

TENDER DOCUMENT

Particulars	Details	
Client	Nashik Municipal Smart City Development Corporation Limited	
Project Name	Godavari Riverfront Development including beautification and infrastructure components in ABD area under Nashik Smart City Mission, Nashik (Maharashtra)	
Cost of Blank Tender Form	[Rs. 3,000 /- (Rupees Three Thousand only) + Rs 90/- (Rupees Ninety only) + 9% SGST + 9% CGST]	
Estimated Cost	INR 55,04,99,644/- (Rupees Fifty Five Crores Four Lakhs Ninety Nine Thousand Six Hundred Forty Four Only) excluding GST	
Bid Security/Earnest Money Deposit	INR 27,53,000/- (Rupees Twenty Seven Lakhs Fifty Three Thousand Only)	
Performance Security	INR 1,10,10,000/- (Rupees One Crore Ten Lakhs Ten Thousand Only)	
Document Issue Date	05/03/2019	
Document Number	MAH-NAS-032-053-RFP-V02-01	

Nashik Municipal Smart City Development Corporation Limited

Panditrao Khaire Panchvati Divisional Office, 4th Floor, Makhamalabad Naka,Panchawati, Nashik - 422003 March 2019

 ${\bf Contractor}$

Nashik Municipal Smart City Development Corporation Limited

TENDER NOTICE

Online digitally signed Bids in '**B1**' Form (item rate) for the below mentioned work is invited by NMSCDCL from the Bidders. The Tender Document is available on the website https://mahatenders.gov.in

1	Project Name	Godavari riverfront development including beautification and
		infrastructure components in ABD area under Nashik Smart
		City Mission, Nashik (Maharashtra)
2	Estimated cost	INR 55,04,99,644/- (Rupees Fifty Five Crores Four Lakhs
		Ninety Nine Thousand Six Hundred Forty Four Only)
3	Cost of Blank Bid form/	Rs. 3,000/- (Rupees Three Thousand only) + Rs. 90/- (Rupees
	TD Fee (Non-Refundable)	Ninety only) + 9% CGST + 9% SGST per set (Tender
		Document can only be downloaded from
		https://mahatenders.gov.in using credit card/ debit card / net
		banking)
4	Period of Contract	Refer the table A below
5	NMSCDCL Contact Details	Nashik Municipal Smart City Development Corporation
		Limited
		4rth Floor, Panditrao Khaire Panchvati Divisional Office,
		Nashik Municipal Corporation,
		Makhamalabad Naka,
		Panchavati,
		Nashik
		Email: pmc@nashiksmartcity.in
6	Bid Validity Period	The Bid shall remain valid for a period of 180 (one hundred
		and eighty days) from the Bid due date
7	Bid Security/Earnest Money	INR 27,53,000/- (Rupees Twenty Seven Lakhs Fifty Three
/	Deposit Violey	Thousand Only) to be deposited online using credit card/
	Deposit	debit card/ net banking at https://mahatenders.gov.in
		deon card/ net banking at https://manatenders.gov.iii



Nashik Municipal Smart City Development Corporation Limited (NMSCDCL) E-Tender no 27 (2018-19)

Nashik Municipal Smart City Development Corporation Limited (NMSCDCL) invites bids to execute the following work.

Sr. No.	Name of work	Cost of blank tender from (in INR to be paid online only)	Earnest Money Deposit	Duration of Work	Tender Publishing Date	Tender form Availability Date	Pre-Bid meeting	Last date of tender form availability	Last date of online submission
1	RFP for Selection of Contractor for Godavari Riverfront Development including beautification and infrastructure components in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra)	Rs. 3000/- + Rs. 90/- + CGST (9%) + SGST (9%)	Rs. 27,53,000/-	12 months (including monsoon)	05/03/2019 03:00 PM	05/03/2019 03:00 PM	15/03/2019 03:00PM	29/03/2019 02:00 PM	29/03/2019 03:00 PM

^{*-} Online Payment mode via Net banking through mahatenders portal

Contractor

3 | Page

The blank tender forms would be available on www.mahatenders.gov.in. The bidder shall register themselves on Nashik Municipal Corporation (NMC) e-tendering website well in advance to the bid submission date.

The bidder shall submit its ENVELOPE- A (Tender Fee, EMD and Pre-Qualification details as per RFP), ENVELOPE- B (Financial Bid) in the prescribed format online as provided in detailed tender notice.

The Financial Bid (ENVELOPE- B) shall be opened subsequently of Bidders who have qualified under the Pre-Qualification bid.

Rights to reject any or all tenders without assigning any reasons thereof are reserved by Competent Authority of Nashik Municipal Smart City Development Corporation Limited(NMSCDCL) and whose decision will be final and legally binding on all the bidders.

Sd/-

Chief Executive Officer

Nashik Municipal Smart City Development Corporation Limited.

Table A

Packages	Name of work	Construction Period
Part A	Civil Work	1 (one) year including Monsoon
		period with Defect Liability Period
		of 5 (Five) years
Part B	Landscaping Work and O&M	1 (one) year including Monsoon
		period with O&M Period of 3
		(three) years. O&M Period can be
		further extended by 2 Years on
		mutual consent.
Part C	Electrical Work and O & M	1 (one) year including Monsoon
		period with O&M Period of 3
		(three) years with Defect liability
		period of 5 (Five) years. O&M
		Period can be further extended by 2
		Years on mutual consent.
Part D	Irrigation and Mechanical work and O&M	(one) year including Monsoon
		period with O&M Period of 3
		(three) years with Defect liability
		period of 5 (Five) years. O&M
		Period can be further extended by 2
		Years on mutual consent.

SCHEDULE OF BIDDING PROCESS

S. No.	Particulars	Date and Time
1.	Period of availability of the	From 05/03/2019, 15:00 hrs.
	Bidding Document on Web Site	To 29/03/2019, 15:00 hrs.
2.	Last date and address for	Date: 14/03/2019, Time: 15:00 hrs.
	submission of letters seeking	Email ID: pmc@nashiksmartcity.in
	clarifications or suggest	Address:
	amendments to RFP in writing	NMSCDCL Office, Panditrao Khaire
		Panchvati Divisional Office, 4 th floor
		Makhamalabad Naka, Panchavati,
		Nashik- 422003
3.	Time and date of Pre-Bid	Date: 15/03/2019, Time: 15:00 hrs.
	Conference	
4.	Last date and time for Online	Date: 29/03/2019, Time: 15:00 hrs.
	Receipt of Bids	
5.	Date and time for physical/ hard	Date: 29/03/2019, Time: 14:00 hrs.
	copy receipt of Bids	
6.	Time and date of opening of	Date: 30/03/2019, Time: 15:00 hrs.
	Envelope A (Bids will be opened	
	Online by the authorized officers)	
7.	Time and date of opening of	To be intimated separately to the
	Envelope B- Financial Bids (Bids	technically qualified bidders
	will be opened online by the	
	authorized officers)	
8.	Officer inviting Bids	The Chief Executive Officer,
		NMSCDCL Office,
		Loknete Panditrao Khaire Panchavati
		Divisional Office, 4 th Floor,
		Makhamalabad Naka,Panchavati
		Nashik-422003

Notes:

- The changes/ corrigendum, if any will only be published on https://mahatenders.gov.in.
- Right to reject any or all Bids without assigning any reasons thereof are reserved by NMSCDCL.
- The Bids shall be accepted through hard copy as well as soft copy in the prescribed format as provided in Clause 2.12 and Clause 2.13.
- All requisite information required for the submission of documents is available in the aforementioned website.
- For any queries related to the Bidding Documents, please contact NMSCDCL.

Chief Executive Officer NMSCDCL

TABLE OF CONTENTS

Contents

TENDER	NOTICE	2
Table A		5
SCHEDU	LE OF BIDDING PROCESS	6
TABLE	PF CONTENTS	-
GLOSSA	RY	8
DISCLAII	MER	11
SECTION	I 1: INTRODUCTION	13
1.1	Background	13
1.2	Brief Description of Bidding Process	14
SECTION	l 2:	16
	Instructions to Bidders	
	GENERAL	
2.1	Scope of Bid	
2.2	Eligibility of Bidders	
2.3	Number of Bids and costs thereof	
2.4	Site visit and verification of information	
2.5	Acknowledgement by Bidder	
2.6	Right to accept or reject any or all Bids	23
2.7	Contents of the RFP	24
2.8	Clarifications	25
2.9	Amendment of RFP	25
С.	PREPARATION AND SUBMISSION OF BIDS	25
2.10	Language	25
2.11	Format and Signing of Bid	26
2.12	Sealing, Marking and submission of Bids	
2.13	Bid Due Date	
2.14	Late Bids	
2.15	Modifications/ Substitution/ Withdrawal of Bids	
2.16	Opening and Evaluation of Bids Evaluation of Pre-Qualification Bids:	
2.17	Confidentiality	
2.18	Tests of responsiveness	29

Document No.: MAH-NAS-032-053-RFP-V02-01

2.19	Clarifications	30
E. (QUALIFICATION OF BIDDING	31
2.20	Selection of Bidder	31
2.21	Proprietary data	32
2.22	Correspondence with the Bidder	32
2.23	Contacts during Bid Evaluation	32
2.24	Other Conditions	32
2.25	Bid Security	33
2.26	Performance Security	33
2.27	Additional Performance Security	34
SECTION	3	36
3 (Criteria for Evaluation	36
3.1	Evaluation Parameters	36
3.2	Details of Experience	36
3.3	Financial information for purposes of evaluation	36
SECTION	- 4	20
	- 4 Fraud and Corrupt Practices	
	- 5	
5. F	Pre-Bid Conference	40
SECTION	- 6	41
6 I	Miscellaneous	41
APPEND	IX I: Details of the Bidder	42
APPEND	IX II: Power of Attorney for signing the Bid	43
APPEND	X IIA: POWER OF ATTORNEY FOR LEAD BIDDER BY THE OTHER CONSORTIUM MEMBER	45
APPEND	IX IIB: Consortium Agreement	47
APPEND	IX III: Statement of Legal Capacity	54
APPEND	IX IV: Format for Declaration by the Bidder for not being Blacklisted / Debarred/ Terminate	≥d-55
APPEND	X V: Letter comprising the Pre-Qualification Bid	56
ANNE	XURE 1: Details of work tendered for and in hand as on the date of submission of this RFP	59
ANNE	XURE 2: Details of works carried out by the Bidder	60
ANNE	XURE 3: Details of plants and machinery immediately available with the Bidder	
ANNE	XURE 4: Details of technical personnel available with the Bidder	62
ANNE	XURE 5: Financial capacity of the Bidder	63

ANNEXURE 6	: Approach and Methodology	64
APPENDIX VI:	Letter comprising the Financial Bid	65
APPENDIX VII:	Format of sending pre-bid queries	67
APPENDIX VIII-A:	Format for Performance Security	68
ANNEXURE 1:	Check list for Performance Security	71
APPENDIX VIII-B:	Format for Bank Guarantee for Mobilization Advance	72
APPENDIX –IX:	Guidelines of the Department of Disinvestment	73
APPENDIX X: Scor	oe of Work	75
APPENDIX XI:	TECHNICAL SPECIFICATIONS	85
APPENDIX XII:	BILL OF QUANTITIES	132
ANNEXURE A:	GENERAL CONDITIONS OF CONTRACT	281
ANNEXURE B:	SPECIAL CONDITIONS OF CONTRACT	302
SCHEDULE 1		343
APPENDIX XIV: ST	AR RATE FOR BASIC MATERIALS CLAUSE	344
APPENDIX XV: DR	AWINGS	345

GLOSSARY

The words and expressions beginning with capital letters and defined in this document shall, unless repugnant to the context, have the meaning ascribed thereto herein:

4 BD	A D I D I	
ABD	Area Based Development	
Addendum	As defined in clause 2.9.1	
Associate	As defined in clause 2.2.1 (d)	
Bids	As defined in Disclaimer	
Bidders	As defined in clause 2.2.1	
Bid Document Fee	Means the fee to be submitted by the Bidder for downloading the RFP from the website	
Bid Due Date	As defined in clause 1.1.7 and 2.13	
Bid Price	As defined in clause 1.2.5	
Bid Security	As defined in clause 1.2.3	
Bidding Documents	As defined in clause 1.1.7	
Bidding Process	As defined in clause 1.2.1	
Conflict of Interest	As defined in clause 2.2.1 (d)	
Construction Period	Means, as the case may be, the period of: (a) For Part A: 1 (one) year from the date of issuance of Work Order for works as set out in Appendix X of the RFP; (b) For Part B: 1 (one) year from the date of issuance of the Work Order for works as set out in Appendix X of the RFP. (c) For Part C: 1 (one) year from the date of issuance of the Work Order for works as set out in Appendix X of the RFP. (d) For Part D: 1 (one) year from the date of issuance of the Work Order for works as set out in Appendix X of the RFP.	
Contract Agreement	As defined in clause 1.1.4 and as set forth in Appendix XIII of the RFP	

Defect Liability Period	Means the period of 5 years applicable for Part A, Part C and Part D in the manner as set forth in this Agreement
Effective Date	Means the date on which the Work Order is issued in favour of the selected Bidder
Estimated Project Cost	INR 55,04,99,644/- (Rupees Fifty Five Crores Four Lakhs Ninety Nine Thousand Six Hundred Forty Four Only) as set out in Clause 1.1.5.
Final Project Cost	Means the Final Project Cost agreed upon in the Contract Agreement under Appendix XIII between the Selected Bidder and NMSCDCL
Financial Bid	Means the Price Bid submitted online in accordance with Appendix VI by the Bidder in accordance with in clause 2.12.2 of this RFP
Financial Capacity	As defined in clause 2.2.2 (C)
Implementation Plan	Means the implementation plan, prepared by the Contractor, consisting of quality assurance plant, safety plan, traffic management plan and such other plan(s) as may be required by NMSCDCL for undertaking this Project by the Contractor.
L1 Bidder	As defined in clause 2.20.1
LOA	As defined in clause 2.20.4
Performance Security Security/Additional	As defined in clause 2.26.1
Qualified Bidder	Means such Bidder whose Pre-Qualification Bid is responsive in accordance with clause 2.18 and who fulfills the Technical Criteria and the Financial Criteria as set out in the RFP
NMC	Means Nashik Municipal Corporation
NMSCDCL	Means Nashik Municipal Smart City Development Corporation Limited
O&M Period	Means the period of 3 years applicable for Part B, Part C and Part D from the date of issue of completion certificate.
Part A	Means all civil works including cycle track, cobblestone paving, stone benches, signages etc.

	and defect liability period of 5 years at Nashik, Maharashtra as set out in Appendix X
Part B	Means all landscaping and related works including O & M for 3 years as set out in Appendix X
Part C	Means all Electrical and related works including O&M Period 3 years and defect liability period of 5 years as set out in Appendix X
Part D	Means all Irrigation and Mechanical works including O&M Period 3 years and defect liability period of 5 years as set out in Appendix X
Project/Project Goda	Means:
	the infrastructure works required for the integrated development of area near Godavari River at Nashik, Maharashtra comprising of Part A, Part B, Part C and Part D
Selected Bidder	Means the L1 Bidder or the Qualified Bidder, as the case may be (refer clause 2.20) selected by NMSCDCL pursuant to this RFP for implementation of this Project and to whom LOA is issued
Technical Capacity	As defined in clause 2.2.2(B)

