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure).	cum	1000.00
2	Supplying and stacking of good earth at site including royalty and carriage upto 5 km complete (earth measured in stacks will be reduced by 20% for payment).	cum.	1000.00
3	Supplying and stacking sludge at site including royalty and carriage upto 5 km complete (sludge measured in stacks will be reduced by 8% for payment).	cum.	800.00
4	Supplying and stacking at site dump manure from approved source, including carriage upto 5 km complete (manure measured in stacks will be reduced by 8% for payment) - Screened through sieve of I.S. designation 4.75 mm	cum.	1800.00
5	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.	% Sqm	32659.00
6	Spreading of sludge, dump manure and/or good earth in required thickness as per direction of officer-in-charge (cost of sludge, dump manure and/ or good earth to be paid separately).	cum	2600.00
7	Mixing earth and sludge or manure in the required proportion specified or directed by the Officer-in-charge	cum	800.00
8	Preparation of beds for hedging and shrubbery by excavating 60 cm deep and trenching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%),flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50 m, lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately)	cum	400.00

9	Providing and stacking of Fishtail palm of ht. 270-300 cm bottom girth 40- 50 cm well developed in big size HDPE bags as per direction of the officer-in-charge.	each	100.00
10	Supply and stacking of Delonix regia (Gulmohar) plant of height 150-165 cm. in big poly bags of size 25 cm as per direction of the officer-in-charge	each	50.00
11	Providing and laying Neelgiri / Mexican grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with tools wooden (Dhurmos) and than rolling the surface with light roller make the surface smoothen and light watering with sprinkler and maintenance for 30 days or more till the grass establish properly, as per direction of officer-in-charge.	sqm	3000.00
12	Providing and displaying of Brassia Variegated having ht. 30 cm, well developed with fresh and healthy foliage in 20 cm size of Earthen pot/Plastic pot & as per direction of the officer-in-charge.	each	90.00
13	Providing and displaying of Croton Petra Bangalore variety having ht. 60 cm to 75 cm with 4 to 6 branches, well developed, fresh and healthy colorful leaves in 25 cm size of Earthen pot/Plastic pot & as per direction of the officer-in-charge.	each	200.00
14	Providing and Displaying Bougainvillea named variety, Sobhra, Thima, Marry palmar, Cherry Blossom etc. well developed with fresh & healthy bushy in full bloom 75 to 90 cm ht. in 40 cm Cement Pot as per direction of the officer-in-charge.	each	70.00
15	Providing and stacking of Callistemon lanceolatus of height 150-165 cm. in big poly bags of size 25 cm as per direction of the officer-in-charge.	each	100.00
16	Providing and stacking of Delonix regia (Gulmohar) of height 150-165 cm. in big poly bags of size 25 cm as per direction of the officer-in-charge	each	180.00
17	Providing and stacking of Cassia fistula (Amaltash) of height 120-135 cm. in big poly bags of size 25 cm as per direction of the officer-in-charge.	each	80.00
18	Providing and stacking of Cassia siamea of height 150-165 cm. in big poly bags of size 25 cm as per direction of the officer-in-charge	each	100.00
19	Providing and stacking of Ceiba pentandra of height 150-165 cm. in big poly bags of size 25 cm as per direction of the officer-in-charge	each	176.00
20	Providing and stacking of Ficus infectoria (Pilkhan) of height 150-165 cm. in big polybag of size 25 cm as per direction of the officer-in-charge.	each	240.00
21	Providing and stacking of Saraca indica (Sita Ashok) of height 105-120 cm. in big poly bags of size 25 cm as per direction of the officer-in-charge	each	450.00
22	Providing and stacking of Alpinia Variegated (three in one) having ht. 30 cm and above, with fresh and healthy variegated foliage in 25 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge	each	100.00
23	Providing and stacking of Asparagus sprengeri of height 15 cm to 20 cm, full of leafy branches in 15 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge.	each	100.00
24	Providing and stacking of Duranta Golden, having ht.15 to 20 cm bushy shape with fresh and healthy leaves in 15 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-incharge	each	525.00

25	Providing and stacking of Calliandra, emarginata of height 45-60 cm. in earthen pot of size 20 cm as per direction of the officer-in-charge.	each	900.00
26	Providing and stacking of Cassia biflora of height 60-75 cm. with 4-5 branches in poly bags of size 25 cm as per direction of the officer-in-charge	each	900.00
27	Providing and stacking of Excoecaria bicolor of height 45-60 cm. in earthen pots of size 20 cm as per direction of the officer-in-charge	each	900.00
28	Providing and stacking of Ficus reginald well branched, bushy of height 60-75 cm. in earthen pots of size 25 cm as per direction of the officer-in-charge	each	400.00
29	Providing and stacking of Hamelia patens of height 30-45 cm. with 3-4 branches in poly bags of size 20 cm as per direction of the officer-in-charge	each	800.00
30	Complete maintenance of the entire garden features having as per yard stick in the garden area i.e. lawn trees, shrubs, hedge, flower beds, foliage, creepers etc. including hoeing, weeding, pruning, replacement of plants, gap filling, watering, mowing of lawn, grass cutting by lawn mover and brush cutter, removal of garden waste, applying insecticide, pesticide & fertilizers (whenever required) top dressing of lawn with good earth and manure and maintenance of other garden related works as directed by officer-in-charge (Cost of Good Earth, Manure, Fertilizer, Insecticide, Pesticide will be provided by the Department & lawn mover and brush cutter with fuel, other T & P material/articles shall be provided by the contractor.) - Open spaces (as per yard stick 1 Mali = 3.00 Acre).	per sqm per year	32659.00
31	Providing and laying factory made chamfered edge cement concrete paver blocks in foot path, park and lawns drive way or light & traffic parking etc. of required strength, thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of coarse sand, compacting and proper embedding/laying of interlocking paver blocks in to the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand cutting of paver blocks as per size required size and pattern, finishing and sweeping extra sand, all complete as per manufacturer's specifications & directions of E/I.	sqm	6846.00

22 Fish Display Pond / Water submersed Aquarium

S.No.	Description	Unit	Qty.
1	Submerged Civil Structure including Escalation, soling, PCC, Raft, RCC pillar structure, Steel & Waterproofing etc.	Lot	1
2	Acrylic Viewing Panels 4m x 2m embedded Vertically in RCC structure for Aquarium Visitor Section	Lot	8
3	Submerged Watertight Escalator with Acrylic Waterproof Covering Structure for Entry & Exit to Aquarium	Lot	2
4	Curved non-submerged / open-to-air Acrylic Roof Structure for ceiling of Aquarium Visitor Section (150 Sq Mtr)	Lot	1
5	Aquarium LED Customized Lighting including Marine Lights & Lenses and Exhibit Gallery Lighting	Lot	1
6	Visitor Gallery Interior Works Including GRC Theming, FRP Animal Lifesize Models, Information Graphic Displays, Wall & Flooring Theme Cladding	Lot	1

7	MEP & Fire-fighting	Lot	1
8	HVAC System installation, testing & commissioning	Lot	1
9	Packing, Transportation, Installation, Testing & Commissioning	Lot	1
10	Submissions of detailed Designs & Drawings for Aquarium Visitor Area	Lot	1
11	Life Saving System, Water Treatment plant for clean aquarium water	Lot	1

23 Main Entrance Sculptural Gate

S.No.	Description	Unit	Qty.
1	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.		
	Two Coats	sqm	1800
2	Design supply & installation of suspended Spider Glazing system designed to withstand the wind pressure as per IS: 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12mm thick clear toughened glass held together with SS- 316 Grade Stainless steel Spider & bolt assembly with laminated glass fins 21mm thick. The Glass fins and glass panel assembly shall be connected to Slab/beams by means of SS- 316 Grade stainless steel brackets & Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener & anchor bolts, non-staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion & seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter & in U channel of the assembly to be filled with non-staining weather sealant, so as to make the entire system fully water proof & dust proof. The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, T&P, scaffolding, other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete. For the purpose of payment, actual elevation area of Glazing including thickness of joints and the portion of Glass panel inside the SS channel shall be measured.		
	Spider Glazing Work	sqm	2600

24 Central Pond Water Cascade, Water Curtain Show

S.No.	Description	Unit	Qty.
1	Supply & fixing of multimedia laser show with musical fountain size 30 mtr by 10 mtr	Lot	1

2	Civil Works for Base of Fountain Works including construction of water tank, foundation, etc. @ 10% of Fountain cost	Lot	1
3	Supply & fixing of CASCADE fountain	Lot	1
4	Civil Works for Base of Fountain Works including construction of water tank, foundation, etc. @ 20% of Fountain cost	Lot	1

25 Outdoor Playing Equipment

S.No.	Description	Unit	Qty.
1	Aerial Stroller:	each	1
2	Double Shoulder Exercise	each	1
3	Double Chest Press	each	1
4	Aero Rider	each	1
5	Leg Extension	each	2
6	Forearm Twirl	each	1
7	Skywalker	each	1
8	ABS Board	each	2
9	Hip Twister Double Circular	each	1
10	Leg Press Double Standard gem Id : 5116877-26060386933	each	1
11	Hand Rower	each	1
12	Back Extension	each	2
13	Surf Board	each	1
14	Arm and Paddle Bike	each	1
15	Elliptical cross trainer	each	1
16	Pull up station	each	2
17	Seated Twister Gem Id: 5116877-12937449035	each	1
18	4-seater see saw (2 nos)	each	2
19	Round Iron Playground Spinning Wheel	each	2
20	4-seater Swing (heavy Duty) 2 nos.	each	2
21	Twister Climber/ Monkey Bar (heavy Duty)	each	1
22	Double Roller Slide	each	2
23	ROPE CLIMBER	each	1
24	MILITARY CLIMBER	each	2
25	Adventure Challenging Climber (28'0" X 14'0" X 10'0") or similar	each	1
26	Multiplay system 3 nos. or similar	each	1
27	8 activity Multiplay system 2 nos. or similar	each	1
28	EPDM flooring Gem Id: 5116877-56528776550	Sqm	500
29	DELUXE BENCH (GI) Gem Id: 5116877-87429785202	each	80
30	Steel dust bin Gem Id: 5116877-60024189276	each	80