DISCLAIMER

- 1. This RFP is not an agreement and is neither an offer nor invitation by NMSCDCL to the prospective Bidders or any other person. The information contained in this Request for Proposal document ("RFP") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of the NMSCDCL or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and the Bidding Documents.
- 2. The purpose of this RFP is to provide interested parties with information that may be useful to them in submitting their bids pursuant to this RFP ("Bids"). This RFP includes statements, which reflect various assumptions and assessments arrived at by NMSCDCL in relation to the Project. 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 NMSCDCL or its employees or advisors to consider the objectives, financial situation and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in the Bidding Documents, 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, statements and information contained in this RFP and obtain independent advice from appropriate sources.
- 3. Information provided in this RFP to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. NMSCDCL accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.
- 4. While due care and adequate measures have been taken in preparation of this RFP, NMSCDCL, its employees and advisors make no representation or warranty and shall have no liability to any person, including any applicant or 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, completeness or reliability 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 for participation in this Bidding Process.
- 5. NMSCDCL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP. The issue of this RFP does not imply that NMSCDCL is bound to select a Bidder or to appoint the Selected Bidder or the Contractor, as the case may be, for the Project and NMSCDCL reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

- 6. The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by NMSCDCL or any other costs incurred in connection with or relating to its Bid. All such costs and expenses shall remain with the Bidder and NMSCDCL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.
- 7. The Bidders are prohibited from any form of collusion or arrangement in an attempt to influence the selection and award process of the Bid. Giving or offering of any gift, bribe or inducement or any attempt to any such act on behalf of the Bidder towards any officer/employee of the NMSCDCL or to any other person in a position to influence the decision of NMSCDCL for showing any favour in relation to this RFP or any other contract, shall render the Bidder to such liability/penalty as NMSCDCL may deem proper, including but not limited to rejection of the Bid of the Bidder and forfeiture of its Bid Security.
- 8. Laws of the Republic of India are applicable to this RFP.
- 9. Each Bidder's procurement of this RFP constitutes its agreement to, and acceptance of, the terms set forth in this Disclaimer. By acceptance of this RFP, the recipient agrees that this RFP and any information herewith supersedes documents(s) or earlier information, if any, in relation to the subject matter hereto.

SECTION 1: INTRODUCTION

1.1 **Background**

- 1.1.1. Nashik is one of the 100 cities shortlisted for smart cities development in India and was ranked 11th in the second round of the smart cities challenge. The Smart City Challenge required cities to develop a proposal for the development of city in two components: ABD (developing a specific area in the city) and pan city initiative. Nashik Municipal Corporation has several initiatives on-going including the mission projects of Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Swacch Bharat Mission (SBM), Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and Smart City. Nashik Municipal Corporation has formed a special purpose vehicle Nashik Municipal Smart City Development Corporation Limited for overall management of the projects under Smart City Mission (SCM).
- 1.1.2. As part of the SCM, NMSCDCL has decided to carry out and undertake the Project Goda and has decided to carry out the Bidding Process for selection of a Contractor to whom the Project may be awarded.
- 1.1.3. The scope of work of the Project is divided in the following five parts viz Part A, Part B, Part C and Part D, details of which are set out in Appendix X.

1.1.4. DELETED

- 1.1.5. The estimated cost of the Project is **INR 55,04,99,644/-** (Rupees Fifty Five Crores Four Lakhs Ninety Nine Thousand Six Hundred Forty Four Only) excluding GST.
 - (a) The assessment of actual costs, however, will have to be made by the Bidders. A broad overview of the indicative statement of work, dimensions, quantitative and other details in relation to the Scope of Work as set out in Appendix X are set out in Appendix XII ("Bill of Quantities").
 - (b) Further, conceptual drawings of the Project are set out in Appendix XV.
- 1.1.6. The statements and explanations contained in this RFP are intended to provide a better understanding to the Bidders about the subject matter of this RFP and should not be construed or interpreted as limiting in any way or manner the scope of work and obligations of the Contractor set forth in the Contract Agreement or NMSCDCL rights to amend, alter, change, supplement or clarify the scope of work, the work to be awarded pursuant to this RFP or the terms thereof or herein contained. Consequently, any omissions, conflicts or contradictions in the Bidding Documents including this RFP are to be noted, interpreted and applied appropriately to give effect to this intent and no claims on that account shall be entertained by NMSCDCL.
- 1.1.7. NMSCDCL shall receive Bids pursuant to this RFP in accordance with the terms set forth in this RFP and other documents including the Contract Agreement and its annexures to be provided by NMSCDCL pursuant to this RFP, as modified, altered, amended and clarified

- from time to time by NMSCDCL (collectively the "**Bidding Documents**"), and all Bids shall be prepared and submitted in accordance with such terms on or before the Bid Due Date specified in clause 1.3 for submission of Bids ("**Bid Due Date**").
- 1.1.8. Unless the context otherwise requires, the terms not defined in this RFP, but defined in the Contract Agreement shall have the meaning assigned thereto in the Contract Agreement. Further, notwithstanding anything to the contrary contained in this RFP, the detailed terms specified in the Contract Agreement shall have an overriding effect; provided, however, that any condition or obligation imposed on the Bidder hereunder shall continue to have effect in addition to its obligations under the Contract Agreement.

1.2 Brief Description of Bidding Process

- NMSCDCL has adopted a single stage- two-part bidding process (collectively referred to as 1.2.1. the "Bidding Process") for selection of the Bidder for award of the Project. Under this process, the eligibility and qualification of the Bidder will be first examined based on the details submitted under first part Envelope A- Pre-Qualification Bid with respect to the Technical Capacity and the Financial Capacity as set out in this RFP. Prior to making an application, the Bidder shall pay to NMSCDCL a sum of INR3,000/- (Rupees Three Thousand only) + INR90/- (Rupees Ninety only) + 9% CGST+ 9% SGST as the cost of the Bidding Documents ("Bid Document Fee"). The Financial Bid under the second part shall be opened only for the Qualified Bidders whose Pre-Qualification Bids are responsive in accordance with clause 2.18 to eligibility and qualifications requirements as per this RFP. Government of India has issued guidelines (see Appendix-IX of the RFP) for qualification of bidders seeking to acquire stakes in any public-sector enterprise through the process of disinvestment. The guidelines shall apply mutatis mutandis to this Bidding Process. NMSCDCL shall be entitled to disqualify a Bidder in accordance with the aforesaid guidelines at any stage of the Bidding Process. The Bidders must satisfy themselves that they are qualified to Bid and should give an undertaking to this effect in the form at Appendix-V.
- 1.2.2. The Bidding Documents include the Contract Agreement for the Project as set out in Appendix XIII. The aforesaid documents and any addenda issued subsequent to this RFP will be deemed to form part of the Bidding Documents.
- 1.2.3. A Bidder is required to deposit, along with its Bid, an amount **INR 27,53,000/-** (Rupees Twenty Seven Lakhs Fifty Three Thousand Only) ("**Bid Security**"), refundable after signing of the Contract Agreement with the Selected Bidder In the case of the Selected Bidder its Bid Security shall be retained till the Selected Bidder has provided the Performance Security within 15 (fifteen) days of issuance of the LOA.
- 1.2.4. Bidders are advised to examine the Project in greater detail, and to carry out, at their cost, such studies as may be required for submitting their respective Bids for award of the Project.
- 1.2.5. Bids are invited for the Project on the basis of the lowest quoted combined item rate by a Bidder for implementing the Project ("**Bid Price**"). The Bidder should quote the Bid Price after carefully studying the Bidding Document and duly taking into consideration:

- (a) Construction Period 1 (one) year for Part A, Part B, Part C and Part D
- (b) O&M Period of 3 (three) years for Part B, Part C and Part D
- (c) Defect liability Period for 5 (five) Years for Part A, Part C and Part D
- 1.2.6. L1 Bidder shall be the Selected Bidder. The remaining Qualified Bidders shall be kept in reserve and may, in accordance with the process specified in the RFP, be invited to match the Bid submitted by the L1 Bidder in case such L1 Bidder withdraws or is not selected for any reason. In the event that none of the other Qualified Bidders match the Bid of the L1 Bidder, NMSCDCL may, in its discretion, invite fresh Bids from the remaining Qualified Bidders or annul the Bidding Process, as the case may be Any queries or request for additional information concerning this RFP shall be submitted in writing or by fax and e-mail to NMSCDCL in the format as set out in Appendix VII of this RFP. The envelopes/communication shall clearly bear the following identification/title:

"Queries/Request for Additional Information: RFP for Selection of Contractor for Godavari Riverfront Development including beautification and infrastructure component in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra)"

SECTION 2:

2. Instructions to Bidders

A. GENERAL

2.1 Scope of Bid

NMSCDCL intends to receive Bids for selection of experienced and capable Contractor to execute the works as set out in Appendix X of this RFP. It is clarified that consortium is allowed to participate in this Bidding Process.

2.2 Eligibility of Bidders

- 2.2.1 For determining the eligibility of Bidders for their qualification hereunder, the following shall apply:
 - (a) Any Entity may submit its Bid as Bidder in accordance the terms of this RFP.
 - (b) The Bidder for qualification may be a single Entity or a group of Entities (the "Consortium"), coming together to implement the Project. However, no Bidder applying individually or as a Member, as the case may be, can be a member of another Consortium. The term 'Bidder' used herein would apply to both a single Entity and a Consortium.
 - (c) A Bidder can be a Proprietorship Firm / Partnership Firm / a Company incorporated under the Companies Act 1956 / 2013 or any combination thereof with a formal intent to enter into an agreement to form a Consortium. A Consortium shall be eligible for consideration subject to the following requirements:
 - (i). number of members in a consortium shall not exceed 3 (three) i.e Lead Bidder + 2 Consortium Members;
 - (ii). subject to the provisions of sub-clause (i) above, the Bid should contain the information required for each member of the Consortium;
 - (iii). the Member purchasing the tender document will be the Lead Member (the Lead Member);
 - (iv). the Bid should include a brief description of the roles and responsibilities of individual Members of the Consortium; (for the purpose of meeting the qualification criteria, the Consortium Member)

- (v). an individual Bidder cannot at the same time be member of another Consortium applying for qualification. Further, a member of a particular Consortium cannot be member of any other Consortium;
- (vi). Members of the Consortium shall enter into a binding Consortium Agreement, substantially in the form specified at Appendix IIB ("Consortium Agreement"), for the purpose of submitting a Bid. The Consortium Agreement, to be submitted along with the Bid, shall, *inter-alia*:
- (vii). the Consortium Agreement shall clearly outline the proposed roles and responsibilities of each Member in relation to the Scope of Work as set out in Appendix X;
- (viii). a Power of Attorney by the Consortium Member in favour of the Lead Bidder in accordance Appendix IIA with authorizing him to submit the Bid, receive communications, submit documents and do all such acts, for and on behalf of, such member of the Consortium as may be necessary for submission of their Bid
 - (ix). include a statement to the effect that all Members shall be liable jointly and severally for all obligations of the Contractor in relation to the Project; and except as provided under this RFP and the Bidding Documents, there shall not be any amendment to the Consortium Agreement without the prior written consent of NMSCDCL.
- (d) A Bidder shall not have a conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of such disqualification, the Authority shall forfeit and appropriate the Bid Security or Performance Security, as the case may be. The Bidder acknowledges and agrees that such forfeiture and appropriation of the Bid Security or Performance Security (as the case may be) is reasonable and represents the mutually agreed genuine pre-estimated loss and damages likely to be suffered and incurred by the Authority for, *inter alia*, the time, cost and effort of the Authority, including consideration of such Bidder's proposal (the "Damages") and not by way of penalty. The Bidder acknowledges and agrees that such forfeiture and appropriation of the Bid Security or Performance Security (as the case may be) is without prejudice to any other right or remedy that may be available to the Authority hereunder or otherwise. Without limiting the generality of the above, a Bidder shall be considered to have a Conflict of Interest that affects the Bidding Process, if:
 - (i). any Bidder or its Member (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this qualification shall not apply in cases where the direct or indirect shareholding of a Bidder or its Member thereof (or any shareholder thereof having a shareholding of more than 5% (five per cent) of the paid up and subscribed share capital of such Bidder or Member, as the case may be) in the other Bidder(s) or its Member is less than 5% (five per cent) of the paid up and

subscribed equity share capital thereof; provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in section 2(72) of the Companies Act 2013. For the purposes of this Clause 2.2.1(d), indirect shareholding held through one or more intermediate persons shall be computed as follows: (aa) where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the "Subject Person") shall be taken into account for computing the shareholding of such controlling person in the Subject Person; and (bb) subject always to sub-clause (aa) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-clause (bb) if the shareholding of such person in the intermediary is less than 26% (twenty six per cent) of the subscribed and paid up equity shareholding of such intermediary; or

- (ii). a constituent of such Bidder is also a constituent of another Bidder in the Project; or
- (iii). such Bidder or its Member thereof receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Bidder or its Member or Associate, or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Bidder or its Member or Associate; or
- (iv). such Bidder has the same legal representative for purposes of this Bid as any other Bidder; or
- (v). such Bidder thereof has a relationship with another Bidder or any Associate thereof, directly or through common third parties, that puts them in a position, to have access to each other's information about, or to influence the Bid of the other Bidder; or
- (vi). such Bidder has participated as a consultant or sub-consultant to NMSCDCL in the preparation of any documents, design or technical specifications of the Project; or
- (vii). such Bidder shall be liable for disqualification and forfeiture of Bid Security if any legal, financial or technical adviser of NMSCDCL in relation to the Project is engaged by the Bidder, its Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Project during the Bidding Process or subsequent to the (i) issue of the LOA or (ii) execution of the Contract Agreement. In the event any such adviser is engaged by the Selected Bidder or the Contractor, as the case may be, after issue of the

LOA or execution of the Contract Agreement for matters related or incidental to the Project, then notwithstanding anything to the contrary contained herein or in the LOA or the Contract Agreement and without prejudice to any other right or remedy of the NMSCDCL, including the forfeiture and appropriation of the Bid Security or Performance Security, as the case may be, which the Authority may have there under or otherwise, the LOA or the Contract Agreement, as the case may be, shall be liable to be terminated without NMSCDCL being liable in any manner whatsoever to the Selected Bidder or the Contractor for the same. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Bidder, its Member or Associate in the past but its assignment expired or was terminated prior to the Bid Due date. Nor will this disqualification apply where such adviser is engaged after a period of 1 (one) year from the completion of the Project.

Explanation:

In case a Bidder is a Consortium, then the term Bidder as used in this Clause 2.2.10, shall include each Member of such Consortium.

For the purposes of this RFP, Associate means, in relation to the Bidder/Member, a person who controls, is controlled by, or is under the common control with such Bidder/Member (the "Associate"). 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 by operation of law or agreement.

- (e) A Bidder shall be liable for disqualification if any legal, financial or technical adviser of NMSCDCL in relation to the Project is engaged by the Bidder, as the case may be, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Bidder in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this RFP.
- (f) **Positive Net Worth:** The Bidder should have positive net worth in last financial year i.e. 2018-19. The Bidder should submit attested copies of auditor's report along with the audited financial statements as per the format set forth in Annexure 5 of Appendix V. It is clarified that in case of consolidated annual financial statements, only the net worth of the entity that is submitting the Bid shall be considered. The Bidder shall submit the Networth certificate of the bidding entity only.
- (g) The Bidder shall not have been barred or black-listed by Central/ any State Government department/ Any Municipal Corporation in India as on the date of submission of the Bid. A Self Declaration shall be submitted by the Bidder (in event of a Consortium, all the Consortium Members each) in accordance with Appendix IV.
- 2.2.2 To be eligible to bid, a Bidder shall fulfill the following conditions of eligibility:

(A) Assessed Available Bid Capacity

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:

Assessed Available Bid Capacity = (A*N*2) - B

Where:

A= Maximum value of similar works as detailed in clause 2.2.2 (B) executed in any one year during the last 7 (seven) financial years i.e. 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17 and 2017-18 (Value of executed work shall be brought to current value at simple rate of 5% per annum) taking into account only the completed works.

N = Number of years prescribed for completion of the works for which bids are invited.

B = Value of existing commitments and ongoing works to be completed during the period for completion of works for which Bid is invited. Bidder has to submit the work orders for the same.

For this purpose, a Project shall be considered to be completed, if more than 90% of the value of work has been completed as on the Bid Due Date and is certified by a chartered Chartered accountant.

(B) Technical Capacity:

For demonstrating technical capacity and experience ("**Technical Capacity**"), the Bidder (or any Member of the Consortium) shall have experience of successful completion and commissioning of the works listed below with any Government/Government Undertakings/Public Sector/Municipal Corporations in India:

- (a) The bidder shall have successfully completed either of the following similar works during the last 7 (seven) years preceding the Bid Due Date:
 - (i). One similar completed work costing not less than INR 44,04,00,000/- (Rupees Forty Four Crores Four lakhs only)

Or

(ii). Two similar completed works **each** costing not less than INR 27,53,00,000/- (Rupees Twenty Seven Crores Fifty Three lakhs only)

Or

(iii). Three similar completed works **each** costing not less than INR 22,02,00,000/- (Rupees Twenty Two Crores Two Lakhs only)

"Similar works" means a project successfully completed regarding River Front Development Related Civil works OR Garden Development OR Landscaping OR Electrical work OR Irrigation and Mechanical works OR any combination thereof.

(b) The bidder (any member in case of consortium) shall have completed at least either:

(i). one project involving garden OR landscape development having a project value of at least INR 75,00,000 (Rupees Seventy-Five lakh only) in India over the past 7 (seven) years preceding the Bid Due Date

OR

- (ii). one project involving landscaping of at least 15,000 square meters in India over the past 7 (Seven) years preceding the Bid Due Date
- (c) The bidders should have completed at least one project involving construction of retaining wall of minimum 200 running meters in India over the Past 7 (seven) years.
- (d) The bidders should have completed at least one project involving construction of Gabion wall of minimum 200 running meters in India over the Past 7 (seven) years.
- (e) The bidder should have completed at least one project involving piling work of minimum 750 running meters in India over the Past 7 (seven) years.
- (f) The bidder shall have completed at least one project involving installation of electrical fixtures having a project value of at least INR 1,00,00,000 (INR One crore only) in India over the past 7 (Seven) years from the date of submission of the bid.
 - Completion Certificates for the technical capacity and experience should be issued by an officer not below the rank of Executive Engineer or equivalent from any of Central/State Govt. departments, Public Sector Undertakings, Municipal Corporations formed under relevant Act and published in central/state gazette.

(C) Financial Capacity

- (i). The Bidder (Lead Bidder in case of consortium) should have an average annual turnover of at least INR 27,50,00,000/- (Rupees Twenty Seven Crore Fifty Lakhs only) over the last three financial years i.e. 2015-16, 2016-17 and 2017-18.
- (ii). The Bidder (Lead Bidder in case of consortium) should have a Positive Net worth as on March 31, 2018.
- (iii). The Bidder (Lead Bidder in case of consortium) shall submit a True copy of latest valid original Solvency Certificate from Nationalised/ scheduled Bank of a value of INR 12,00,00,000/- (Rupees Twelve Crore only). The Solvency Certificate should not have been issued earlier than six months from the date of submission of the bid.
- 2.2.3 The Bidder shall enclose with its Bid, to be submitted as per the format at Appendix I, Appendix II, Appendix IV, Appendix V and Appendix VI, the certificate(s) from its Statutory Auditor specifying

- (a) the Net Worth of the Bidder as per the format set forth at Annexure 5 of Appendix V, as on 31 March 2018
- (b) Average annual turnover averaged over a period of 3 (three) years of the preceding financial years i.e. FY 2015-16, FY 2016-17, FY 2017 18.
- (c) Methodology adopted for calculating such net worth.

2.2.4 DELETED

- 2.2.5 The Bidder should submit a Power of Attorney as per the format at Appendix II, authorizing the signatory of the Bid to commit the Bidder.
- 2.2.6 Any Bidder (any member in case of consortium) or its Associate should not be either blacklisted or terminated for default owing to fraudulent or corrupt practices in the last three years by State/Central Government or Municipal Corporation in India in the last three years from the ate of submission of the bid. The bidder shall submit an undertaking in the format as set out in Appendix IV.
- 2.2.7 Any Bidder which has been barred by the Central / State Government, or any entity controlled by it, from participating in any project, and the bar subsists as on the date of Bid, would not be eligible to submit a Bid under this RFP.

2.3 Number of Bids and costs thereof

- 2.3.1 No Bidder shall submit more than one Bid for the Project. A Bidder bidding individually or as a Member shall not be entitled to submit another Bid for the Project either individually or as a member of any other Consortium, as the case may be.
- 2.3.2 The Bidders shall be responsible for all of the costs associated with the preparation of their Bids and their participation in the Bidding Process. NMSCDCL will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

2.4 Site visit and verification of information

Bidders are encouraged to submit their respective Bids after visiting the Site and ascertaining for themselves the site conditions, traffic, location, surroundings, climate, availability of power, water and other utilities for construction, access to site, handling and storage of materials, weather data, applicable laws and regulations and any other matter considered relevant by the Bidders.

2.5 Acknowledgement by Bidder

- 2.5.1 It shall be deemed that by submitting a Bid, the Bidder has:
 - (a) made a complete and careful examination of the Bidding Documents;
 - (b) received all relevant information requested from NMSCDCL;
 - (c) Accepted the risk of inadequacy, error or mistake in the information provided in the Bidding Documents or furnished by or on behalf of NMSCDCL relating to any of the matters referred to in clause 2.4 above.

- (d) satisfied itself about all matters, things and information including matters referred to in clause 2.4 hereinabove necessary and required for submitting an informed Bid, execution of the Project in accordance with the Bidding Documents and performance of all of its obligations there under;
- (e) acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the Bidding Documents or ignorance of any of the matters referred to in clause 2.4 herein above shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations, loss of profits etc. from NMSCDCL, or a ground for termination of the Contract Agreement by the Contractor;
- (f) acknowledged that it does not have a Conflict of Interest; and
- (g) Agreed to be bound by the undertakings provided by it under and in terms hereof.
- 2.5.2 NMSCDCL shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to RFP, the Bidding Documents or the Bidding Process, including any error or mistake therein or in any information or data given by NMSCDCL.

2.6 Right to accept or reject any or all Bids

- 2.6.1 Notwithstanding anything contained in this RFP, NMSCDCL reserves the right to accept or reject any Bid and to annul the Bidding Process and reject all Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefore. In the event that NMSCDCL rejects or annuls all the Bids, it may, in its discretion, invite all eligible Bidders to submit fresh Bids hereunder.
- 2.6.2 NMSCDCL reserves the right to reject any Bid:
 - (a) at any time, a material misrepresentation is made or uncovered, or
 - (b) the Bidder does not provide, within the time specified by NMSCDCL, the supplemental information sought by NMSCDCL for evaluation of the Bid.

If such disqualification/ rejection occurs after the Bids have been opened and the L1 Bidder gets disqualified/ rejected, then NMSCDCL reserves the right to:

- (i) invite the remaining Bidders to match the L1 Bidder/ submit their Bids in accordance with clause 2.20; or
- (ii) take any such measure as may be deemed fit in the sole discretion of NMSCDCL, including annulment of the Bidding Process.
- 2.6.3 In case it is found during the evaluation or at any time before signing of the Contract Agreement or after its execution that one or more of the pre-qualification conditions have not been met by the Bidder, or the Bidder has made material misrepresentation or has given any materially incorrect or false information, or the Bidder does not perform its obligations or fails to submit relevant deliverable documents and submissions within the prescribed timelines, the Bidder

shall be disqualified forthwith if not yet appointed as the contractor either by issue of the LOA or entering into of the Contract Agreement, and if the Selected Bidder has already been issued the LOA or has entered into the Contract Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this RFP, be liable to be terminated, by a communication in writing by NMSCDCL to the Selected Bidder or the Contractor, as the case may be, without NMSCDCL being liable in any manner whatsoever to the Selected Bidder or the Contractor. In such an event, NMSCDCL shall be entitled to forfeit and appropriate the Bid Security or Performance Security, as the case may be, as Damages, without prejudice to any other right or remedy that may be available to NMSCDCL under the Bidding Documents and/ or the Contract Agreement, or otherwise as well as debar the Bidder/Contractor from bidding in future as the NMSCDCL deems fit.

2.6.4 NMSCDCL reserves the right to verify all statements, information and documents submitted by the Bidder in response to the RFP. Any such verification or lack of such verification by NMSCDCL shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of NMSCDCL thereunder.

2.7 Contents of the RFP

2.7.1 This RFP comprises the Disclaimer set forth hereinabove, the contents as listed below, and will additionally include any Addendum issued in accordance with Clause 2.9.

Invitation for Qualifications		
Section 1	Introduction	
Section 2	Instructions to Bidders	
Section 3	Evaluation of Bids	
Section 4	Fraud and Corrupt Practices	
Section 5	Pre-Bid Conference	
Section 6	Miscellaneous	

Appendices		
Appendix I	Details of the Bidder	
Appendix II	Power of attorney for signing the Bid	
Appendix IIA	Power of Attorney for Lead Member of the Consortium	
Appendix IIB	Consortium Agreement	
Appendix III	Statement of Legal Capacity	
Appendix IV	Format for Declaration by the Bidder for not being Blacklisted /	
	Debarred/ Termin	nated
Appendix V	Letter comprising the Pre-Qualification Bid	
	Annexure 1	Details of work tendered for and in hand as on the
		date of submission of this RFP
	Annexure 2	Details of works carried out by the Bidder
	Annexure 3	Details of Plants and Machinery immediately
		available with the Bidder
	Annexure 4	Details of technical personnel available with the
		Bidder

	Annexure 5 Financial Capacity of the Bidder	
	Annexure 6 Approach and Methodology	
Appendix VI	Letter comprising the Financial Bid	
Appendix VII	Format of sending Pre-bid queries	
Appendix VIII-A	Format for Performance Security	
Appendix VIII-B	Format for Bank Guarantee for Mobilization Advance	
Appendix IX	Guidelines of the Department of Disinvestment	
Appendix X	Scope of Work	
Appendix XI	Technical Specifications	
Appendix XII	Bill of Quantities	
Appendix XIII	Contract Agreement	
	Annexure A General Conditions of Contract	
	Annexure B Special Conditions of Contract	
Appendix XIV	Price Variation Clause	
Appendix XV	Drawings	

2.8 Clarifications

- 2.8.1 Bidders requiring any clarification on the RFP may notify NMSCDCL in writing or e-mail in editable .xls format accordance with clause 1.2.7. The Bidders should send in their queries on or before the date mentioned in the **Schedule** of Bidding Process specified on page 6. NMSCDCL shall endeavor to respond to the queries within the period specified therein, but no later than 7 (Seven) days prior to the Bid Due Date.
- 2.8.2 NMSCDCL may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by NMSCDCL shall be deemed to be part of the Bidding Documents. Verbal clarifications and information given by NMSCDCL or its employees or representatives shall not in any way or manner be binding on NMSCDCL.

2.9 Amendment of RFP

- 2.9.1 At any time prior to the Bid Due Date, NMSCDCL may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP by the issuance of an addendum ("**Addendum**").
- 2.9.2 Any Addendum issued hereunder will be published on https://mahatenders.gov.in and will be part of the Bidding Document.
- 2.9.3 In order to afford the Bidders a reasonable time for taking an Addendum into account, or for any other reason, NMSCDCL may, in its sole discretion, extend the Bid Due Date.

C. PREPARATION AND SUBMISSION OF BIDS

2.10 Language

The Bid and all related correspondence and documents in relation to the Bidding Process shall be in English language. Supporting documents and printed literature furnished by the Bidder with the Bid may be in any other language provided that they are accompanied by translations of all the pertinent passages in the English language, duly authenticated and certified by the Bidder. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Bid, the English language translation shall prevail.

2.11 Format and Signing of Bid

- 2.11.1 The Bidder shall provide all the information sought under this RFP. NMSCDCL will evaluate only those Bids, in the required formats and complete in all respects, whose Pre-Qualification Bids are submitted online through the e- procurement portal as well as in hard copy and Financial Bids are submitted only online through the online procurement portal.
- 2.11.2 The Bid shall be typed or written in indelible ink and signed by the authorized signatory of the Bidder who shall also initial each page. All the alterations, omissions, additions or any of their amendments made to the Bid shall be initialed by the person(s) signing the Bid.

2.12 Sealing, Marking and submission of Bids

2.12.1 While the Bidders are required to submit the Envelope A-Pre-Qualification Bid online as well in hard copy, the Financial Bid is only to be submitted online through e- procurement portal comprising of the following documents along with supporting documents as appropriate.

Envelope A- Pre-Qualification Bid (To be submitted online and offline):

- (a) Appendix I Details of the Bidder
 - (i) Copy of PAN, TAN certificates and GST registration of the Bidder:
 - (ii) Signed and stamped copy of the Bidding Documents (including amendments and clarifications, if any) by the authorized signatory of the Bidder on each page.
- (b) Appendix II Power of attorney for signing the Bid
- (c) Appendix IIA Power of Attorney for Lead Member of the Consortium
- (d) Appendix IIB Consortium Agreement
- (e) Appendix III Statement of Legal Capacity
- (f) Appendix IV Format for Declaration by the Bidder (Each member in case of consortium) for not being Blacklisted / Debarred / Terminated
- (g) Bid Security online payment fee receipt Cost of Bid Document Fee of INR3,000/- (Rupees Three Thousand only) + INR90 (Rupees Ninety Only) + 9% SGST + 9% CGST;
- (h) Approach and methodology statement in accordance with Clause 3.1.5 and as provided in Annexure 6 of Appendix V.