26	CCTV System		
S.No.	Description	Unit	Qty.
1	Supplying, installation, testing and commissioning of IP based CCTV system for building security comprising of PTZ fixed	sqm	32660

	camera, cabeling, recording, display system and hardware software support		
27	Fire Fighting System		
S.No.	Description	Unit	Qty.
1	With wet riser and sprinkler system	Per Sqm of Covered area	3,900

28 Emergency Light & illuminated signages

S.No.	Description	Unit	Qty.
1	Illuminated Sinages	Per Sqm of Covered area	32660

29 Water Sports Facility

S.No.	Description	Unit	Qty.
1	Development of two units Water sports facility control room	sqm	128
2	Steel Enveloped Pontoon 15m x 4.5m x 0.8m Nos Manufactured using double layer universal floating HDPE cubes and hot dip galvanized steel MS powder Human Guard Rails on 3 sides of the pontoon 8 Cylindrical Fenders, 4 Lifebuoys, 2 Extinguishers and emergency alarm Plan reviewed by Classification Societies /Agencies / institutes.	sqm	300
3	Floating Gangway for the above Steel Enveloped Pontoon constructed by joining steel enveloped single layer segments of size 3m x 2m x 0.4m for a total length of 15 m Each segment manufactured by enveloping single layer HDPE floating cubes with a hot dip galvanized steel framework an Aluminum antiskid flooring and MS powder coated human guard rails Inclusive of solar beacons.	sqm	200
4	ZENITH 2 Strokes 25 horsepower 4.2 M Rubberised Inflatable Boat (Rescue boats)	unit	2
5	FRP Made Paddle Boat	unit	12
6	SOLAS Jacket Polyurethane coated Nylon Fabric Life Jacket- NDRF SOLAS JacketR	unit	60
7	ZORB BALL	unit	2
8	Hitachi NA 24 Liters C1054E Oil Lubricated air compressors HitachiR	unit	2

30 Water Amusement Park

S.No.	Description	Unit	Qty.
1	Supply and Commissioning of Diesel Engine Toy Train, Kirloskar Engine, 10 HP, MS steel Make Fabricated with 48 people capacity boggie boggie 3 nos. luxury make	LS	1
2	Laying of Track for Toy train	M	1050
3	Civil works for Structure of station	LS	1

31 Lighting Automation Including Occupancy sensors

S.No.	Description	Unit	Qty.
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1	Supplying, installation, testing and commissioning of lighting automation including occupancy sensors	Per Sqm of Covered area	32660
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32 Security based Equipment

S.No.	Description	Unit	Qty.
1	X ray Baggage Scanner	unit	1
2	Metal Detector Frame	unit	4
3	Body Security Scanner Hand held	unit	10
4	Hand sanitization dispenser	unit	30

33 Garden Maintenance based Equipment

S.No.	Description	Unit	Qty.
1	BRUSH CUTTER HUSQVARNA	unit	5
2	Husqvarna Petrol Engine Hedge Trimmer / Cutter With 600 to 624 mm Blade	unit	2
3	Husqvarna 2 stroke BACKPACK LEAF BLOWER	unit	2
4	Bosch 0 Cold Water High Pressure Washer Bosch	unit	2
5	AERATOR MACHINE GL GLEWS BTI,	unit	1

34 Internal Electrification Works of Civil works

S.No.	Description	Unit	Qty.
1	Electrical Works for Sculpture Gate	Lot	1
2	Electrical Works for Restaurant	Lot	1
3	Electrical Works for Open Café	Lot	1
4	Transformer 400 KVA including Transportation & Installation	unit	1
5	HT Cable	M	510
6	LT Cable	M	6,530
7	DG set, 250 KVA	unit	1
8	Street Light	Each	30
9	Bollards	Each	740
10	Lamp Post	Each	260
11	Bollards over boundary wall	Each	235
12	Step lights	Each	284
13	Lifts for sculpture gate, 12 passengers, for G+5	Each	2
14	LED flood light	Each	40
15	Tree light upshifter	Each	100
16	High Mast Light	Each	4
17	PA speakers @ 1 nos./ 100 sqm	Each	364
18	Civil Cost for Installation and excavation and other accessories	Lot	1

35 Internal Water Supply & Sanitation

S.No.	Description	Unit	Qty.
1	Sculpture building (G+5 Building with 3900 Sqm Built up area)	-	1
2	Toilet Blocks	-	12
3	Open Café	-	1
4	Soil Mound Restaurant	-	1
5	Water Sports Facility Room	-	2
6	Water ATMs	unit	6
7	Pumps		
	Submersible pump 4 units 10 H.P. each		4
	Centrifugal Pumps @ 15 H.P. each		4
	Monoblock Pumps 4 @ 30 H.P. each		4
8	Pipe fittings		
	Providing and placing on terrace (at all floor levels) 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 fitting and base support for tank.		
	Polyethyle multiple Sintex tanks @ 10000 ltrs x 2 units	per litre	20000
9	Providing & fixing Chlorinated Polyvinyl Chloride (CPVC) Pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, 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 cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in charge.		
	Concealed work, including cutting chases and making good the walls		
	15 mm nominal outer dia pipes	metre	2400
	20 mm nominal outer dia pipes	metre	3200
	25 mm nominal outer dia pipes	metre	4200
	32 mm nominal outer dia pipes	metre	1800
10	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :		
	EXTERNAL WORKS		
	25 mm dia. nominal bore	metre	1800
	32 mm dia. nominal bore	metre	1750
	40 mm dia. nominal bore	metre	2400
	50 mm dia. nominal bore	metre	4200
11	Providing and fixing ball (brass) valve of approved quality. High or low pressure, with plastic floats complete:		
	15 mm nominal bore.	each	40
	20 mm nominal bore.	each	40
	25 mm nominal bore	each	40

12	Providing and fixing required Stainless-Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Reducer		
	For 48.60 mm x 42.70 mm outer dia pipe	each	40
	For 42.70 mm x 34.00 mm outer dia pipe	each	40
	For 34.00 mm x 22.22 mm outer dia pipe	each	40
	For 22.22 mm x 15.88 mm outer dia pipe	each	40
13	Providing and fixing required Stainless Steel Fitting of press fit design of grade AISI 304 conforming to JWWA G116 standard with V-profile or M-profile and with O-ring sealing gasket of EPDM material of required dia as per direction of Engineer-in-charge. Connector		
	For 15.88 mm outer dia x 15 mm nominal dia threaded	each	40
	For 22.22 mm outer dia x 15 mm nominal dia threaded	each	40
14	Providing and fixing uplasticised PVC connection pipe with brass unions:		
	30 cm length 15 mm nominal bore	each	40
15	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.		
	Flexible pipe 40 mm dia	each	40
16	Painting of GI pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work.		
	25 mm dia. nominal bore	metre	1500
	32 mm dia. nominal bore	metre	1500
	40 mm dia. nominal bore	metre	2000
	50 mm dia. nominal bore	metre	3000
17	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc complete.		
	200 mm diameter	metre	550
18	Providing and laying cement concrete 1 : 5 : 10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) upto haunches of S.W. Pipes including bed concrete as per standard design.		
	200 mm diameter	metre	550
19	Providing and fixing square mouth S.W. Gully trap grade 'A' complete with C.I. grating brick masonry chamber with F.P.S bricks and water tight CI cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design		
	150 x 100 mm. size P type		
	With common burnt clay F.P.S. (non-modular) bricks of class	each	100

20	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc complete :		
	250 mm diameter R.C.C pipes	metre	550
21	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :		
	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) :		
	With common burnt clay F.P.S. (non-modular) bricks of class designation 7.5	each	75
	Extra for depth for manholes		
	Size 90x80 cm		
	With common burnt clay F.P.S. (non-modular) bricks of class designation 7.5	each	75
22	Boring/drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS: 2800 (part-I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipment, tools, plants & machineries required for the job, all complete as per direction of Engineer - in-charge, upto 90 metre depth below ground level.		
	All type of soil		
	300 mm dia	metre	180
23	Boring / drilling bore well of required dia for casing / strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipment, tools, plants & machineries required for the job, all complete as per direction of Engineer - in-charge, beyond 90 metre & upto 150 metre depth below ground level.		
	All type of soil		
	300 mm dia	metre	180
24	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed/ plain ended casing pipes of required dia, conforming to IS: 4270, of reputed & approved make, including painted with outside surface with two coats of anti-corrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer- in-charge.		

	200 mm nominal size dia having minimum wall thickness 5.40 mm	metre	50
25	Gravel packing in tube-well construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer- in -charge.	metre	50
26	Development of tube well in accordance with IS:2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tube-well, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in- Charge.	Hour	36
27	Providing and fixing suitable size threaded mild steel cap or spot as per requirement, all complete for borewell of		
	200 mm nominal size dia	each	2
28	Providing and fixing M.S. clamp of required dia to the top of casing / housing pipe of tube-well as per IS: 2800 (part I), including necessary bolts & nuts of required size complete		
	200 mm nominal size dia	each	2
29	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :		
	1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 20mm nominal size) mix for sanitary sealing of well at top (approx. 5m from top).	cum	1
30	Making khurra 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20mm nominal size) over PVC sheet 1m x 1m x 400 micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete :	Each	90
31	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.		
	110 mm diameter	Metre	744
32	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10mm gap for thermal expansion.		
	Coupler		
	110mm	Each	40
	Single T with door		
	110x110x110 mm	Each	40
	Bend 87.5°		
	110 mm bend	Each	40

33	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.		
	110mm	Each	500
34	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	Each	90

Notes:

- 1. Prices shall be quoted by the bidder in Indian rupees**
- 2. Where there is a discrepancy between the rate in figures and words, the rates in words will govern.**
- 3. All dismantling work shall be done after prior approval from authority or Engineer in Charge (Evaluation of Dismantling Work may be done by Engineer in Charge)**
- 4. The cost of miscellaneous works related to project such as electrical connection, permission, forest clearance & translocation of trees, NOC from all concerned dept., etc. included in the estimated cost and no extra payment shall be made to the selected bidders.**
- 5. Drain & Boundary wall length shall be illustrative and for reference purpose only.**

SECTION 10

SECURITIES AND OTHER FORMS

BID SECURITY (BANK GUARANTEE UNCONDITIONAL)

WHEREAS, _____ [name of Bidder] (hereinafter called "the Bidder") has submitted his Bid dated _____ [date] for the[name of Contract hereinafter called "the Bid"].