(i) Appendix - V (Letter comprising the Pre-Qualification Bid) including Annexure 1 to 5 and supporting certificates/documents.

Note: Scanned copy of above mentioned document shall be uploaded in non-editable (PDF) version.

Envelope B- Financial Bid (To be submitted online only)

- (a) Appendix-VI (Letter comprising the Financial Bid).
- 2.12.2 **All pages** of the Bidding document shall be duly signed by the authorized person of the Bidder.

2.13 Bid Due Date

2.13.1 Pre-Qualification Bid and Financial Bid comprising of the document listed in clause 2.12 of the RFP shall be submitted online through e-procurement portal on or before 1500 hours IST on the Bid Due Date. Bidder shall submit the hard copies of the Pre-Qualification Bid on or before the date and time specified in the Schedule of Bidding Process on Page 6 at the below address:

"Chief Executive Officer.

Nashik Municipal Smart City Development Corporation Limited, 4rth Floor, Panditrao Khaire Panchvati Divisional Office, Nashik Municipal Corporation, Makhamalahad Naka

Makhamalabad Naka,

Panchavati,

Nashik"

2.13.2 NMSCDCL may, in its sole discretion, extend the Bid Due Date by issuing an Addendum in accordance with clause 2.9 uniformly for all the Bidders.

2.14 Late Bids

Hard copy of the Bids received by NMSCDCL after the specified time shall not be eligible for consideration and shall be summarily rejected and returned unopened even if submitted online on time. Online submission would not be possible beyond the time specified in the Schedule of Bidding Process specified in the Schedule at Page 6.

2.15 Modifications/ Substitution/ Withdrawal of Bids

- 2.15.1 The Bidder may modify, substitute or withdraw its Bid after submission prior to Bid Due Date.
- 2.15.2 Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid Due Date, unless the same has been expressly sought for by NMSCDCL, shall be disregarded.

D. EVALUATION PROCESS

2.16 Opening and Evaluation of Bids Evaluation of Pre-Qualification Bids:

- 2.16.1 NMSCDCL shall open the Bids as specified in Bid Data Sheet as specified in the Schedule of this RFP at Page 6 in the presence of the Bidders who choose to attend.
- 2.16.2 Pre-Qualification Bids of those Bidders, who have not submitted their Bid online, shall not be considered for opening and evaluation.
- 2.16.3 NMSCDCL will subsequently examine and evaluate Pre-Qualification Bids in accordance with the provisions set out in SECTION 3 of this RFP.
- 2.16.4 Bidders are advised that qualification of Bidders will be entirely at the discretion of NMSCDCL. Bidders will be deemed to have understood and agreed that no explanation or justification on any aspect of the Bidding Process or selection will be given.
- 2.16.5 To facilitate evaluation of Pre-Qualification Bids, NMSCDCL may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Pre-Qualification Bid. Such clarification(s) shall be provided within the time specified by NMSCDCL for this purpose. Any request for clarification(s) and all clarification(s) in response thereto shall be in writing.
- 2.16.6 If a Bidder does not provide clarifications sought under clause 2.19 below within the prescribed time, its Bid may be liable to be rejected. In case the Bid is not rejected, NMSCDCL may proceed to evaluate the Bid by construing the particulars requiring clarification to the best of its understanding and the Bidder shall be barred from subsequently questioning such interpretation of NMSCDCL.
- 2.16.7 NMSCDCL reserves the right to reject any Pre-Qualification Bid which is non-responsive as per clause 2.18 and no request for alteration, substitution or withdrawal shall be entertained by NMSCDCL in respect of such Bid.
- 2.16.8 Any information contained in the Bid shall not in any way be construed as binding on NMSCDCL, its agents, successors or assigns, but shall be binding against the Bidder if the Project is subsequently awarded to it on the basis of such information.
- 2.16.9 NMSCDCL reserves the right not to proceed with the Bidding Process at any time without notice or liability and to reject any or all Bid(s) without assigning any reasons.
- 2.16.10 If any information furnished by the Bidder is found to be incomplete, or contained in formats other than those specified herein, NMSCDCL may, in its sole discretion, exclude the related information.
- 2.16.11 In the event that a Bidder claims credit for an eligible project, and such claim is determined by NMSCDCL as incorrect or erroneous, NMSCDCL shall reject such claim and exclude the same from computation of the eligible score, and may also, while computing the aggregate experience score of the Bidder, make a further deduction equivalent to the claim rejected hereunder. Where any information is found to be patently false or amounting to a material misrepresentation, NMSCDCL reserves the right to reject the Bid in accordance with the provisions of clauses 2.6.2 and 2.6.3.
- 2.16.12 NMSCDCL will evaluate the Pre-Qualification Bids for their compliance to the eligibility and qualification requirements pursuant to clause 2.2.1 & 2.2.2 of this RFP.

- 2.16.13 After evaluation of the Pre-Qualification Bids, NMSCDCL will publish a list of Qualified Bidders whose Financial Bids shall be opened. NMSCDCL will not entertain any query or clarification from the Bidders who fail to qualify.
- 2.16.14 NMSCDCL shall inform the venue and time of online opening of the Financial Bids to the Qualified Bidders through e-procurement portal of NMSCDCL and e- mail. NMSCDCL shall open the Financial Bids online on date and time to be informed in this clause 2.16.14 in the presence of the authorised representatives of the Qualified Bidders who may choose to attend. NMSCDCL shall publically announce the Bid Price quoted by the Qualified Bidder. NMSCDCL shall prepare a record of opening of Financial Bids.

2.17 Confidentiality

Information relating to the examination, clarification, evaluation, and recommendation for the qualified Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising NMSCDCL in relation to, or matters arising out of, or concerning the Bidding Process. NMSCDCL will treat all information, submitted as part of Bid, in confidence and will require all those who have access to such material to treat the same in confidence. NMSCDCL may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or NMSCDCL or as may be required by law or in connection with any legal process.

2.18 Tests of responsiveness

- 2.18.1 Prior to evaluation of Bids, NMSCDCL shall determine whether each Bid is responsive to the requirements of the RFP. A Bid shall be considered responsive only if:
 - (a) it contains all the information and documents (complete in all respects) as requested in this RFP;
 - (b) it is received in the format as prescribed in Appendix I, II, III and IV along with all supporting documents;
 - (c) it is accompanied by the approach and methodology statement in accordance with Clause 3.1.5.
 - (d) it is received as per the format at Appendix- V (including all annexures) and Appendix VI along with all supporting documents;
 - (e) it is received by the Bid Due Date including any extension thereof pursuant to clause 2.13.2;
 - (f) it is signed, and submitted as stipulated in clause 2.12.2;

- (g) it contains information in formats same as those specified in this RFP;
- (h) Payment of Bid Document Fee and Bid Security as mentioned in this RFP is made by Bidder using available net banking option/ credit card/ debit card on e-procurement portal of Govt. of Maharashtra i.e. https://mahatender.gov.in.
- (i) it does not contain any condition or qualification; and
- (j) it is not non-responsive in terms hereof.
- 2.18.2 NMSCDCL reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the NMSCDCL in respect of such Bid.

2.19 Clarifications

- 2.19.1 To facilitate evaluation of Bids, NMSCDCL may, at its sole discretion, seek clarifications from any Bidder regarding its Bid. Such clarification(s) shall be provided within the time specified by NMSCDCL for this purpose. Any request for clarification(s) and all clarification(s) in response thereto shall be in writing.
- 2.19.2 If a Bidder does not provide clarifications sought under Clause 2.19.1 above within the prescribed time, its Bid shall be liable to be rejected. In case the Bid is not rejected, NMSCDCL may proceed to evaluate the Bid by construing the particulars requiring clarification to the best of its understanding, and the Bidder shall be barred from subsequently questioning such interpretation of NMSCDCL.

Document No.: MAH-NAS-032-053-RFP-V02-01

E. QUALIFICATION OF BIDDING

2.20 Selection of Bidder

- 2.20.1 Subject to the provisions of clause 2.6, the Qualified Bidder whose Bid is adjudged as responsive in terms of clause 2.18 and whose Financial Bid is the lowest ("L1 Bidder") will be declared as the Selected Bidder, eligible for negotiations and award of contract after the negotiations.
- 2.20.2 In the event that the L1 Bidder withdraws or is not selected for any reason in the first instance ("first round of bidding"), NMSCDCL may invite all the remaining Qualified Bidders to revalidate or extend their respective Bid Security, as necessary, and match the Bid of the aforesaid L1 Bidder ("second round of bidding"). If in the second round of bidding, only one Qualified Bidder matches the L1 Bidder, it shall be the Selected Bidder. If two or more Qualified Bidders match the said lowest Bidder in the second round of Bidding, then the Qualified Bidder whose Bid was lower as compared to other Qualified Bidders in the first round of bidding shall be the Selected Bidder. For example, if the third and fifth lowest Qualified Bidders in the first round of bidding, the said third lowest Qualified Bidder shall be the Selected Bidder.
- 2.20.3 In the event that no Bidder offers to match the L1 Bidder in the second round of bidding as specified in clause 2.20.2, NMSCDCL may, in its discretion, invite fresh Bids ("third round of bidding") from all the Bidders except the L1 Bidder of the first round of bidding, or annul the Bidding Process, as the case may be. In case the Bidders are invited in the third round of bidding to revalidate or extend their Bid Security, as necessary, and offer fresh bids, they shall be eligible for submission of fresh Bids provided, however, that in such third round of bidding only such Bids shall be eligible for consideration which are lower than the Bid of the second lowest Bidder in the first round of bidding.
- 2.20.4 After selection, a Letter of Award ("LOA") shall be issued, in duplicate, by NMSCDCL to the Selected Bidder and the Selected Bidder shall:
 - (a) within 7 (seven) days of the issuance of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof;
 - (b) within 15 (fifteen) days of the issuance of the LOA, submit an Implementation Plan;
 - (c) within 15 (fifteen) days of the issuance of the LOA, submit Performance Security.
- 2.20.5 In the event the duplicate copy of the LOA duly signed by the L1 Bidder and the Implementation Plan is not received by the stipulated date, NMSCDCL may, unless it consents to extension of time for submission thereof, appropriate the Bid Security of such Bidder as Damages on account of failure of the L1 Bidder to acknowledge the LOA and submit the Implementation Plan.
- 2.20.6 After acknowledgement of the LOA and submission of the Implementation Plan as aforesaid by the Selected Bidder, NMSCDCL shall give its preliminary comment(s) on the Implementation Plan and cause the Selected Bidder to execute the Contract Agreement. The Selected Bidder shall not be entitled to seek any deviation, modification or amendment in the Contract Agreement.

2.20.7 The Selected Bidder shall suitably incorporate the comments of NMSCDCL in the Implementation Plan and submit the revised Implementation Plan on or before the execution of the Contract Agreement. The Selected Bidder agree and acknowledge to two level review process of Implementation Plan by NMSCDCL, one before the execution of the Contract Agreement and one after the execution of the Contract Agreement.

2.21 Proprietary data

All documents and other information supplied by NMSCDCL or submitted by a Bidder to NMSCDCL shall remain or become the property of NMSCDCL. The Bidders are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Bid. NMSCDCL will not return any Bid or any information provided along therewith.

2.22 Correspondence with the Bidder

Save and except as provided in this RFP, NMSCDCL shall not entertain any correspondence with any Bidder in relation to the acceptance or rejection of any Bid.

2.23 Contacts during Bid Evaluation

Bids shall be deemed to be under consideration immediately after they are opened and until such time NMSCDCL makes official intimation of award/rejection to the Bidders. While the Bids are under consideration, Bidders and/ or their representatives or other interested parties are advised to refrain, save and except as required under the Bidding Documents, from contacting by any means, NMSCDCL and/ or their employees/ representatives on matters related to the Bids under consideration.

2.24 Other Conditions

- 2.24.1 Notwithstanding anything to the contrary contained in this RFP, the detailed terms specified in the Contract Agreement shall have overriding effect; provided, however, that any conditions or obligations imposed on the Bidder hereunder shall continue to have effect in addition to its obligations under the Contract Agreement.
- 2.24.2 The Bidding Documents including this RFP and all attached documents are and shall remain the property of NMSCDCL and are transmitted to the Bidders solely for the purpose of preparation and the submission of a Bid in accordance herewith. The Bidders are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Bid. NMSCDCL will not return any Bid or any information provided along therewith.
- 2.24.3 This RFP is not transferable.
- 2.24.4 Any award of contract pursuant to this RFP shall be subject to the terms of the Bidding Documents.

F. BID SECURITY

2.25 Bid Security

- 2.25.1 The Bidder shall furnish as part of its Bid, a Bid Security referred to in clause 1.2.3 through online payment using available net banking option/ credit card/ debit card on e-procurement portal of Govt. of Maharashtra i.e. https://mahatender.gov.in.
- 2.25.2 Any Bid not accompanied by the Bid Security shall be rejected by NMSCDCL as non-responsive.
- 2.25.3 The Bid Security of Bidders other than the Selected Bidder will be returned by NMSCDCL, without any interest, as promptly as possible on the execution of contract with the successful bidder or when the bidding process is cancelled by NMSCDCL.
- 2.25.4 The Selected Bidder's Bid Security will be returned, without any interest, upon the Selected Bidder signing the Contract Agreement and furnishing the Performance Security in accordance with clause 2.26.
- 2.25.5 NMSCDCL shall be entitled to forfeit and appropriate the Bid Security as damages inter alia in any of the events specified in clause 2.25.6 herein below. The Bidder by submitting its Bid pursuant to this RFP, shall be deemed to have acknowledged and confirmed that NMSCDCL will suffer loss and damage on account of withdrawal of its Bid or for any other default by the Bidder during the period of Bid Validity as specified in this RFP. No relaxation of any kind on Bid Security shall be given to any Bidder.
- 2.25.6 The Bid Security shall be forfeited and appropriated by NMSCDCL as damages payable to NMSCDCL for, *inter alia*, time, cost and effort of NMSCDCL without prejudice to any other right or remedy that may be available to NMSCDCL under the Bidding Documents and/or under the Contract Agreement or otherwise, under the following conditions:
- 2.25.7 If a Bidder submits a non-responsive Bid;
- 2.25.8 If a Bidder engages in a corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice as specified in Clause 4 of this RFP;
- 2.25.9 If a Bidder withdraws its Bid during the period of Bid validity as specified in this RFP and as extended by mutual consent of the respective Bidders and NMSCDCL;
- 2.25,10 In the case of Selected Bidder, if it fails within the specified time limit:
 - (a) to sign and return the duplicate copy of LOA;
 - (b) to sign the Contract Agreement; or
 - (c) to furnish the Performance Security within the period prescribed in clause 2.26; or
 - (d) to submit the Implementation Plan.

2.26 Performance Security

2.26.1 The Selected Bidder shall obtain (at his cost) a Performance Security for proper performance, amounting to **INR 1,10,10,000/-** (Rupees One Crore Ten Lakhs Ten Thousand Only)) ("**Performance Security**").

- 2.26.2 The Selected Bidder shall, within 15 (fifteen) days from the date of issuance of LOA, furnish 60% of the Performance Security, which may be in form of an unconditional and irrevocable bank guarantee in accordance with Appendix VIII-A or a Demand Draft.
- 2.26.3 The remaining 40% of the Performance Security, shall be deducted by NMSCDCL at the rate of 5% of the Running Account Bill amounts payable monthly till the cumulative deduction amount reaches the remaining 50% of the Performance Guarantee
- 2.26.4 The Performance Security shall be released on the following landmarks:
 - (i) The initial submission of 60% of the Performance Security shall be released at the time of issuance of Completion Certificate.
 - (ii) For the remaining 40% of the Performance Security it shall be released as follows:
 - (a) 25% of the Performance Security shall be released after completion of the first 2.5 years after the Completion Certificate is granted, which is 50% of the Defect Liability Period).
 - (b) Remaining 25% of the Performance Security shall be released on the successful completion of the Defects Liability Period of Part A, Part C and Part D, subject to relevant deductions and after NMSCDCL has ensured that the Works have been completed in accordance with the Contract and the Work Order.
- 2.26.5 The Performance Security shall be forfeited without prejudice to the Bidder being liable for any further consequential loss or damage incurred to NMSCDCL in accordance with the terms of the Contract Agreement.

2.27 Additional Performance Security

- 2.27.1 In the event that project cost quoted by the Bidder is less than the Estimated Project Cost provided in the RFP amounting to INR 55,04,99,644/- (Rupees Fifty Five Crores Four Lakhs Ninety Nine Thousand Six Hundred Forty Four Only) the Bidder shall submit an Additional Performance Security (APS), which may be in form of an unconditional and irrevocable bank guarantee in accordance with Appendix VIII A or a Demand Draft.
- 2.27.2 The Additional Performance Security submitted by the Bidder shall be payable by the Bidder as mentioned below:

2.27.3

Final Bid by the Bidder	Additional Performance Security (APS)
up to 10% below the Estimated Project	1% of the Estimated Project Cost
Cost	
more than 10% below the Estimated	% of the APS = (% rate quoted -10%) plus 1%.
Project Cost and upto 15%	Eg: If the final bid is 14% below the Estimated
	Project Cost, then:
	APS = (14% - 10%) + 1% = 5%
more than 15% below the Estimated	% of the APS = (% rate quotated -15%) x 2.
Project Cost	Eg: If the final bid is 19% below the Estimated
	Project Cost, then:
	APS = (19% - 15%) *2% = 8%

	or Selection of Contractor for Godavari Riverfront Development including beautification as ructure components in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra)
2.27.4	The Additional Performance Security payable shall be submitted by the Bidder within (fifteen) days from the date of issuance of LOA, at the time of submitting 50% of the Performance Security under Clause 2.26.2.
	Nashik Municipal Smart City Development Corporation Limited 35 P a g e

SECTION 3

3 Criteria for Evaluation

3.1 Evaluation Parameters

- 3.1.1 The Bidder (in event of a Consortium, all members of the Consortium) shall submit a Self-declaration, duly signed by the authorized signatory on Non –judicial stamp paper of INR 100/-in accordance with Annexure IV
- 3.1.2 Subject to Clause 2.1, the Bidder's competence and capability is proposed to be established under the Pre-Qualification by the following parameters:
 - (a) Assessed Available Bid Capacity as set out in clause 2.2.2 (A);
 - (b) Technical Capacity as set out in clause 2.2.2 (A); and
 - (c) Financial Capacity as set out in clause 2.2.2 (B).
- 3.1.3 The Bids of the Bidders considered as responsive in terms of Clause 2.18.1 ("**Bidders**") shall be evaluated. Bids of the Bidders who do not meet these criteria shall be rejected.
- 3.1.4 In case of any discrepancy between the documents submitted in hard copy and in soft copy (online), the documents, except the Power of Attorney, submitted online shall prevail.
- 3.1.5 The Bidders are encouraged to conduct their own assessment of the Project prior to the bid submission that would help them to prepare a substantially detailed approach and methodology statement as a part of the Pre-Qualification Bid in order to demonstrate their understanding and capabilities for undertaking the Project which shall *inter alia* take into account the timelines, resource deployment plan, understanding and mitigation of risks. While doing so, the Bidder shall take into due consideration the scope of work as set forth in Appendix X and the technical specification as set forth in Appendix XI. For the avoidance of doubt, the approach and methodology to be submitted by the Bidder shall also include:
 - (a) proposed plan including timeframe for performing various tasks in accordance with the scope of work as set out in Appendix X;
 - (b) details of technology to be adopted by the Bidder for undertaking this Project;
 - (c) flow chart of process setting out the manner in which the Bidder shall undertake the Project; and
 - (d) manner in which the Bidder proposes to tackle the sludge in order to successfully undertake the Project.

3.2 Details of Experience

- 3.2.1 The Bidder should furnish the required Project-specific information and evidence in support of its claim of Pre Qualification Capacity, as per the format at Annexure-1 to 6 of Appendix-V
- 3.2.2 The Bidder should furnish the required statutory auditor certificate in support of its Financial Capacity as per the format at Annexure 5 of Appendix V.
- 3.3 Financial information for purposes of evaluation

- 3.3.1 The Bid must be accompanied by the audited financial statements (of each Member in case of a Consortium) for 3 (three) financial years, preceding the year in which the Bid is made.
- 3.3.2 In case the annual accounts for the latest financial year are not audited and therefore the Bidder cannot make it available, the Bidder shall give an undertaking to this effect and the statutory auditor shall certify the same. In such a case, the Bidder shall provide the audited annual reports for 3(three) financial years preceding the year for which the audited annual report is not being provided.

SECTION - 4

4. Fraud and Corrupt Practices

- 4.1.1 The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process and subsequent to the issue of the LOA and during the subsistence of the Agreement. Notwithstanding anything to the contrary contained herein, or in the LOA or the Agreement, NMSCDCL may reject a Bid, withdraw the LOA, or terminate the Agreement, as the case may be, without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder or the Contractor, as the case may be, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process. In such an event, NMSCDCL shall be entitled to forfeit and appropriate the Bid Security or Performance Security, as the case may be, as Damages, without prejudice to any other right or remedy that may be available to NMSCDCL under the Bidding Documents and/ or the Agreement, or otherwise.
- 4.1.2 Without prejudice to the rights of NMSCDCL under clause 4.1 hereinabove and the rights and remedies which NMSCDCL may have under the LOA or the Agreement, or otherwise if a Bidder or Contractor, as the case may be, is found by NMSCDCL to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, or after the issue of the LOA or the execution of the Agreement, such Bidder or Contractor shall not be eligible to participate in any tender or RFP issued by NMSCDCL during a period of 2 (two) years from the date such Bidder, or Contractor, as the case may be, is found by NMSCDCL to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.
- 4.1.3 For the purposes of this Section 4, the following terms shall have the meaning hereinafter respectively assigned to them:

4.1.4 "Corrupt practice" means

- (a) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of NMSCDCL who is or has been associated in any manner, directly or indirectly, with the Bidding Process or the LOA or has dealt with matters concerning the Agreement or arising therefrom, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of NMSCDCL, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or
- (b) save and except as permitted under clause 2.2.1 of this RFP, engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Contract Agreement,

who at any time has been or is a legal, financial or technical adviser of NMSCDCL in relation to any matter concerning the Project;

- 4.1.5 "Fraudulent practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;
- 4.1.6 "Coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bidding Process;
- 4.1.7 "Undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by NMSCDCL with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
- 4.1.8 "Restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

SECTION - 5

5. Pre-Bid Conference

- 5.1 Pre-Bid conference of the Bidders shall be convened at the designated date, time and place. A maximum of 2 (two) representatives of prospective Bidders shall be allowed to participate on production of authority letter from the Bidder.
- 5.2 During the course of Pre-Bid conference(s), the Bidders will be free to seek clarifications and make suggestions for consideration of NMSCDCL. NMSCDCL shall endeavor to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process. However, NMSCDCL reserves the right not to respond to any question or provide any clarification, in its sole discretion and is not under any obligation to entertain/ respond to suggestions made or to incorporate modifications sought for.
- 5.3 The Bidder is advised, as far as possible, to submit the queries in writing or email and the same should be sent to NMSCDCL on or before the specified date in schedule of bidding process as set forth in the Schedule of this RFP.
- 5.4 The list of the questions raised and the responses given during the meeting together with any response prepared after the meeting will be hosted on https://mahatenders.gov.in
- 5.5 Pursuant to the Pre-Bid Conference, if NMSCDCL deems necessary to amend the Bidding Document, it shall be done by issuing amendment/ corrigendum pursuant to clause 2.9.

SECTION - 6

6 Miscellaneous

- 6.1 The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts in Nashik, Maharashtra shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Bidding Process.
- 6.2 NMSCDCL, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to;
 - (a) suspend and/ or cancel the Bidding Process and/ or amend and/ or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;
 - (b) consult with any Bidder in order to receive clarification or further information;
 - (c) retain any information and/ or evidence submitted to NMSCDCL by, on behalf of, and/ or in relation to any Bidder; and/ or
 - (d) independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any Bidder.
- 6.3 It shall be deemed that by submitting the Bid, the Bidder agrees and releases NMSCDCL, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder and the Bidding Documents, pursuant hereto, and/ or in connection with the Bidding Process, to the fullest extent permitted by applicable law, and waives any and all rights and/ or claims it may have in this respect, whether actual or contingent, whether present or in future.

APPENDIX I: Details of the Bidder

S. No.	Particulars	Details	
1	Name of the Bidder		
2.	Туре	Consortium/Company/partnership firm/LI proprietorship	P/Sole
3.	Certificate of incorporation (in case of consortium for each of the members)	Attach relevant documents	
4.	Address of Communication		
5.	Telephone Number with STD Code		
6.	Fax Number with STD Code		
7.	PAN (in case of consortium for each of the members)		
8.	GST No (in case of consortium for each of the members).		
9.	TAN (in case of consortium for Lead Bidder)		
10.	EPF Registration (in case of consortium for each of the members)		
11.	Landline Number(in case of consortium for Lead Bidder)		
12.	E-mail Address for all communications		
13.	Details of Authorized Representative		
14.	Name		
15.	Designation		
16.	Postal Address with pin code		
17.	Telephone Number with STD Code		
18.	Fax Number with STD Code		
19.	Mobile Number		
20.	E-mail Address		

	·	
8.	GST No (in case of consortium for each of the members).	
9.	TAN (in case of consortium for Lead Bidder)	
10.	EPF Registration (in case of consortium for each of the members)	
11.	Landline Number(in case of consortium for Lead Bidder)	
12.	E-mail Address for all communications	
13.	Details of Authorized Representative	
14.	Name	
15.	Designation	
16.	Postal Address with pin code	
17.	Telephone Number with STD Code	
18.	Fax Number with STD Code	
19.	Mobile Number	
20.	E-mail Address	
Signature	e of Bidder with Seal	
Date:		

APPENDIX II: Power of Attorney for signing the Bid

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

Know all men by these presents, We,(name and
address of the registered office of the Bidder as applicable) do hereby constitute, appoint and authorize
Mr. /Ms (name & residential address) who is presently employed with us
and holding the position of as our true and lawful attorney, to do
in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental
to submission of our Bid in response to the RFP No
issued by Nashik Municipal Smart City Development Corporation Limited (NMSCDCL), including
signing and submission of the Bid and all other documents related to the Bid, including but not limited
to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document
which NMSCDCL may require us to submit.
The aforesaid Attorney is further authorized for making representations to NMSCDCL and providing
information/ responses to NMSCDCL representing us in all matters before NMSCDCL and generally
dealing with NMSCDCL in all matters in connection with Bid till the completion of the Bidding
Process.
We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of
Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and
shall always be deemed to have been done by us.
All the terms used herein but not defined shall have the meaning ascribed to such terms under the RFP.
Signed by the within named
Through the hand of
Mr
Duly authorized by the Board to issue such Power of Attorney
Dated this
Accepted
Signature of Attorney
(Name, designation and address of the Attorney)
(1. mins, avaignment mile manzess of mo 1. montes)
Attested

(Signature of the executants)				
(Name, designation and address of the executants)				
Signature and stamp of Notary of the place of execution				
WITNESS				
(Signature)				
Name				
Designation				
(Signature)				
Name				
Designation				

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 executants(s) and the same should be under common seal of the executants affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by the executants(s) in this regard.
- Also, wherever required, the executants(s) should submit for verification the extract of the chartered documents and documents such as a Board resolution/power of attorney, in favour of the person executing this power of attorney for delegation of power hereunder on behalf of the executants(s).

APPENDIX IIA: POWER OF ATTORNEY FOR LEAD BIDDER BY THE OTHER CONSORTIUM MEMBER

(On Non- Judicial Stamp paper of appropriate value to be purchased in the name of Consortium)

with infrastructure	
being Members of t	t (the "Authority") has invited bids for the redevelopment of Major & Minor Roads utility services including sewerage in ABD Area under Nashik Smart City Mission htra). Whereas,, and(collectively the "Consortium") he Consortium are interested in bidding for the Project in accordance with the terms he Request for Proposal and other connected documents in respect of the Project,
Member with all n	essary for the Members of the Consortium to designate one of them as the Lead ecessary power and authority to do for and on behalf of the Consortium, all acts, may be necessary in connection with the Consortium's bid for the Project and its
NOW THEREFOR	E KNOW ALL MEN BY THESE PRESENTS
, and M/s. and addresses of "Memebrs of the authorise M/s Consortium, as the	g our registered office at, M/s, having our registered office at, having our registered office at, {insert the respective names the registered office of members} (hereinafter collectively referred to as the Consortium") do hereby irrevocably designate, nominate, constitute, appoint and, having its registered office at, being one of the Members of the Lead Member and true and lawful attorney of the Consortium (hereinafter referred
to as the "Attorney	").
·	").
Accordingly: (1) We hereby irrefor and on beha (2) in the event the regard, to do or as are necessary not limited to a. sighting b. particle c. red. significant designificant designi	vocably authorise the Attorney (with power to sub-delegate) to conduct all business lf of the Consortium and us during the bidding process., Consortium is awarded the Project, during the execution of the Project, and in this our behalf and on behalf of the Consortium, all and any such acts, deeds or things or required or incidental to the submission of its bid for the Project, including but gning and submission of all applications, bids and other documents and writings, articipate in bidders' meetings and other conferences, spond to queries, submit information/ documents, and execute contracts and undertakings consequent to acceptance of the bid of
Accordingly: (1) We hereby irrefor and on beha (2) in the event the regard, to do or as are necessary not limited to a. sighting b. pactor red. sighting generally to reduce the control of the control	vocably authorise the Attorney (with power to sub-delegate) to conduct all business lf of the Consortium and us during the bidding process., Consortium is awarded the Project, during the execution of the Project, and in this our behalf and on behalf of the Consortium, all and any such acts, deeds or things or required or incidental to the submission of its bid for the Project, including but gaing and submission of all applications, bids and other documents and writings, articipate in bidders' meetings and other conferences, spond to queries, submit information/ documents, and execute contracts and undertakings consequent to acceptance of the bid of the Consortium and present the Consortium in all its dealings with the Authority, and/ or any other by or any person, in all matters in connection with or relating to or arising out of the bid for the Project and/ or upon award thereof till the Contract Agreement is entered

us/Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF 20**.