KNOW ALL PEOPLE by these presents that we _____ [name of Bank] of _____ [Name of country] having our registered office at _____ (hereinafter called "the Bank") are bound unto _____ [Name of Employer's Representative] (Hereinafter called "the Employer's Representative") in the sum of _____ *for which payment well and truly to be made to the said Employer's Representative the Bank itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20__ .

The Conditions of this obligation are:

- 1.0 If after Bid opening the Bidder withdraws his bid during the period of Bid validity Specified in the Form of Bid; or
- 2.0 If the Bidder having been notified to the acceptance of his bid by the Employer during the period of Bid Validity;
 - a) Fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
 - b) Fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders; or
 - c) Does not accept the correction of the Bid Price pursuant to Clause 27.

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, (specifying the occurred condition or conditions).

This Guarantee will remain in force up to and including the date _____ **days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE _____

SIGNATURE _____

WITNESS

SEAL _____

- 1.
- 2.

[Signature, name and address]

- * The Bidder should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 16 of the Instructions to Bidders.
- ** 45 days after the end of the validity period of the Bid. Date should be inserted by the Employer before the Bidding documents are issued.

PERFORMANCE BANK GUARANTEE

To

_____ [Name of Employer]
_____ [Address of Employer]

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

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

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

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

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

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

This guarantee shall be valid until 30 days from the date of expiry of the Operation & Maintenance Period.

Signature and Seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

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

UNCONDITIONAL BANK GUARANTEE FOR ADVANCE PAYMENT

To

_____ [Name of Employer]
_____ [Address of Employer]
_____ [Name of Contractor]

Sir,

In accordance with the provisions of the General Conditions of Contract, sub-clause 17.2 ("Advance Payment") of the above-mentioned Contract, _____ [name and address of Contractor] (herein after 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 as primary obligator and not as Surety merely, the payment to _____ [name of Employer] on his first demand without whatsoever right of obligation on our part and without his first claim to the Contractor, in the amount not exceeding _____ [amount of guarantee]* _____ [in words]

We further agree that no change or addition to or other modification of the terms of the Contractor or Works to be performed there under or of any of the Contract documents which may be made between _____ [name of Employer] and the Contractor, shall in anyway 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.

LETTER OF ACCEPTANCE
(Letter head paper of the Employer)

Letter No.

Dated

From,

To,

Subject: Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis.– Letter of Acceptance (“LOA”) – Reg.

Reference: 1.NIT No.-;

2. -----

3. -----

4.-----

Sir,

This is to notify that your Bid (Bid or tender Reference -) submitted on _____ (Date) through e-procurement (<https://www.eproc2.bihar.gov.in>) against NIT No.-for Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis at your quoted bid price amounting to Rs.-/-(Rs.) only has been determined to be lowest evaluated bid and has been accepted by the Authority. The conditions of this “LOA” are mentioned below:

1. You are requested to return a duplicate copy of this “LOA” with seal and signature of authorized signatory as an acknowledgement within 7 (seven) days.
2. You are also requested to furnish Performance Security including an additional security for unbalanced bid of Rs.-/-(Rs.) only within 21 (twenty-one) days of receipt of this “LOA”.
3. In case of failure of submission of Performance Security within time as mentioned above, the award shall be deemed to be cancelled and Bid Security shall be encashed by the Authority.

Thanking you.

Your’s Sincerely,

Authorized Signature
Name and title of Signatory
(Employer Representative)

ISSUE OF NOTICE TO PROCEED WITH THE WORK

(Letter head of the Employer)

Letter No.

Date

To

_____ (Name and address of the Contractor)

Dear Sirs,

Pursuant to your furnishing the requisite security as stipulated in ITB Clause 32.1 and signing of the Contract for the construction of _____

_____ at Bid Price of Rs. _____

You are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

(Signature, name and title of
Employer's Representative)

Agreement Form

Agreement

This agreement, made the _____ day of _____ between _____ (name and address of Employer) [hereinafter called "the (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 WITNESSETH as follows :

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.

2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works 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) Notice to proceed with the works;
- (iii) Contractor's Bid
- (iv) Condition of Contract : General and Special
- (v) Contract Data
- (vi) Additional condition
- (vii) Drawings
- (viii) Price Bid
- (ix) Any other documents listed in the Contract Data as forming part of the Contract.

In witnessed whereof 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 _____

AGREEMENT FORM

(On Stamp Paper)

AGREEMENT NUMBER: (To be filled by Authority)

Name of Work: Request for Proposal for Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis.

This agreement, entered into on this the day of

BETWEEN

Bhagalpur Smart City Limited, CIN- U93090BR2016SGC033046, having its registered office at Municipal Corporation, Court Compound, Bhagalpur, Bihar-812001 through Authorised Signatory (hereinafter referred to as the “**Authority**” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of **One Part;**

AND

M/s..... having its registered office atthrough its authorized signatory(hereinafter referred to as the “**Contractor**” which expression shall, unless repugnant to the context or meaning thereof) of the **Other Part,**

Each of “Authority” and “Contractor” may be referred to individually as a “Party”, and together they may be referred to as the “Parties”.

Whereas the “Authority” entrusted Request for Proposal for **Rejuvenation of Bhairva Talab in Bhagalpur, Bihar, including 5 years operation & maintenance with Defect Liability Period of 2 (two) years under Smart City Mission (SCM) on Engineering, Procurement and Construction (EPC) Basis (“Project”)** to “Contractor” in accordance with the terms and conditions set forth in this agreement.

The “Authority” accordingly invited Request for Proposals (“RFP”) vide E-Tender NIT No. dated from the eligible bidders as per terms and conditions prescribed in the “RFP” for undertaking the “Project”.

The “Authority” issued Letter of Acceptance vide Letter No. dated and to M/s for the “Project” at the Contract Price of Rs..... /- (Rs.) only inclusive of all taxes and GST.

NOW, THEREFORE, in consideration of the foregoing and the respective covenants set forth in this Agreement, the sufficiency and adequacy of which is hereby acknowledged, the “Authority” hereby covenants to pay the “Contractor” in consideration of the obligations specified herein, the Contract Price or such other sum as may become payable under the provisions of the Agreement at the times and in the manner specified in the Agreement and intending to be legally bound hereby, the Parties agree and accept that the following documents are part of this agreement:

- a) Performance Security in terms of
- b) Letter of Acceptance (LOA) with letter No.dated

- c) Bid document of M/s submitted on website <http://www.eproc2.bihar.gov.in>
- d) NIT No:dated;
- e) RFP and Drawings and Bill of Quantities
- f) Any other reference documents mentioned in the RFP.

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

For and on behalf of
M/s

For and on behalf of
Bhagalpur Smart City Limited

[Authorized Signatory]

[Authorized Signatory]

Seal of M/s
Witness:

1.

2.

Seal of Bhagalpur Smart City Limited.
Witness:

1.

2.

UNDERTAKING

I, the undersigned do hereby undertake that our firm M/s _____ agree to abide by this bid for a period _____ days for the date fixed for receiving the same and it shall be binding on us and may be accepted at any time before the expiration of that period.

(Signed by an Authorized Officer of the Firm)

Title of Officer

Name of Firm

DATE

INDENTURE FOR SECURED ADVANCES

FORM 31

(for use in case in which the contract is for finished work and the contractor has entered into an agreement for the execution of a certain specified quantity of work in a given time)

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 advance 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 rates fixed for the finished work (inclusive of the cost of materials and labour and other charges)

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

Now THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in consideration of the sum of 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 :

- (1) That the said sum of Rupees _____ so advanced by the Employer to the Contractor as aforesaid and all or any further sum of sums advanced as aforesaid shall be employed by the Contractor in or towards expending the execution of the said works and for no other purpose whatsoever.
- (2) That the materials details in the said Account of Secured Advances which have been offered to and accepted by the Employer as security are absolutely the Contractor's own propriety and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnified the Employer against all claims to any materials in respect of which an advance has be made to him as aforesaid.
- (3) That the materials detailed in the said account of Secured Advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereafter called the said materials) shall be used by the Contractor solely in the Execution of the said works in accordance with the directions of the Engineer.
- (4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the

Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Engineer or any officer authorized by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same required by the Engineer.