For	
(Signature)	
(Name & Title)	
For	
(Signature)	
(Name & Title)	
For	
(Signature)	
(Name & Title)	
(Example 11)	
(Executants)	
(To be executed by all the Members of the Consortium)	
Witnesses:	[Notarised]
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 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.
- Power of Attorney should be executed on a non-judicial stamp paper of appropriate value as relevant to the place of execution(if required under applicable laws).

APPENDIX IIB: Consortium Agreement (Refer Clause 2.2.1 (c) (vi))

(Refer Clause 2.2.1 (c) (vi))
(To be executed on Stamp paper of appropriate value)
THIS CONSORTIUM AGREEMENT is entered into on this the day of
AMONGST
1. {, a [company / LLP/partnership firm] incorporated under the} 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. {, a [company / LLP/partnership firm] incorporated under the} and having its registered office at (hereinafter referred to as the "Second Part" which expression shall unless repugnant to the context include its successors and permitted assigns)
AND
3. {, a [company / LLP/partnership firm] incorporated under the} 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 the SECOND PART and the THIRD PART are collectively referred to as the " Parties " and each is individually referred to as a " Party ".
WHEREAS,
(A) The Nashik Municipal Smart City Development Company Limited (hereinafter referred to as the "Authority" which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) has invited bids (the "Bids") by its Request for Proposal No
(B) The Parties herein are interested in jointly bidding for the Project as members of a Consortium and in accordance with the terms and conditions of the RFP and other Bidding Documents in respect of the Project, and
(C) As per Clause 2.2.21 (c) (vi) it is a necessary condition under the RFP that the members of the

Consortium shall enter into a Consortium Agreement and furnish a copy thereof with the Bid.

NOW IT IS HEREBY AGREED:

1. Definitions and Interpretations

In this Agreement, the capitalised terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the Bidding Documents.

2. Consortium

- 2.1 The Parties do hereby irrevocably constitute a consortium (the "Consortium") 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 Consortium and not individually and/ or through any other consortium constituted for this Project, either directly or indirectly or through any of their Associates.

3. Role of the Parties

3.1 The Parties hereby undertake that Party of the First Part shall be the Lead Member and shall have the Power of Attorney from all the Second Party for conducting all business for and on behalf of the Consortium during the Bidding Process and until the effective date under the Contract

Agreement when all the obligations shall become effective.

- 3.2 As per the requirement set out in Clause 2.2.1 (c) (vii) of the RFP:
 - (a) the Lead Member shall perform the following role:

 $[\bullet]$

(b) Consortium Member 1 shall perform the following role:

 $[\bullet]$

(c) Consortium Member 2 shall perform the following role:

4. 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 till the occurrence of the Effective Date in accordance with the Contract Agreement and shall indemnify the Authority for any losses, damages, claims suffered by the Authority as a result of default of performance of the obligations of either Party of this Consortium. In event of such default or loss, damage, claim suffered by the Authority, it may take action against the Consortium together and/or against either Party.

5. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- a) Such Party is duly organised, 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 authorised by all necessary and appropriate corporate or Authority 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 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 organisational documents thereof;
- (iv) violate any clearance, permit, concession, grant, license or other Governmental authorisation, 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.

6. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until the effective date is achieved under and in accordance with the Contract Agreement, in case the Project is awarded to the Consortium. However, in case the Consortium is either not prequalified for the Project or does not get selected for award of the Project, the Agreement will stand terminated in case the Bidder is not pre-qualified or upon return of the Bid Security by the

Nashik Municipal Smart City Development Corporation Limited

Authority to the Bidder, as the case may be.

7. Miscellaneous

- 7.1 This Consortium Agreement shall be governed by laws of India.
- 7.2 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.

SIGN	NED, SEALED AND DELIVERED	SIGNED, SEALED AND DELIVERED	
For a	and on behalf of	For and on behalf of	
LEA	D MEMBER by:	SECOND PART	
(Sign	nature)	(Signature)	
(Nan	ne)	(Name)	
(Desi	ignation)	(Designation)	
(Add	ress)	(Address)	
CICN	IED GEALED AND DELIVEDED		
	NED, SEALED AND DELIVERED		
	and on behalf of		
	RD PART by:		
(Sign	nature)		
(Nan	ne)		
(Desi	ignation)		
(Add	ress)		
In the	e presence of:		
1.		2.	
Notes	s:		
1.	The mode of the execution of the Consortium 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 Consortium Agreement should attack	h 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

Member.	
•	

APPENDIX III: Statement of Legal Capacity

(To be forwarded on the letterhead of the Bidder)

Ref.	Date:
To,	
Chief Executive Officer Nashik Municipal Smart City Development Corporation Limited 4th Floor, Panditrao Khaire Panchvati Divisional Office, Nashik Municipal Corporation, Makhamalabad Naka, Panchavati, Nashik	
Dear Sir,	
We hereby confirm that we satisfy the terms and conditions laid out in the F	RFP.
We, as a consortium, hereby appoint [●]. (Insert individual's name and de act as authorized signatory for submission of the bid as well as such do required with respect to RFP. Further, the authorized signatory is vested with such letter and authenticate the same.	cuments, letters, contracts
Thanking you,	
Yours faithfully, [●]	

APPENDIX IV: Format for Declaration by the Bidder for not being Blacklisted / Debarred/ Terminated

(In case of consortium, to be provided by all the members of the Consortium)

(On the non-judicial stamp paper of appropriate value)

Date: [●]
То
Chief Executive Officer 4rth Floor, Panditrao Khaire Panchvati Divisional Office, Nashik Municipal Corporation, Makhamalabad Naka, Panchavati, Nashik
Subject: Declaration for not being debarred/ black-listed/terminated by Central/ any State Government department in India as on the date of submission of the Bid
RFP Reference No: XXXX
Dear Sir,
I, authorized representative/signatory of the company/consortium
In the event of any deviation from the factual information/ declaration, NMSCDCL reserves the right to reject the Bid or terminate the Contract without any compensation.
Thanking you.
Yours faithfully,
Signature of Authorized Signatory (with official seal) Date: Name: Designation: Address: Telephone & Fax: E-mail address

APPENDIX V:Letter comprising the Pre-Qualification Bid

(Refer Clause 2.12.1)

To

Chief Executive Officer
4rth Floor, Panditrao Khaire Panchvati Divisional Office,
Nashik Municipal Corporation,
Makhamalabad Naka,
Panchavati,
Nashik

Subject:Application for Pre-Qualification Bid for Selection of a Contractor for Godavari Riverfront Development in ABD Area under Nashik Smart City Mission, Nashik, Maharashtra

Dear Sir,

With reference to your RFP dated [•], we, having examined the document and understood its contents, hereby submit our Bid for the aforesaid Project. The Bid is unconditional and unqualified.

- 1. I acknowledge that NMSCDCL will be relying on the information provided in the Bid and the documents accompanying such Bid for selection of the Bidders for the aforesaid project, and we certify that all information provided in the Bid and in Annexure 1 to 5 of Appendix V is true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying such Bid are true copies of their respective originals.
- 2. This statement is made for the express purpose of qualifying as a Bidder for undertaking:
 - (a) Part A which includes Defect Liability Period of 5 (five) years;
 - (b) Part B which includes an O&M Period of Three Years;
 - (c) Part C which includes an O&M Period of three years and Defect Liability Period of 5 (five) years and
 - (d) Part D which includes an O&M Period of three years and Defect Liability Period of 5 (five) years.
- 3. I shall make available to NMSCDCL any additional information it may find necessary or require to supplement or authenticate the qualification statement.
- 4. I acknowledge the right of NMSCDCL to reject our Bid without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
- 5. I certify that in the last 3 (three) years, we have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial employer or a judicial pronouncement or arbitration award, nor been expelled from any project or contract by any public employer nor have had any contract terminated by any public employer for breach on our part.
- 6. I declare that:

- (a) I have examined and have no reservations to the RFP, including any Addendum issued by NMSCDCL.
- (b) I do not have any conflict of interest in accordance with Clause 2.2.1(b) and I am not disqualified in accordance with the provisions of Clause 2.2.1(c) of the RFP.
- (c) I have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in Clause 4.3 of the RFP, of any tender or request for proposal issued by or any agreement entered into with NMSCDCL or any other public sector enterprise or any government, Central or State; and
- (d) I hereby certify that we have taken steps to ensure that in conformity with the provisions of Section 4 of the RFP, no person acting for us or on our behalf has engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
- 7. I understand that you may cancel the Bidding Process at any time and that you are neither bound to accept any Bid that you may receive nor to invite the Bidders to Bid for the Project, without incurring any liability to the Bidders, in accordance with Clause 2.16.9 of the RFP.
- 8. I believe that we satisfy the Net Worth criteria and meet all the requirements as specified in the RFP document and are qualified to submit a Bid.
- 9. I certify that in regard to matters other than security and integrity of the country, we have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory employer which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.
- 11. I further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law.
- 12. I further certify that no investigation by a regulatory authority is pending either against us or against our CEO or any of our directors/ managers/ employees.
- 13. I further certify that we are not barred by the Central/ State Government or any entity controlled by it, from participating in any project, and that no bar subsists as on the date of Bid.
- 14. I further certify that we are qualified to submit a Bid in accordance with the guidelines for qualification of bidders seeking to acquire stakes in Public Sector Enterprises through the process of disinvestment issued by the GOI vide Department of Disinvestment OM No. 6/4/2001-DD-II dated 13th July, 2001 which guidelines apply *mutatis mutandis* to the Bidding Process. A copy of the aforesaid guidelines form part of the RFP at Appendix-VII thereof.

15. I undertake that in case due to any change in facts or circumstances during the Bidding Process, we are attracted by the provisions of disqualification in terms of the provisions of this RFP, we

shall intimate NMSCDCL of the same immediately.

16. The Statement of Legal Capacity as per format provided at Appendix-IV of the RFP and duly signed, is enclosed. The power of attorney for signing of Bid, as per the format provided at

Appendix II of the RFP is also enclosed.

I certify that the Bidder (Lead bidder in case of consortium) is an existing Company 17.

incorporated under the {Indian Companies Act, 1956/ Indian Companies Act, 2013}.

18. I hereby irrevocably waive any right or remedy which we may have at any stage at law or

howsoever otherwise arising to challenge or question any decision taken by NMSCDCL in connection with the selection of Bidders, selection of the Successful Bidder, or in connection

with the selection/ Bidding Process itself, in respect of the above mentioned Project and the

terms and implementation thereof.

19. The documents accompanying the Pre-Qualification Bid, as specified in Clause 2.12.1 of the

RFP, have been submitted in separate files online on the procurement portal and is submitted

in hard copy at the address set forth in Clause 2.13.1.

20. I offer a Bid Security of INR 27,53,000/- (Rupees Twenty Seven Lakhs Fifty Three Thousand

Only) to NMSCDCL in accordance with the RFP.

21. I agree and undertake to abide by all the terms and conditions of the RFP.

22. I certify that in terms of the RFP, our Net worth of INR [•] (Rupees. In words) is positive.

I undertake to engage personnel specialized/ sub-contractors for design and construction of 23.

those elements of the Project for which we do not have adequate experience.

24. I agree and undertake to be jointly and severally liable for all the obligations of the Contractor

under the Contract Agreement.

25. I hereby submit our Bid and offer a Bid Price as indicated in Financial Bid for undertaking the

aforesaid Project in accordance with the Bidding Documents and the Agreement.

26. I shall keep this offer valid for 180 (one hundred and eighty) days from the Bid Due date

specified in the RFP.

In witness thereof, we submit this bid under and in accordance with the terms of the RFP.

Yours faithfully,

Place: (Signature, name and designation of the Authorised Signatory)

Date: {Name and seal of the Bidder}

ANNEXURE 1: Details of work tendered for and in hand as on the date of submission of this RFP

NAME OF THE BIDDER:

			Work i	n hand		Works tendered for			
			Tendered	Cost of	Anticipated		Date when	Stipulated	
Sr.	Name of work	Place	cost	remaining	date of	Estimated	decision is	date or	Remarks
No.		and		work	completion	cost	expected	period of	
		Country						completion	
1	2	3	4	5	6	7	8	9	10

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

ANNEXURE 2: Details of works carried out by the Bidder

NAME OF THE BIDDER:

Sr.	Name of work	Cost of work	Date of starting	Stipulated date of		Remarks
No.				completion	completion	
1	2	3	4	5	6	7

ANNEXURE 3: Details of plants and machinery immediately available with the Bidder

NAME OF THE BIDDER:

Sr. No.	Name of equipment	No. of units	Kind and make	Capacity	Age and condition	Present location	Remarks
1	2	3	4	5	6	7	8

ANNEXURE 4: Details of technical personnel available with the Bidder.

NAME OF THE BIDDER:

Sr. No.	Name of the person	Qualification	Whether working in field or office	Experience of execution of similar works	Period for which the person is working with the Bidder	Remarks
1	2	3	4	5	6	7

NOTE: The specific persons proposed to be deployed for this Site shall be nominated as Resident Engineer, Quality Control Engineer etc. along with Photographs, Signed Bio-data and Certificates.

Minimum Qualification

ANNEXURE 5: Financial capacity of the Bidder

(Refer Clause (C), 2.2 of the RFP)

Part I:

	Financial Year	Financial Year	Financial Year
	2015-2016	2016- 2017	2017- 2018
Average Turnover			

Note: To be supported by audited financial statements of the organization duly certified by a Chartered Accountant.

Part II:

	Financial Year preceding the Bid Due Date
Net Worth	

Note: To be supported by certificate from statutory auditors of the Bidder specifying the positive Net Worth along with the details of computation of the Net Worth.

ANNEXURE 6: Approach and Methodology.

(Refer Clause 3.1.54 of the RFP)

Bidders to provide details of:

- (a) proposed plan including timeframe for performing various tasks in accordance with the scope of work as set out in Appendix X;
- (b) details of technology to be adopted by the Bidder for undertaking this Project;
- (c) flow chart of process setting out the manner in which the Bidder shall undertake the Project; and
- (d) manner in which the Bidder proposes to tackle the sludge in order to successfully undertake the Project.

Nashik Municipal Smart City Development Corporation Limited 64 \mid P a g e

APPENDIX VI: Letter comprising the Financial Bid

(*Refer Clause 2.12.1*))

(To be submitted only online in separate folder named Financial Bid)

Subject: Financial Bid for Selection of a Contractor for Godavari Riverfront Development in ABD Area under Nashik Smart City Mission, Nashik, Maharashtra

Dated: [●]

Dear Sir,

With reference to your RFP document dated [•], {I/we}, having examined the Bidding Documents and understood their contents, hereby submit {my/our} BID for the aforesaid Project. The Bid is unconditional and unqualified.

- I acknowledge that NMSCDCL will be relying on the information provided in the Bid and the
 documents accompanying the Bid for selection of the Contractor for the aforesaid Project, and we
 certify that all information provided in the Bid are true and correct; nothing has been omitted which
 renders such information misleading; and all documents accompanying the Bid are true copies of
 their respective originals.
- 2. I undertake that the prices are in conformity with the specifications prescribed. The quote/ price are inclusive of all cost likely to be incurred for executing this Project. The prices are inclusive of all type of government taxes/duties as may be applicable for undertaking this Project.
- 3. I undertake, if our Bid is accepted, to complete the Project in adherence to the Bidding Document.
- 4. I have examined and have no reservations to the Bidding Documents, including any corrigendum/addendums issued by NMSCDCL.
- 5. I hereby declare that in case the contract is awarded to us, we shall submit the performance security and additional performance security, if applicable, as prescribed in the Bidding Document.
- 6. I agree to abide by this Bid for a period of 180 (One Hundred and Eighty) days from the Bid Due Date and it shall remain binding upon us and may be accepted at any time before the expiry of that period.
- 7. I hereby declare that in case the LOA is awarded to us and accepted by us and until a formal contract is prepared and executed, this Bid, together with NMSCDCL written acceptance thereof and notification of award by NMSCDCL shall constitute a binding contract between us.

- 8. I hereby declare that our Bid is made in good faith, without collusion or fraud and the information contained in the Bid is true and correct to the best of our knowledge and belief.
- 9. I understand that NMSCDCL is not bound to accept the lowest or any bid it may receive. We agree to all the terms and conditions as mentioned in the Bidding Document and certify that we have not submitted any deviations in this regard.
- 10. In case of any discrepancy between words and figures, the words shall prevail over the figures.

In witness thereof, we submit this Bid under and in accordance with the terms of the RFP.

Yours faithfully,

Name of the Authorised Signatory: Designation of the Authorised Signatory: Seal of the Bidder

Financial Proposal Format and Instructions

To be submitted on e-Tendering Portal only

RFP Reference No: [●]

:

I/We quoted my/our offer as at par or [●] percent above or [●] percent below the Estimated Project Cost i.e. [•]/- (Rupees [•] Only).

APPENDIX VII: Format of sending pre-bid queries

RFP No: [●]

Bidd	Bidder's Request For Clarification								
Name and complete official address of				Telephone, Fax and E-mail of the organization					
Orgai	nization sub	mitting query / i	request	Tel:					
for cl	arification		•	Fax:					
				Email:					
				21111111					
Sr.	Clause	Page No.	Conte	nt of	RFP	Clarification	required/	Change	
No.	No.		Requi	ring Clarifi	ication/	Requested	-	S	
			change	O		•			
1									
2									

Signature:

Name of the Authorized signatory:

Company seal:

Date and Stamped

Note: Bidder(s) are requested to send the queries in PDF with Sign and Company Seal and also in MS Excel for making consolidation process easy.

APPENDIX VIII-A: Format for Performance Security

(Refer Clause 2.26 of the RFP)

(To be on non-judicial stamp paper of appropriate value)

- In consideration of the ----- [Insert name of the Bidder] submitting the response to the RFP for Selection of a Contractor for Godavari Riverfront Development in ABD Area under Nashik Smart City Mission, Nashik, Maharashtra (RFP no. [●] dated [●]) issued by Nashik Municipal Smart City Development Corporation Limited (hereinafter referred to as "NMSCDCL") and NMSCDCL considering such response to the RFP of {insert the name of the Selected Bidder} (which expression shall unless repugnant to the context or meaning thereof include its executers, administrators, successors and assignees) and selecting the {insert name of the Selected Bidder} and issuing LOA dated [●] as per the terms of RFP and the same having been accepted by {insert name of the Selected Bidder}.
- 2 As per the terms of the RFP, {insert name & address of the bank} (hereinafter referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to NMSCDCL forthwith on demand in writing from NMSCDCL or any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees [•] [Total Value] only, on behalf of {Insert name of the Selected Bidder}
- This guarantee shall be valid and binding on this Guarantor Bank up to and including [•] and shall not be terminable by notice or any change in the constitution of the Guarantor Bank or the changes in the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

4	Our liability under this Guarantee is restricted to INR
5	Our Guarantee shall remain in force until NMSCDCL shall be entitled to invoke this Guarantee till
6	The Guarantor Bank hereby agrees and acknowledges that NMSCDCL shall have a right to invoke this

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by NMSCDCL, made in any format, raised at the above-mentioned address of the Guarantor Bank, in order to make the said payment to NMSCDCL.

BANK GUARANTEE in part or in full, as it may deem fit.

	P in relation to Selection of a Contractor for Godavari Riverfront Development in ABD Area under shik Smart City Mission, Nashik Maharashtra
8	The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by [Insert name of the Selected Bidder]. The Guarantor Bank shall not require NMSCDCL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against NMSCDCL in respect of any payment made hereunder
9	This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Nashik shall have exclusive jurisdiction.
10	The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.
11	This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.
12	This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly NMSCDCL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the [insert the name of the Selected Bidder] to make any claim against or any demand on the Selected Bidder or to give any notice to [insert the name of the Selected Bidder] or to enforce any security held by or to exercise, levy or enforce any distress, diligence or other process against the Selected Bidder.
13	Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to INR (Rs only) and it shall remain in force until
Sig	nature
Na	me
Po	wer of Attorney No
For	•
	[Insert Name of the Bank]

Nashik Smart City Mission, Nashik Maharashtra
Banker's Stamp and Full Address.
Dated this day of, 20
Witness:
1
Signature
Name and Address
2
Signature
Name and Address

RFP in relation to Selection of a Contractor for Godavari Riverfront Development in ABD Area under

ANNEXURE 1: Check list for Performance Security

Sr. No.	Details of checks	YES/NO
A	Is the Bank Guarantee ("BG") on non-judicial Stamp paper of appropriate value, as per applicable stamp Act of the place of execution	
В	Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on the stamp paper? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the party on whose behalf the BG has been issued.).	
C	Has the executing Officer of BG indicated his name, designation and Power of Attorney No. /Signing Power no./ other similar authorisation on the BG?	
D	Is each page of BG duly signed / initialed by executants and whether stamp of Bank is affixed thereon? Whether the last page	
Е	Does the Bank Guarantees compare verbatim with the Performa prescribed in the RFP?	
F	Are the factual details such as RFP No. amount of BG and validity of BG correctly mentioned in the BG	
G	Whether overwriting/cutting if any on the BG have been properly authenticated under signature & seal of executants?	
Н	Contact details of issuing bank including details of Branch Manager, email id, mobile number etc.	
Ι	Is the Jurisdiction of Court is restricted to Courts of Nashik	

APPENDIX VIII-B: Format for Bank Guarantee for Mobilization Advance

	То	
	Chief Executive Officer 4th Floor, Panditrao Khaire Panchvati Divisional Office, Nashik Municipal Corporation, Makhamalabad Naka, Panchavati, Nashik	
1	Gentlemen: In accordance with the provisions of Clauses 3.2 of the SCC consideration of the Chief Executive Officer, NMSCDCL, Nashik (hereinafter called "NMSCDCL"), has agreed to give interest bearing mobilization advance @ 10% PA to INR (In Words: Rupees) as against the total amount of INR (In Words: Rupees) to	
	M/shereinafter called the said "Contractor" based on the letter of award No	
2	Accordingly, the Contractor shall deposit with the Authority, a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of INR (Rupees [•] only).	
3	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 NMSCDCL or the first demand from the CEO, NMSCDCL or an authorised person, without whatsoever right of obligation on our part and without their first claim to the Contractor, in the amount not exceeding INR (Rupees [•] only).	
4	We further agree that no change or addition to or other modification of the terms of the Contractor or Works to be performed thereunder or of any of the Contract documents which may be made between NMSCDCL 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.	
5	This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until NMSCDCL receives full repayment of the same amount from the Contractor.	
	Yours truly, Signature and Seal : _ Name of Bank / Financial Institution: Address: Date :	

APPENDIX –IX: Guidelines of the Department of Disinvestment

(Refer Clause 1.2.1 of the RFP)

No. 6/4/2001-DD-II

Government of India Department of Disinvestment

Block 14, CGO Complex

New Delhi. Dated 13th July, 2001

OFFICE

MEMORANDUM

Sub: Guidelines for qualification of Bidders seeking to acquire stakes in Public Sector Enterprises through the process of disinvestment Government has examined the issue of framing comprehensive and transparent guidelines defining the criteria for bidders interested in PSE-disinvestment so that the parties selected through competitive bidding could inspire public confidence. Earlier, criteria like net worth, experience etc. used to be prescribed. Based on experience and in consultation with concerned departments, Government has decided to prescribe the following additional criteria for the qualification/ disqualification of the parties seeking to acquire stakes in public sector enterprises through disinvestment:

- (a) In regard to matters other than the security and integrity of the country, any conviction by a Court of Law or indictment/ adverse order by a regulatory authority that casts a doubt on the ability of the bidder to manage the public sector unit when it is disinvested, or which relates to a grave offence would constitute disqualification. Grave offence is defined to be of such a nature that it outrages the moral sense of the community. The decision in regard to the nature of the offence would be taken on case to case basis after considering the facts of the case and relevant legal principles, by the Government of India.
- (b) In regard to matters relating to the security and integrity of the country, any charge- sheet by an agency of the Government/ conviction by a Court of Law for an offence committed by the bidding party or by any sister concern of the bidding party would result in disqualification. The decision in regard to the relationship between the sister concern would be taken, based on the relevant facts and after examining whether the two concerns are substantially controlled by the same person/persons.
- (c) In both (a) and (b), disqualification shall continue for a period that Government deems appropriate.
- (d) Any entity, which is disqualified from participating in the disinvestment process, would not be allowed to remain associated with it or get associated merely because it has preferred an appeal against the order based on which it has been disqualified. The mere pendency of appeal will have no effect on the disqualification.
- (e) The disqualification criteria would come into effect immediately and would apply to all bidders for various disinvestment transactions, which have not been completed as yet.

- (f) Before disqualifying a concern, a Show Cause Notice why it should not be disqualified would be issued to it and it would be given an opportunity to explain its position.
- (g) Henceforth, these criteria will be prescribed in the advertisements seeking Expression of Interest (EOI) from the interested parties. The interested parties would be required to provide the information on the above criteria, along with their Expressions of Interest (EOI). The bidders shall be required to provide with their EOI an undertaking to the effect that no investigation by a regulatory authority is pending against them. In case any investigation is pending against the concern or its sister concern or against its CEO or any of its Directors/ Managers/ employees, full details of such investigation including the name of the investigating agency, the charge/ offence for which the investigation has been launched, name and designation of persons against whom the investigation has been launched and other relevant information should be disclosed, to the satisfaction of the Government. For other criteria also, a similar undertaking shall be obtained along with EOI.

Sd/-

(A.K. Tewari) Under Secretary to the Government of India)

APPENDIX X: Scope of Work

Beautification Projects including civil, horticultural and electrical works with O&M- Landscape, cycle track, cobblestone paving, stone benches, signage etc.

1. Goda Garden

Goda Garden is an important part of Goda riverfront area. It is a green themed garden to be developed as a multipurpose park for leisure and recreation of the visitors. Cycle track, walkway, amphitheater and a pavilion with a small eatery are the main components that are proposed to be developed in the Goda Garden. It would offer people many avenues to enjoy the charm of the Godavari River.

Scope of Work:

- Construction of entrance plaza consisting of five pillars and gabion signage along with compound wall and railing, security and administration cabins and control rooms.
- Laying of the natural stone tile/pavement, as per the specifications, for developing the multifunctional walkway as per the alignment provided in the drawings.
- Constructing an amphitheater facing the river with water body for water screen.
- Constructing the arched pavilion/open air restaurant as per the specifications.
- Installing the artificial gabion benches as per the drawing details.
- Repairing the existing gabion wall along the river wherever it is broken or weakened and constructing the gabion wall on parts of this stretch where it is non-existent.
- Constructing a retaining wall with railing to strengthen the gabion along the bank side and a drain
 to channelize all the water flowing from the bank towards the river, and directing it towards the
 recharge pits.
- Electrical works including procuring and installing the lamp posts with LED light fittings and ambient Light Fittings along with establishment of electrification network for the same.
- Costructing access to river bed and providing a floating jetty with adequate ticketing and Life guard facilities.
- Constructing waterbodies in the form of bubbler jet fountains, Fog mist fountain cum reflecting pool and water screen for projection mapping as per the specifications.
- Construction of walls with murals signifying the Heritage walk within the park.
- Construction of steps and ramps for universal access to all the features of the park.
- Construction of Children Play area with natural stones to create natural playgrounds.

2. Goda Walk Area

It is the extended part of Goda Park, which is narrower but a longer stretch. It starts from the small bridge over a nallah and reaches up to the Holkar Bridge. It is designed to promote walking.

Scope of Work:

• Laying of the natural stone tile/pavement, as per the specifications, for developing the

- multifunctional walkway as per the alignment provided in the drawings.
- Construction of Stone pillars and murals to signify the transition from the recreational area of Goda Park to the religious area of Goda Ghats as per the specifications.
- Installing the artificial gabion benches and steel pipe benches around the existing manholes as per the drawing details.
- Electrical works including procuring and installing the lamp posts with LED light fittings and ambient Light Fittings along with establishment of electrification network for the same.
- Location for placing Bollard
 The Bollards are placed at every 3m at various places such as near Sambhaji Udyan, on both the Ghats from Victoria Bridge to Amardham Bridge.
- Installation of Gate and security Cabin at the entrance of the walkway as per specifications.
- Landscaping as mentioned separately in its scope of work.
- Provision of water supply lines for gardening, including pipe network and necessary fixtures as directed by NMSCDCL.
- Repairing the existing gabion wall along the river wherever it is broken or weakened and constructing the gabion wall on parts of this stretch.

3. Construction of Sundar Narayan temple Ghat and Jetty

Sundar Narayan Temple Ghat

Ghat from Sunder Narayan temple to Godavari River is proposed to establish direct visual and physical connectivity of Sunder Narayan temple with the Godavari and reclaim its lost historic character. In addition, a jetty is provided to establish connectivity between both the river banks.

Its location also provides an opportunity to develop the area from the temple to the river banks as a place making initiative. Development of Sundar Narayan Ghat is aimed to develop Ghat area as multi-activity space.

Elements of Sunder Narayan Ghat:

Ghat at Sunder Narayan temple are proposed to integrate the temple complex with the Godavari river bank opposite the temple. The Ghats will descend to the open plaza and further go down up to the proposed jetty. On left side of Ghats is a park that is re-designed that is to be redeveloped.