- (5) That the said materials shall not be any account 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 made recovery from the Contractor's bill for such payment by deducting there from the value of the said materials that actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
- (7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing of the Employer shall immediately on the happening of such default be repayable by the Contractor to be the Employer together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the Employer to reply and pay the same respectively to him accordingly.
- (8) That the Contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rupees _____ and any further sum of sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the power contained therein if and whenever the covenant for payment and repayment here in before contained shall become enforceable and the money owing shall not be paid in accordance there with the Employer may at by time thereafter adopt all or any of the following courses as he may deem best :
 - (a) Seize and utilise the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions 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 has carried it out in accordance with the said agreement and at the rests 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 there of and out of the moneys arising from the sale retain all the sums aforesaid repayable or payable to the Employer under these presents and pay over the surplus (if any) to the Contractor.
 - (c) Deduct all or any part of the 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 present and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been here-in-before expressly provided for the same shall be referred to the Employer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

Format for Power of Attorney for signing of BID

Know all men by these presents, We..... (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr./Ms.(name), son/daughter/wife of..... and presently residing at, who is presently employed with us/ the Lead Member of our Joint Venture and holding the position of....., as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our BID for the Project proposed or being developed by the Bhagalpur Smart City Limited (the "Authority") including but not limited to signing and submission of all applications, BIDs and other documents and writings, participate in Pre-BID and other conferences and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the agreement and undertakings consequent to acceptance of our BID, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our BID for the said Project and/ or upon award thereof to us and/or until the entering into the Contract with the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE,....., THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF 2....

For
(Signature, name, designation and address) of
person authorized by Board Resolution
(in case of Firm/ Company)/ partner in case of partnership firm

Witnesses:

- 1.
- 2.

Accepted

.....

.....

(Signature)

(Name, Title and Address of the Attorney)

(Notarised)

Person identified by me/ personally appeared before me/

Attested/Authenticated*(*Notary to
specify as applicable) (Signature
Name and Address of the Notary)

Seal of the
Notary Registration No.
of the Notary
Date.....

Notes:

- *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
- *Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*
- *For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Apostille certificate.*

Format for Power of Attorney for Lead Member of Joint Venture

Whereas the Bhagalpur Smart City Limited (“the Authority”) has invited BIDs for the Project (the “Project”).

Whereas,.....and.....(collectively the “Joint Venture”) being Members of the Joint Venture are interested in bidding for the Project in accordance with the terms and conditions of the Request for Proposal (RFP) and other BID documents including agreement in respect of the Project, and

Whereas, it is necessary for the Members of the Joint Venture to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Joint Venture, all acts, deeds and things as may be necessary in connection with the Joint Venture’s BID for the Project and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We, having our registered office at, M/s. having our registered office at ...,

M/s. ... having our registered office at, and having our registered office at

, (hereinafter collectively referred to as the “Principals”) do hereby irrevocably designate,

nominate, constitute, appoint and authorize M/S having its registered office at

,being one of the Members of the Joint Venture, as the Lead Member and true and lawful attorney of the Joint Venture (hereinafter referred to as the “Attorney”).

We hereby irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Joint Venture and any one of us during the bidding process and, in the event the Joint Venture is awarded the contract, during the execution of the Project and in this regard, to do on our behalf and on behalf of the Joint Venture, all or any of such acts, deeds or things as are necessary or required or incidental to the pre-qualification of the Joint Venture and submission of its BID for the Project, including but not limited to signing and submission of all applications, BIDs and other documents and writings, participate in pre BID and other conferences, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of the BID of the Joint Venture and generally to represent the Joint Venture in all its dealings with the Authority, and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Joint Venture’s BID for the in all respect Project and/ or upon award thereof till the Contract is entered into with the Authority & Compelled.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/ Joint Venture.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS
POWER OF ATTORNEY ON THIS DAY OF..... 2.....

For (Signature) (Name & Title)	For (Signature) (Name & Title)	For (Signature) (Name & Title)
---	---	---

(Executants)(To be executed by all the Members of the Joint Venture)

Witnesses:

- 1.
- 2.

Notes:

- *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
- *Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*
- *For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Apostille certificate.*

Format for Joint Bidding Agreement for Joint Venture

(To be executed on Stamp paper of appropriate value)

THIS JOINT BIDDING AGREEMENT is entered into on this the day of 20.....

AMONGST

1. {..... Limited, and having its registered office at} (hereinafter referred to as the “**First Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns).

AND

2. {..... Limited, having its registered office at} and (hereinafter referred to as the “**Second Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

3. {..... Limited, and having its registered office at} (hereinafter referred to as the “**Third Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above-mentioned parties of the FIRST, {SECOND and THIRD} PART are collectively referred to as the “**Parties**” and each is individually referred to as a “**Party**”

WHEREAS,

- (A) Bhagalpur Smart City Limited (hereinafter referred to as the “**Authority**” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited bids (the “**Bids**”) by its Request for Proposal No. dated (the “**RFP**”) for award of contract for (Name of Project) of.....Project (the “**Project**”) through an EPC Contract.
- (B) The Parties are interested in jointly bidding for the Project as members of a Joint Venture and in accordance with the terms and conditions of the RFP document and other bid documents in respect of the Project, and
- (C) It is a necessary condition under the RFP document that the members of the Joint Venture shall enter into a Joint Bidding Agreement and furnish a copy thereof with the Application.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalized terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the RFP.

2. Joint Venture

2.1 The Parties do hereby irrevocably constitute a Joint Venture (the “Joint Venture”) for the purposes of jointly participating in the Bidding Process for the Project.

2.2 The Parties hereby undertake to participate in the Bidding Process only through this Joint Venture and not individually and/ or through any other Joint Venture constituted for this Project, either directly or indirectly.

3. Covenants

The Parties hereby undertake that in the event the Joint Venture is declared the selected Bidder and awarded the Project, it shall enter into an EPC Contract with the Authority for performing all its obligations as the Contractor in terms of the EPC Contract for the Project.

4. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

- (a) Party of the First Part shall be the Lead member of the Joint Venture and shall have the power of attorney from all Parties for conducting all business for and on behalf of the Joint Venture during the Bidding Process and for performing all its obligations as the Contractor in terms of the EPC Contract for the Project;
- (b) Party of the Second Part shall be {the Member of the Joint Venture; and}
- (c) Party of the Third Part shall be {the Member of the Joint Venture.}

5. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the RFP and the EPC Contract, till such time as the completion of the Project is achieved under and in accordance with the EPC Contract.

6. Share of work in the Project

The Parties agree that the proportion of construction in the EPC Contract to be allocated among the members shall be as follows

First Party:
Second Party:
{Third Party:}

Further, the Lead Member shall itself undertake and perform at least 50 (fifty) per cent of the total work if the Contract is allocated to the Joint Venture.

7. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- (a) Such Party is duly organized, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement;
- (b) The execution, delivery and performance by such Party of this Agreement has been authorized by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Joint Venture Member is annexed to this Agreement, and will not, to the best of its knowledge:
 - (i) Require any consent or approval not already obtained;
 - (ii) Violate any Applicable Law presently in effect and having applicability to it;
 - (iii) Violate the memorandum and articles of association, by-laws or other applicable organizational documents thereof;
 - (iv) Violate any clearance, permit, concession, grant, license or other governmental authorization, approval, judgment, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
 - (v) Create or impose any liens, mortgages, pledges, claims, security interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have

a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;

- (c) This Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- (d) There is no litigation pending or, to the best of such Party's knowledge threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfillment of its obligations under this Agreement.

8. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until Project completion (the "Operation & Maintenance Period") is achieved under and in accordance with the EPC Contract, in case the Project is awarded to the Joint Venture. However, in case the Joint Venture is either not pre-qualified for the Project or does not get selected for award of the Project, the Agreement will stand terminated in case the Applicant is not pre-qualified or upon return of the Bid Security by the Authority to the Bidder, as the case may be.

9. Miscellaneous

- a. This Joint Bidding Agreement shall be governed by laws of {India}.

8.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of the Authority.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.SIGNED, SEALED AND DELIVERED

For and on behalf of

LEAD MEMBER by:

SECOND PART

THIRD PART

(Signature)

(Signature)

(Signature)

(Name)

(Name)

(Name)

(Designation)

(Designation)

(Designation)

(Address)

(Address)

(Address)

In the presence of:

1.

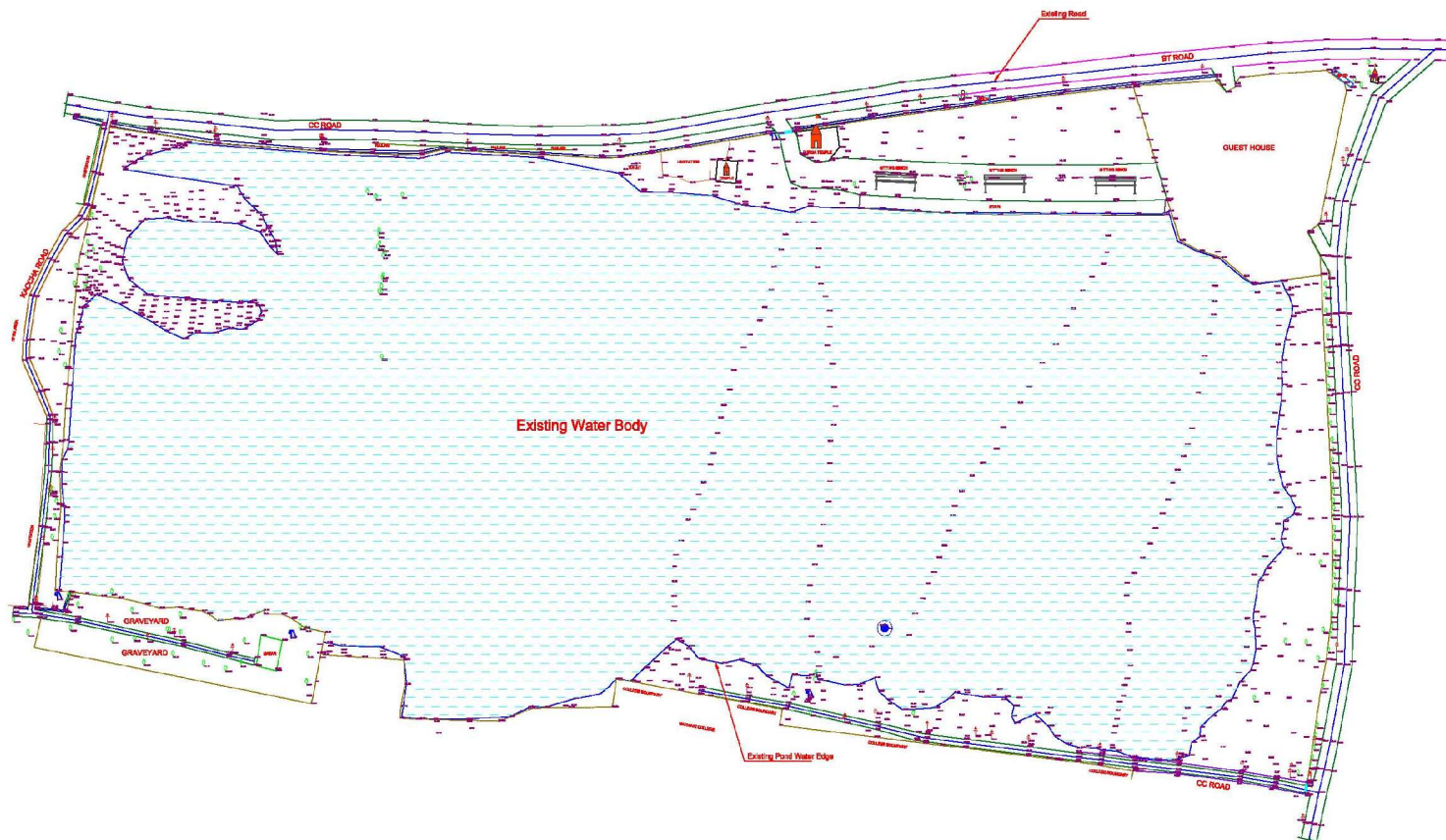
Notes:

1. The mode of the execution of the Joint Bidding Agreement should be in accordance with the procedure, if any, laid down by the Applicable Law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
2. Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Joint Venture Member.
3. For a Joint Bidding Agreement executed and issued overseas, the document shall be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney has been executed.

VOLUME-IV

SECTION-11

CONCEPTUAL DRAWINGS



NOTES

1. Read this drawing along with architectural & structural drawings.
2. Do not scale. Follow written dimensions only. All dimensions are in mm unless otherwise noted.
3. All dimensions & levels shall be checked & co-related with relevant architectural & structural drawing. In case of any ambiguity the matter shall be brought to the notice of the consultant before starting the work.
4. Grade of concrete shall be M-20 & shall be conforming to IS: 456 - 2000.
5. Reinforcement steel shall be high strength Deformed TMT bars as per IS: 1786 - 1983 and having a minimum yield strength of 550 N/mm² and tensile elongation more than 14.2%.
6. Clear cover to main reinforcement shall be 50 mm for footing, 40 mm for column, 25 mm for beam and 20 mm for slab. Side cover of footing shall be 75 mm.
7. Not more than 50% of bars shall be lapped at any section.
8. Lap length shall be equal to $L_d = 57$ times smaller dia of bars and shall be avoided in following cases - Top bars - near support, Bottom bars - near mid span.
9. Whenever necessary chairs shall be provided to support the lap reinforcement in position.
10. All concrete shall be machine mixed and machine vibrated.
11. Sufficient concrete cube test and steel yield strength tests to be performed for different batches & report shall be submitted to proper authority.
12. Bearing Capacity of the soil is - "Test" shall be as below Ground level as per soil test report.
13. Foundation has been designed for (2 + 0) structures only.
14. L_d means 57 times of dia of bars.
15. Structure is designed for earthquake zone II.
16. For any ambiguity/discrepancy, detailed provision (if any not necessary) site must be brought to the notice of consultant/design office for clarification and work must be carried out after obtaining approval from competent authority.

Schedule of Area

PLOT AREA	= 55,630.10 sqm
= 23.66 Acres	
Water Body Area	= 80,171.51 sqm
= 19.81 Acres	
Proposed Water Body Area	= 83,175.73 sqm
= 19.81 Acres	
Land Area	= 32,654.37 sqm
= 8.07 Acres	

Sheet Title - Site Survey Drawings

Proposed Beautification of Bhairava Pond, Bhagalpur

Drawing No - 01. Site Survey

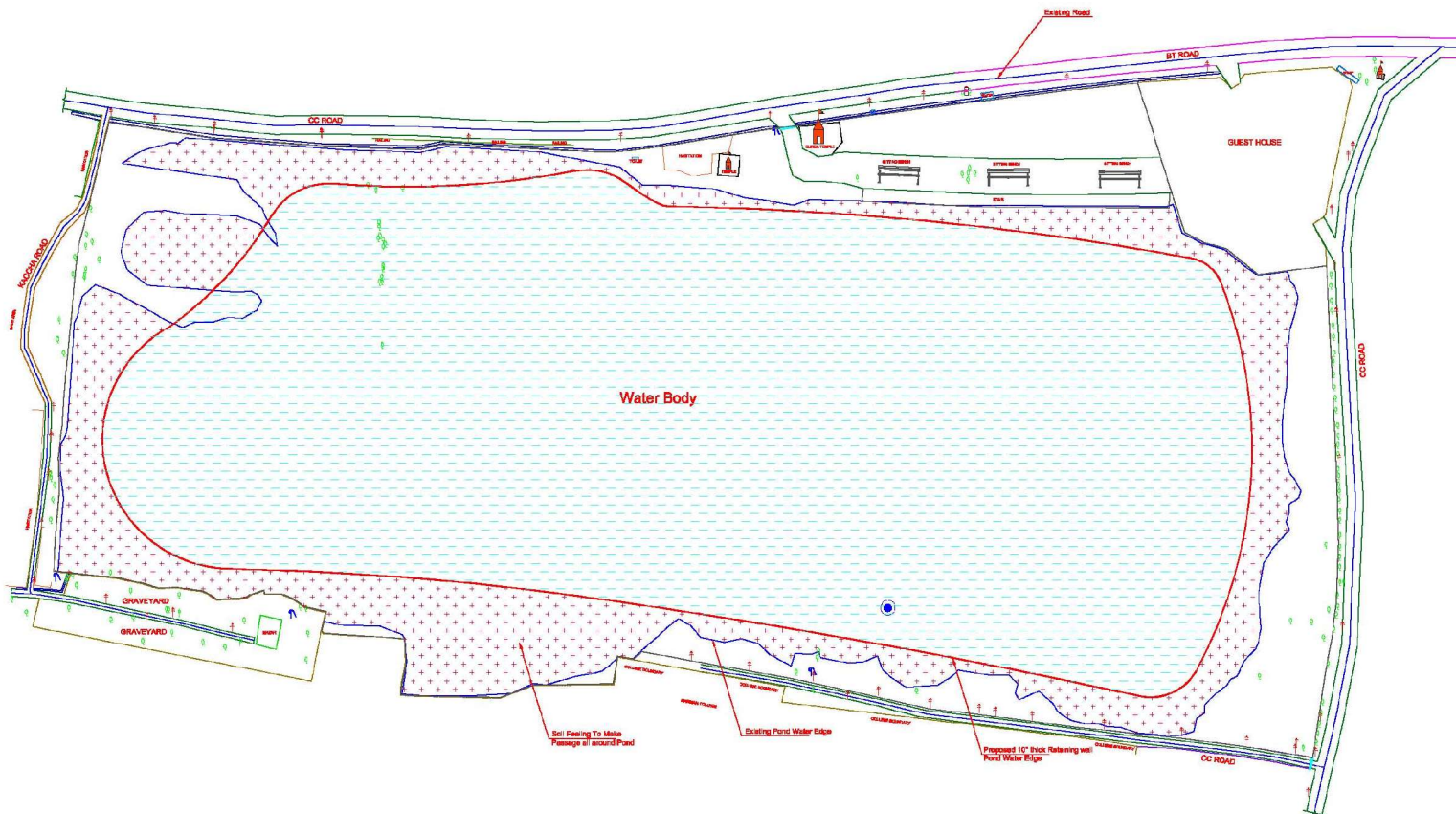
Sheet no - 01

Project - Bhairava Pond

Client - BSCL Pvt. Ltd.

Consultant - MARS Planning and Engineering Services PVT. Ltd.

Date :	North	Drawn By -
08-04-2021	N	Gautam
Scale :		Checked By -
NTS		Gautam K. Modi



- NOTES**
1. Read this drawing along with architectural & structural drawings.
 2. Do not scale, follow written dimensions only.
All dimensions are in mm unless otherwise noted.
 3. All dimensions & levels shall be checked & co-ordinated with relevant architectural & structural drawing & in case of any ambiguity the matter shall be brought to the notice of the consultant before starting the work.
 4. Grade of concrete shall be M-25 & shall be conforming to IS 456 - 2000.
 5. Reinforcement shall be High Strength Deformed 'TMT' bars as per IS 1786 - 1985 and having a minimum yield strength of 450 N/mm² and having elongation more than 14.5%.
 6. Clear cover to main reinforcement shall be 50 mm for footing, 40 mm for column, 25 mm for beam and 30 mm for slab. Side cover of footing shall be 75 mm.
 7. Not more than 50% of bars shall be lapped at any section.
 8. Lap length shall be equal to $L_d = \phi/7$ times smaller.
Dia of bars and shall be provided in following cases -
Top bars - near support, Bottom bars - near mid span.
 9. Whenever necessary chairs shall be provided to support the top reinforcement in position.
 10. All concrete shall be machine mixed and machine placed.
 11. Sufficient concrete cube test and steel yield strength test to be performed for different batches & report shall be submitted to proper authority.
 12. Bearing Capacity of the soil is $\approx 7 \text{ T/m}^2$ at $\approx 1 \text{ m}$ below ground level as per soil test report.
 13. Foundation has been designed for (IS 456) structure only.
 14. L_d means 57 times of dia of bars.
 15. Structure is designed for earthquake zone II.
 16. For any ambiguity, discrepancy, deficient provision (if any) not necessary etc must be brought to the notice of consultant/owner for clarification and work must be carried out after obtaining approval from competent authority.

Schedule of Area	
PLOT AREA	= 85,630.10 sqm = 23.68 Acres
Water Body Area	= 60,171.31 sqm = 19.61 Acres
Proposed Water Body Area	= 63,175.73 sqm = 15.51 Acres
Land Area	= 32,654.37 sqm = 8.07 Acres

Sheet Title -
Architectural Drawings
Proposed Beautification of Bhairava Pond,
Bhagalpur

Drawing No- 02. Pond refined edge

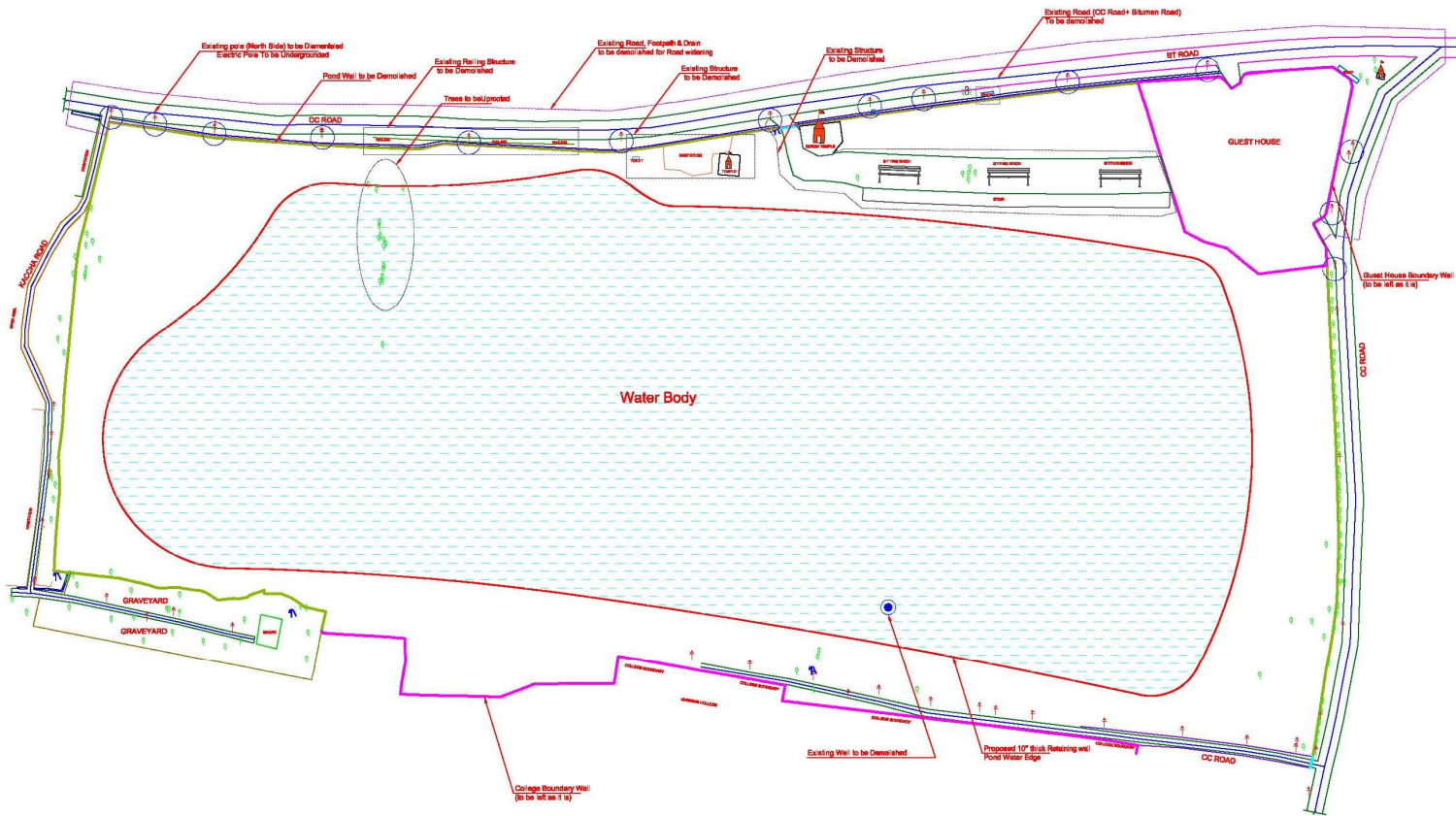
Sheet no 02

Project - Bhairava Pond

Client - BSCL Pvt. Ltd.

Consultant -
MaRS Planning and Engineering Services
PVT. Ltd.

Date :	North	Drawn By -
06-04-2021	N	Gautam
Scale :		Checked By -
NTS		Gautam K. Modi



- NOTES**
1. Read this drawing along with architectural & structural drawings.
 2. Do not scale, follow written dimensions only. All dimensions are in mm unless otherwise noted.
 3. All dimensions & levels shall be checked & co-related with relevant architectural & structural drawing & in case of any ambiguity the matter shall be brought to the notice of the consultant before starting the work.
 4. Grade of concrete shall be M-40 & shall be conforming to IS-456 - 2000.
 5. Reinforcement shall be High Strength Deformed TMT bars as per IS-1786 - 1985 and having a minimum yield strength of 460 N/mm² and bending elongation more than 14.5%.
 6. Clear cover to main reinforcement shall be 50 mm for footing, 40 mm for column, 25 mm for beam and 20 mm for slab. 50% cover of footing shall be 75 mm.
 7. Not more than 50% of bars shall be lapped at any section.
 8. Lap length shall be equal to $L_d = 57$ times smaller dia of bars and shall be avoided in following cases - Top bars - near support, Bottom bars - near slab span.
 9. Whenever necessary chairs shall be provided to support the top reinforcement in position.
 10. All concrete shall be machine mixed and machine vibrated.
 11. Sufficient concrete cube test and steel yield strength test to be performed for different batches & report shall be submitted to proper authority.
 12. Bearing Capacity of the soil is -7.2 t/m^2 as below Ground level as per soil test report.
 13. Foundation has been designed for (G+0), structure only.
 14. L_d means 67 times of dia of bars.
 15. Structure is designed for earthquake zone II.
 16. For any ambiguity/discrepancy, deficient provision (if any felt necessary) etc must be brought to the notice of consultant/leading officer for clarification and work must be carried out after obtaining approval from competent authority.

Schedule of Area	
PLOT AREA	= 85,630.10 sqm
Water Body Area	= 23.68 Acres
	= 80,171.31 sqm
	= 19.81 Acres
Proposed Water Body Area	= 63,175.73 sqm
	= 15.81 Acres
Land Area	= 32,654.37 sqm
	= 8.07 Acres

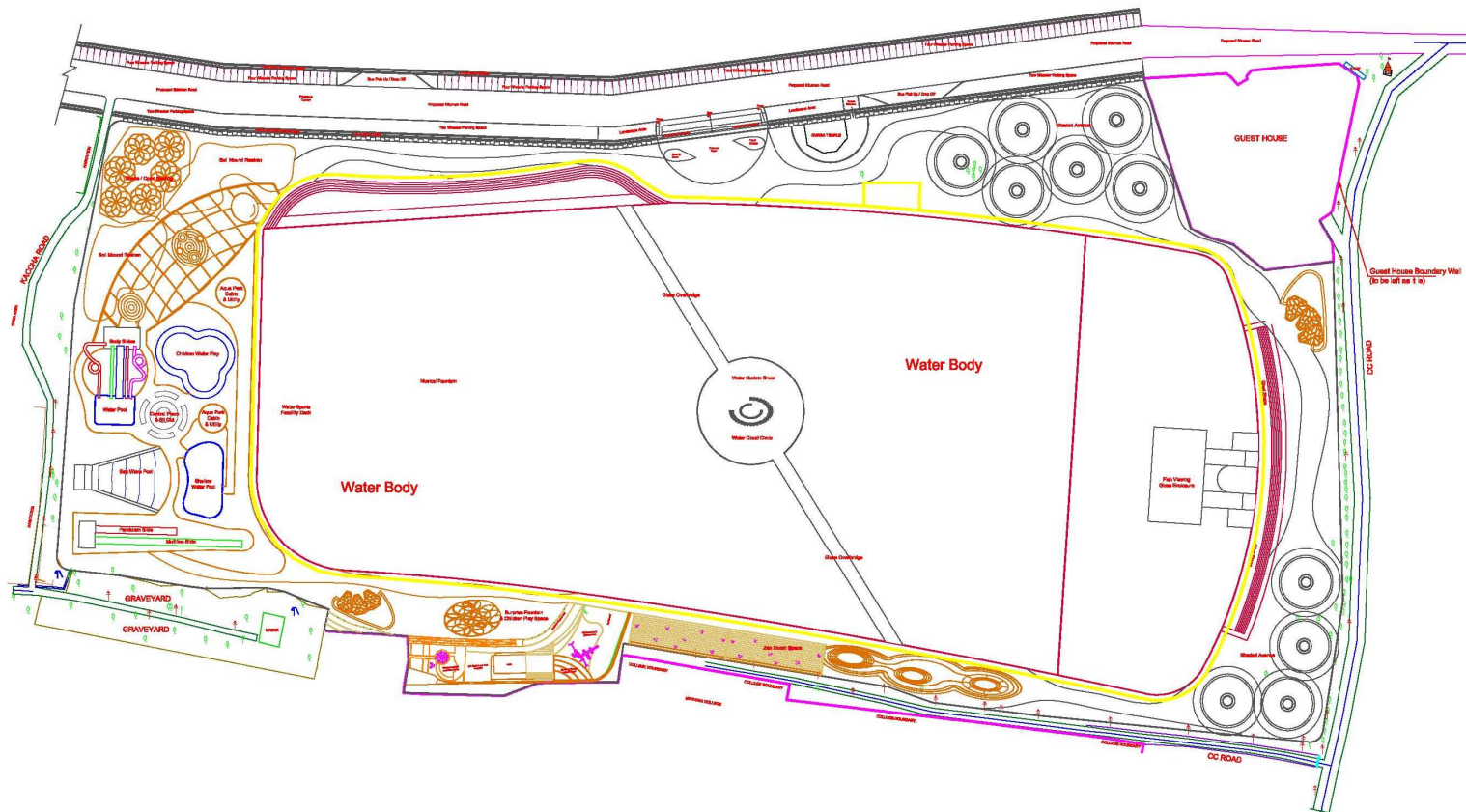
Sheet Title -
Architectural Drawings
 Proposed Beautification of Bhairava Pond, Bhagalpur

Drawing No- 03, Demolition Plan **Sheet no** 03

Project - Bhairava Pond
Client - BSCL Pvt. Ltd.

Consultant - MGRS Planning and Engineering Services PVT. Ltd.

Date :	North	Drawn By -
08-04-2021		Gautam
Scale :		Checked By -
NTS		Gautam K. Modi



NOTES

1. Read this drawing along with architectural & structural drawings.
2. Do not scale, follow written dimensions only.
3. All dimensions & levels shall be checked & co-related with relevant architectural & structural drawing & in case of any ambiguity the matter shall be brought to the notice of the consultant before starting the work.
4. Grade of concrete shall be M-20 & shall be conforming to IS-456 - 2000.
5. Reinforcement steel shall be High Strength Deformed TMT bars as per IS- 1786 - 1985 and having a minimum yield strength of 500 N/mm² and having elongation more than 14.5%.
6. Clear cover to main reinforcement shall be 50 mm for footing, 40 mm for column, 25 mm for Beam and 20 mm for slab. Side cover of footing shall be 75 mm.
7. Not more than 80% of bars shall be lapped at any section.
8. Lap length shall be equal to $L_d = 87$ times smaller dia of bars and shall be avoided in following cases - Top bars - near support, Bottom bars - near mid span.
9. Whenever necessary chairs shall be provided to support the top reinforcement in position.
10. All concrete shall be machine mixed and machine vibrated.
11. Sufficient concrete cube test and steel yield strength test is to be performed for different batches & report shall be submitted to proper authority.
12. Bearing Capacity of the soil is - 7T/ sq-m below Ground level as per soil test report.
13. Foundation has been designed for (G + 45) structures only.
14. L_d means 87 times of dia of bars.
15. Structure is designed for earthquake zone II.
16. For any ambiguity/discrepancy, deficient provision (if any) in the drawing etc must be brought to the notice of consultant/design office for clarification and work must be carried out after obtaining approval from competent authority.

Schedule of Area

PLOT AREA	= 95,830.10 sqm
Water Body Area	= 23.68 Acres
	= 80,171.31 sqm
	= 19.81 Acres
Proposed Water Body Area	= 63,175.73 sqm
Land Area	= 15.61 Acres
	= 32,654.37 sqm
	= 8.07 Acres

Sheet Title -
Architectural Drawings
 Proposed Beautification of Bhairava Pond,
 Bhagelpur

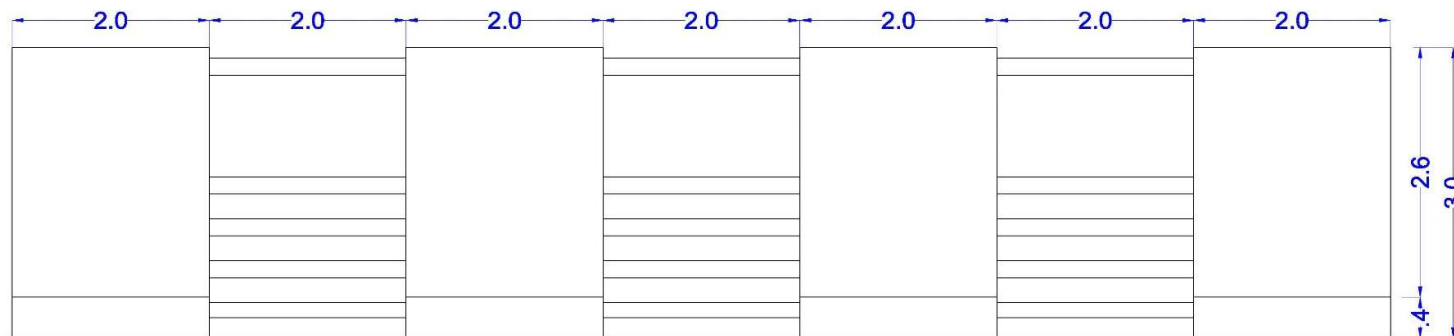
Drawing No- 04, Proposed Plan Sheet no- 04

Project - Bhairava Pond

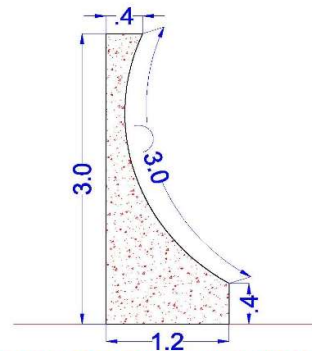
Client - BSCCL Pvt. Ltd.

Consultant -
 MaRS Planning and Engineering Services
 PVT. Ltd.

Date :	North	Drawn By -
28-08-2021		Gautam
Scale :		Checked By -
NTS		Gautam K. Modi



BOUNDARY WALL



SECTION OF BOUNDARY WALL

- NOTES
1. Read this drawing along with architectural & structural drawings.
 2. Do not scale, follow written dimensions only. All dimensions are in mm unless otherwise noted.
 3. All dimensions & levels shall be checked & co-ordinated with relevant architectural & structural drawing & in case of any ambiguity the matter shall be brought to the notice of the consultant before starting the work.
 4. Concrete shall be M-20 & shall be confirming to IS: 456 - 2000.
 5. Reinforcement steel shall be High Strength Deformed. TMT bars as per IS: 1785 - 1985 and having a minimum yield strength of 500 N/mm² and having elongation more than 14.5%.
 6. Clear cover to main reinforcement shall be 50 mm for footing, 40 mm for column, 25 mm for Beam and 20 mm for slab. Side cover of footing shall be 75 mm.
 7. Not more than 50% of bars shall be lapped at any section.
 8. Lap length shall be equal to $L_d = 57$ times smaller. Dia of bars and shall be avoided in following cases:
Top bars - near support, Bottom bars - near mid span.
 9. Wherever necessary chairs shall be provided to support the top reinforcement in position.
 10. All concrete shall be machine mixed and machine vibrated.
 11. Sufficient concrete cube test and steel yield strength test is to be performed for different batches & report shall be submitted to properly authority.
 12. Bearing Capacity of the soil is $1/10$ of safe bearing capacity.
 13. Ground level as per soil test report.
 14. Foundation has been designed for all structures only.
 15. Structure is designed for earthquake zone II.
 16. For any ambiguity, discrepancy, deficient provision (if any felt necessary) etc must be brought to the notice of consultant/design office for clarification and work must be carried out after obtaining approval from competent authority.

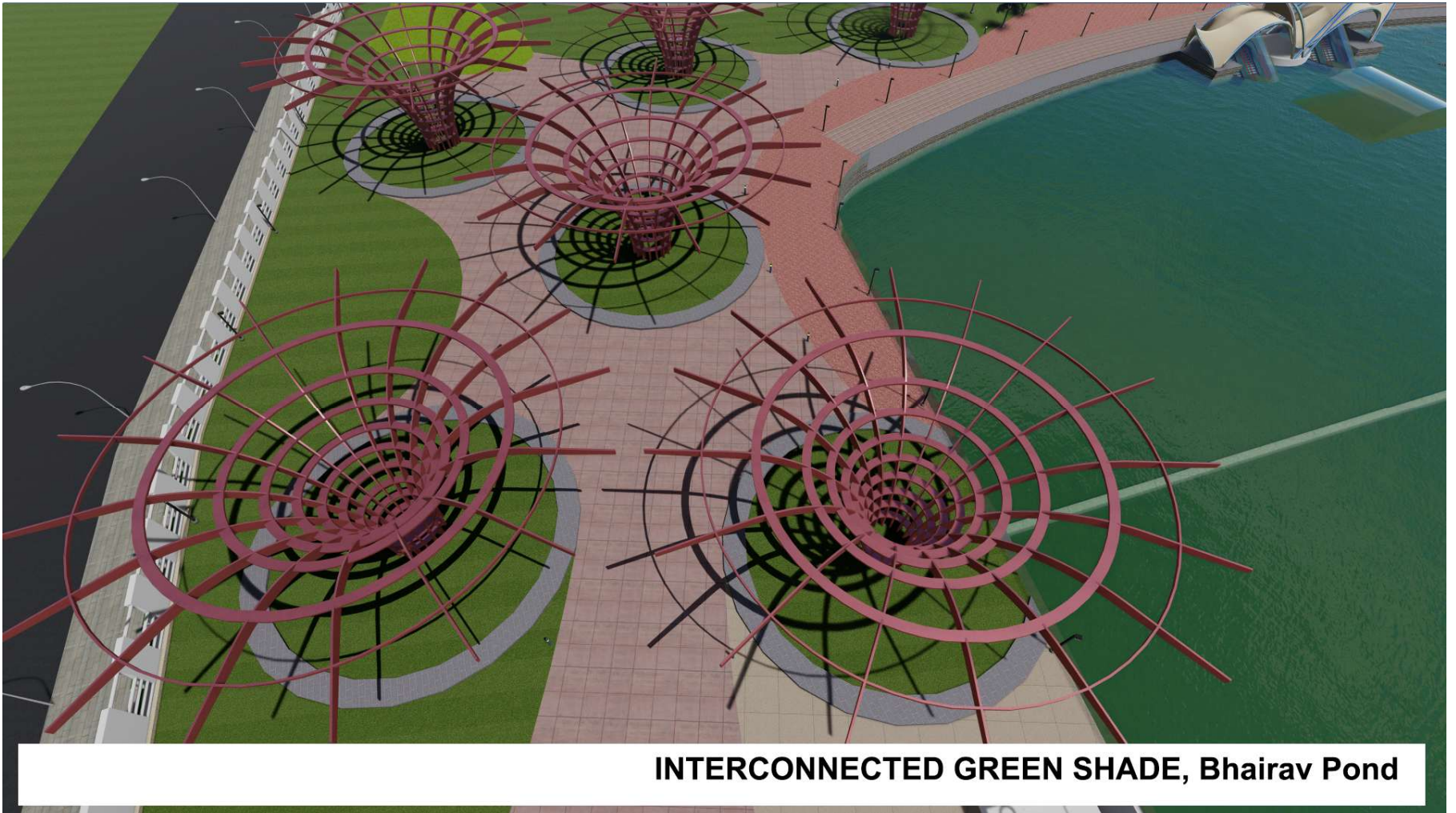
Sheet Title -		
Architectural Drawings		
Bhairava Pond at, Bhagalpur		
Drawing No- AR-01		Sheet no - 06
Project - Bhairava Pond		
Client - BSCL		
Consultant - MGRS Planning and Engineering Services PVT. Ltd.		
Date :		Drawn By -
12-03-2021		S.K.Paswan
Scale :		Checked By -
NTS		Gautam K. Modi



UNDER WATER AQUARIUM & GLASS PASSAGE



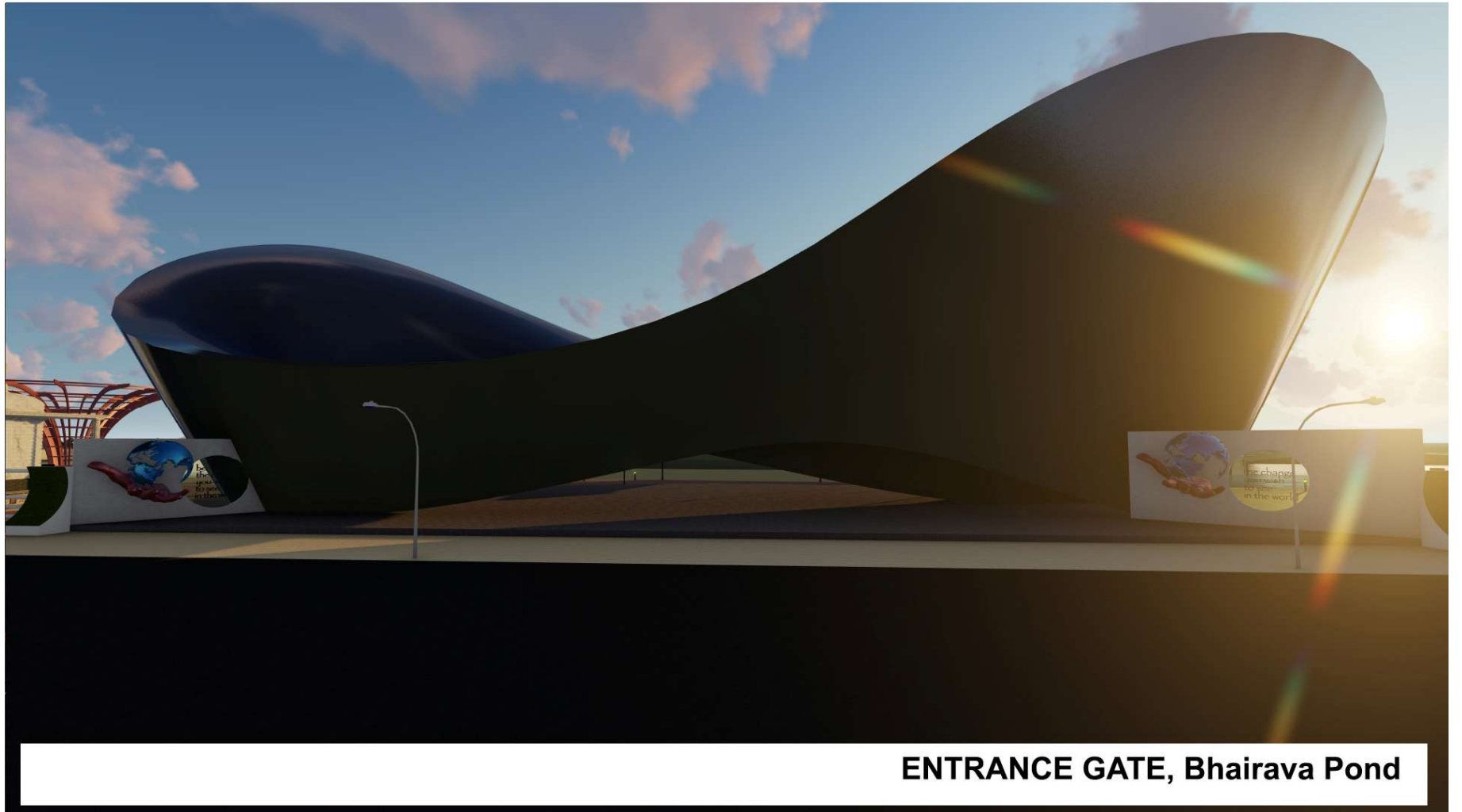
RESTAURANT & OPEN CAFETERIA, Bhairav Pond



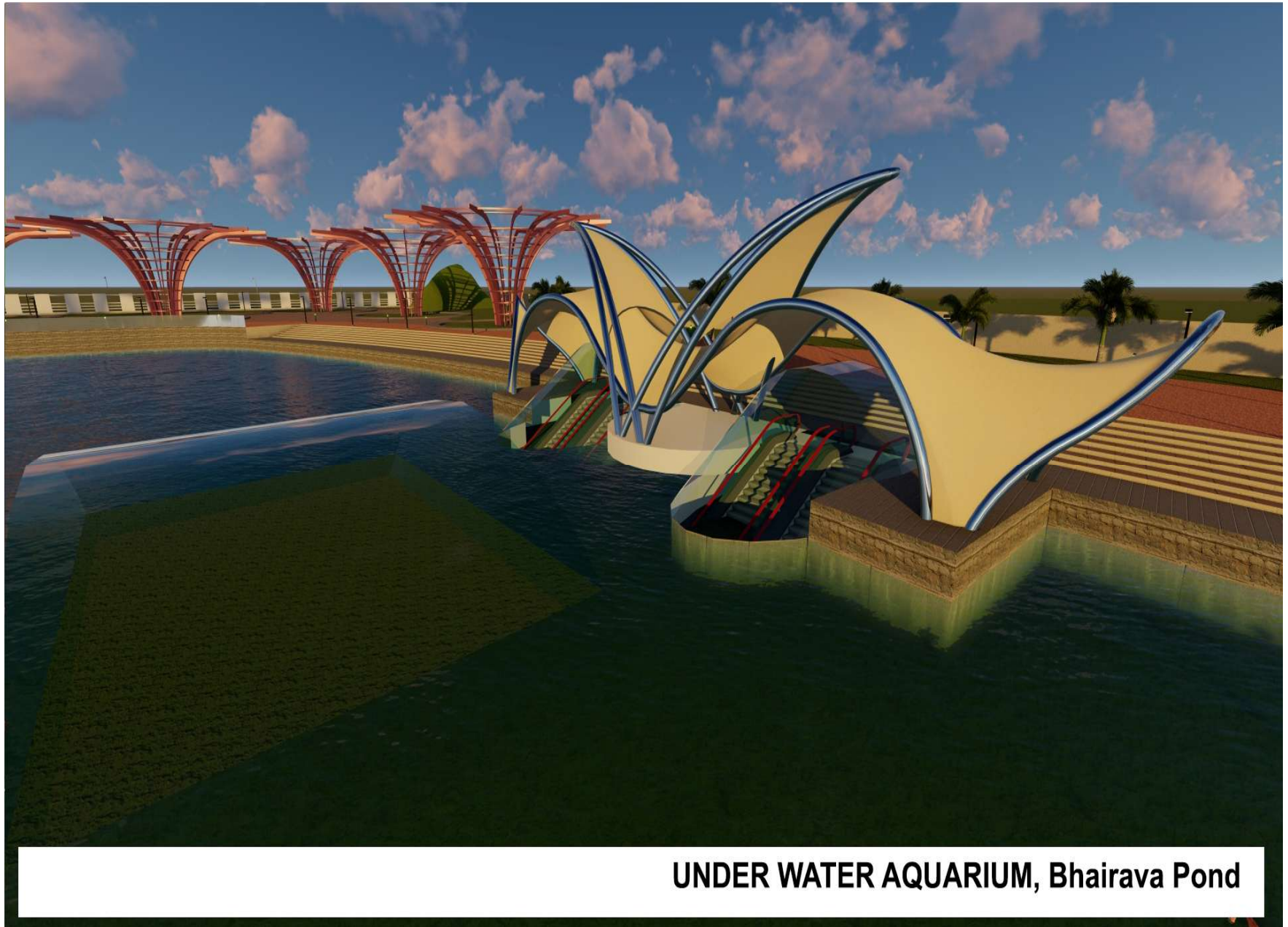
INTERCONNECTED GREEN SHADE, Bhairav Pond



GLASS BRIDGE & CENTRAL WATER CURTAIN FOUNTAIN, Bhairava Pond



ENTRANCE GATE, Bhairava Pond



UNDER WATER AQUARIUM, Bhairava Pond

VOLUME-V

SECTION-12

DOCUMENTS TO BE FURNISHED BY BIDDER

All required documents as mentioned in RFP.