- a) Ghat from Temple up to Jetty point: The Sundar Narayan Temple is situated at same elevation as that of Holkar Bridge. Currently, there is flight of stairs adjacent to the bridge, between the bridge and Sunder Narayan Temple. New proposed Ghat will start from the side of the temple and reach up to the level of existing road which is proposed to be developed as a plaza which will be acting as buffer space between Ghat, garden and the jetty which is proposed to be crossing over to Gandhi Talao area. Further down, Ghat will pave the way for the jetty.
- b) **Jetty:** a walkway from the land to a water body is proposed near the Sundar Narayan Temple ghat for undertaking the boat rides in Godavari River. These boat rides are aimed at promoting tourism and recreational avenues at Godavari Riverfront.
- c) The jetty at proposed at Sundar Narayan ghat is designed as a floating jetty to accommodate the fluctuating water levels in the Godavari

- d) One ticket booth and one cabin for the life guard shall be required for operational purpose. Also, an existing public toilet is relocated and redesigned as amenities for the visitors to the ghat and boating. The responsibility of availing permission of various concerned authority vests with the Contractor.
- e) Garden redevelopment: The existing garden is redesigned in harmony with the design of ghat and jetty. It is created as a recreational space for Children and Senior citizens. The walls of the garden have murals
- **f) Ticket Booth:** The boat ride from the jetty would be charged and hence a FRP ticket booth is proposed.
- g) **Life Guard room:** Safety of the tourists is always being at the top priority. It is important that a life guard with all required safety equipment is stationed near the jetty and hence a FRP life guard room is proposed. The requisite permission has to be sought by the Contractor.

Scope of Work

- Construction of Ghat from Sundar Narayan temple up to jetty at river as per the design, detailed drawings and specifications
- Obtaining permission from the concerned tree authority for the trees that may be needed to be removed/replanted and carrying out the removal/replantation of trees as per the permissions
- Ensuring that construction of Ghats is carried out in co-ordination of other sub-projects such as jetty, that are being constructed as part of Project Goda river development at that location.
- Taking all care that no damage is caused to the temple or any existing nearby structure.

4. Beautification of Goda Ghats

Goda Ghats is the section of Godavari riverfront from Holkar Bridge up to Gadge Maharaj Bridge as it has famous Godavari Ghats and Kunds. The riverbed, mainly the Kunds, in this part of Godavari has been heavily concretized in the past, which has caused river to lose its original flow and regime. Therefore, it is proposed to de-concretize the riverbed in Kunds and Gandhi talao – a large pond in the Goda Ghat area. Apart from removing the concrete from the Kund bed, Nirmalya kunds are proposed along the Ghats for Nirmalya visarjan (disposing off the Nirmalaya in a flowing water) to reduce pollution in the river. Beyond the Ghats near Sita Kund, trees are proposed to be planted at regular intervals in movable planters on both the banks. Some Parts of ghat steps are proposed to be reshaped for better functionality without encroaching into the current water course. Away from the Ghats natural stone paving is to be laid in as per specifications. Beyond the Gadge Maharaj Bridge the area above the ghats is painted with grey epoxy paint and white thermoplastic stripes in a defined manner. On the right bankwhen we are facing upstream, a row of Deepstambhas starting from Naroshankar Mandir to the Amardham Bridge is proposed at relevant locations as specified. The Deepstambhas are connected by a series of stone bollards with provision for chains acting as a barrier as and when required. A 0.15m in height stone divider runs along this bollard and Deepstambja assembly to visually demark the religious zone from the rest of the area. A parking area is proposed beyond the Gadge Maharaj Bridge on the bank for two wheelers and four wheelers, a proper entry and exit is marked for the vehicles. Area is allocated for Electric vehicles which would play in the pedestrian zone thus created. A small raised island and with other small islands are created for facilitating vehicular movement in this area. The raised island has trees planted on it to act as a shaded platform. A tree line is proposed along the road parallel to the Ghat area as specified in the drawings.

On the left bank when we are facing upstream, Deepstambhas start from the Gandhi Talao to the Modkeshwar mandir with intermittent bollards. The Area near Modakeshwar mandir is developed as a Ramayan Circuit Garden consisting of miniatures and landscaping with adequate lighting.

Scope of Work:

- Removal of concrete from the riverbed in Gandhi Talao and Kunds from Holkar Bridge to Talkuteshwar Bridge
- Reconstruction of ghat steps near Gopikabai cha taas, Lakshman Kund, and other locations in Basalt stone upto Gadge Maharaj bridge as per the specifications
- Reconstruction of L-shaped flight of steps near the changing room which leads to the Ram Kund
- Construction of Nirmalya kunds and laying of piped network to allow the discharge of water from Nirmalya Kunds to storm water drain network.
- Laying natural stone paving with anchorage as per the drawings
- Painting of the Area adjoining the ghats from Modkeshwar Mandir to Amardham Bridge
- Construction of Deepstambhas, bollards and divider as per specifications and the design provided in drawings
- Construction of traffic islands as specified in the drawings.
- Provision of security cabin for parking and Electric cars.
- Proviion of necessary electrical network with lights fixtures and High mast providing and repairing, overhauling of High Mast lighting along the ghat.
- De-Concretization

The concretization of the ghat area that includes the concrete platform along both sides of the river bank, steps and the platform in the midst of the river bed as well as the river bed itself from Holkar bridge to the Amardham bridge was executed using various techniques and methods due to varying profile of the river bed as it was desired to have a uniform surface in the river bed as it is frequently accessed by the people for religious/social occasions apart from the Kumbh Mela. This concretization is assumed as the major reason behind water depletion due to blockage of natural aquifers present in the river bed that provided water to the river throughout the year and also one of the reasons for flooding in the river bed creating obstacle in the natural flow of the river. Though the exact position of the aquifers is unknown, the deconcretisation of the kunds and river bed shall result to exposure of the natural river bed which can possibly lead to opening of the natural aquifers that can provide water to the river.

De concretization works is to be carried out at following locations:

- 1) Dhobi Ghat
- 2) Ram Kund
- 3) Lakshman Kund
- 4) Sita Kund
- 5) Kund near Naroshankar Temple

Hence, the strategy to adopt the methods for deconcretisation shall be carried out by manual/mechanical means depending upon pre-study on the previously executed work and also the results of the trials/tests conducted as per the site conditions as required to understand the severity of the existing concrete for its removal as per the directions of the Engineer-in-charge. As the site is of

religious and heritage importance, all necessary steps shall be taken to avoid any damage to the existing structures/elements in the river bed zone as well as the settlements nearby. The above process needs be executed carefully so as to get the uneven river bed area exposed and is desired to get a uniform, leveled, even surface as much as possible maintaining the required invert level for the flow of water using various methods and techniques as applicable to avoid any stagnant water and deposition of silt/matter in the river bed and can be washed away by the water current. The even surface shall be useful for the public to walk over in the river bed without any possible damage due to matter deposition in the river bed even during the Kumbh. The dismantled concrete shall be stacked and disposed off away from the site as directed by the Engineer-in-charge.

5. Development of Modakeshwar Mandir Garden space as Ramayan Circuit Garden

This area lies near the Modakeshwar mandir and at start of the Talkuteshwar Ghats on the Left Bank. The area is developed as a Ramayan Circuit garden with miniatures of the religious places in Nashik which form a part of theis circuit. It is proposed to create miniatures of Ramshej fort, Sita gumpha, Triambakeshwar, Kavani kapal dhara and Tapovan, Kalaram temple, Sita sarovar.

Others will be in the form of information boards. A connecting pathway will lead the visitors to appreciate these historic sites in the Ramayan circuit.

Scope of Work:

- Laying natural stone paving as per the drawings.
- Constructing of RCC platforms of sizes as per the drawings.
- Plantation of five huge Banyan Trees in movable planters signifying the importance of the Panchavati area.
- Construction of pathway connecting the miniatures.
- Construction of the railing and gate.
- Constructions of necessary electrical network with LED focus lights and Lamp posts.

6. Installation of Signages

The information signage system has been designed to provide a powerful visual aesthetic that will provide the visitors information and assurance to the visitors of Godavari Riverfront Development and Heritage Walk.

Manufacturing, installation of signages and information boards and on specified locations as per the Drawings. The Contents for the signages and information boards will be approved by NMSCDCL.

During the Defect Liability Period the Sign board structure would be cleaned and painted once in a six month and if any damages occurred to Sign board structure would be repaired by the successful bidder to restore it in its original condition.

The successful proponent will create shop drawings, fabricate and install information signage based on the designs provided within this RFP. While recommendations regarding signage types, quantities, and priority

installation locations are outlined within the information signage Master Plan, the Plan is considered a general guide and modifications may be made by the Nashik Municipal Smart City Development Corporation (NMSCDCL).

7. Design and Installation of Gabion benches

Comfortable seating spaces at public places like parks, streets with pedestrian movement caters to people's need of resting, waiting, or enjoying the views and activities of that public space. It is an integral part of streetscapes and place making initiatives like river front development, public plazas that aim to attract and retain more people and enjoy that place.

Gabion benches are sturdy, low maintenance and yet have their own aesthetical value. Therefore, they are one of the preferred options for public seating. Smart city proposal has opted for FRP stone benches as the seating option for providing the safe and comfortable seating facilities at various locations all along the riverfront development including the heritage walk.

Objective

To build, place FRP stone benches for providing the safe, comfortable seating facilities at various locations all along the riverfront development.

Locations for placing the benches

Benches are placed at different locations along the riverfront. It includes, Goda park, Goda walk,. The locations for stone benches to be placed are as per the drawings attached.

8. Design and installation of stone Deepstambh

- Deepstambh are incorporated with bollards and dividers.
- They have been designed to provide a powerful visual aesthetics that will provide directions and assurance for the safety of pedestrians in ghat area.
- Deepstambh are octagonal in shape and have 32 Divati each.
- The height of Deepstambha is 3.11m.
- It is placed with the combination of Dividers and Bollards after every 21 m.

Objective for Deepstambh

Deepstambh are proposed to create religious ambiance and give a great aesthetical pleasure.

Location for placing Deepstambh

Deepstambh are placed at different locations along the river front in ghat area from Victoria Bridge to Amardham Bridge. They are total 76 in numbers. Out of which 43 are placed on the right-hand side and 33 are on the left hand side of the Ghat.

9. Design and installation of Bollard

- Bollards are square in plan and tapering towards the top.
- The combination of bollards and dividers is used to demarcate the ghat periphery.

Objective for Bollard

To separate ghat area from vehicular road.

10. Design and installation of Divider

- Dividers are rectangular in shape and are 0.15m above the ground.
- The dividers are proposed to restrict the vehicular entry in ghat area.
- This will reduce water pollution as no washing of vehicles will be allowed near ghat area.

Objective for Divider

To create barrier restricting the entry of vehicles to ghat area.

Location for placing Divider

The Dividers are placed on both side of the Ghats from Victoria Bridge to Amardham Bridge In between Bollards.

Goda Garden is an important part of Goda riverfront area. It is a green themed garden to be developed as a multipurpose park for leisure and recreation of the visitors.

Scope of Work:

- Provision of water supply lines for gardening, water supply and drinking water including pipe network and necessary fixtures as directed by NMSCDCL.
- Tree plantation and landscaping with provision of geonet to retain earth on slope and maintain landscape as mentioned separately in its scope of work.
- Tree plantation in movable planters along the ghats

11. Landscaping with Tree Plantation

Tree plantation and landscaping have their own significance in the beautification of open spaces like riverfronts. In Nashik, at Godavari riverfront, the green/landscape part is not all over the riverfront, but apart from the landscaped areas, trees are used mostly to complement the surroundings and make them more usable from recreational and leisurely activities point of view.

Objective: To plant trees (including the replanting, if required so by the authorities) and execute landscaping of the Goda Garden as per the details to be provided at the time of execution.

Scope of Work:

To provide services for plantation, maintenance and removal/replantation of trees along Godavari Riverfront, this is part of Area Based Development (ABD) of Nashik Smart City.

The contractor will work closely with the NMSCDCL/NMC to ensure the most appropriate care and maintenance of the trees along Godavari Riverfront, which will sustain during high floods in the Godavari River.

The work comprises of laying of soil erosion control blankets, planting of trees, shrubs and ground covers, their maintenance and includes trimming or pruning, watering, removing. It shall be understood that the

Contractor will be required to perform and complete the proposed plantation and maintenance work in a thorough and professional manner, and to provide labour, tools, equipment, materials and supplies necessary to complete all the work in a timely manner that will meet the NMSCDCL requirements. Contractor may be required to perform the following tree maintenance activities throughout the identified locations as per Annexure along Godavari Riverfront:

- 1. Tree pruning
- 2. Tree removal
- 3. Tree planting
- 4. deployment of staffs/ curators
- 5. Clearance pruning
- 6. Grid pruning program
- 7. Tree watering
- 8. Small tree care
- 9. Palm trunk skinning
- 10. Root pruning
- 11. Specialty equipment rental
- 12. Arborist services/inspection
- **13.** Foliar and pesticide treatments if necessary

Since proposed area of tree plantation is along river bank, during monsoon all landscape area submerges into water. Flood tolerant tree species and in movable planters shall be considered for plantation

12. Construction of Retaining Wall:

The scope includes construction of 600m (aapx) of Retaining wall from Ramwadi Bridge to Holkar Bridge protecting the scouring of shores for the proposed Goda Walk/ Goda Park.

- a. Boring, providing and installing bored cast-in-situ reinforced cement concrete pile of specified diameter using approved drilling method to the required depth up to the cut -off level in pile cap in RCC M-35 grade with a minimum cement content of 419 kg/cum using Blue metal of 20mm and down gauge to carry a safe working load not less than the specified, excluding the cost of steel reinforcement but including the cost of boring with casing from natural/formed ground level, bentonite mud circulation of approved specific gravity and the length of the pile to be embedded in the pile cap. The cost shall include the cost of dismantling of laitance/week concrete as per BIS norms, removal of dismantled debris and waste bore mug from the site with all lift and leads up to 1000 mm as directed by the Engineer-in-charge. The rate shall include all machineries required for boring, genset, skilled labor etc. (length of pile for payment shall be measured up to the bottom of pile cap) pile diameter 500 mm (using concrete mixer).
- b. Ultrasonic test for every vertical pile and dynamic pile load test on single vertical pile in accordance with ASTM D 4945-12 including all testing arrangements such as pile head preparation for conducting the test, supply and fixing of ply wood cushion of required thickness and hardness, S & F of mild steel cap plate, hire charges for hydra/power winch with tripod, hire charges for driving

hammer all incidental charges etc. complete, necessary gauges installation, conducting the test and submission of report with two hard copies and one soft copy - Initial or Routine load test.

- c. Hire and operational charges of vacuum dewatering system including power generator of not less than 35 kVA capacity driving 110 to 120 number of filter points for constructing pile cap all-round pit at regular intervals in to the ground to keep the pit in dry condition connecting the filter points to the PVC pipes and then to the suction motors including labor charges for driving the points, delivering the discharge water to the nearest outlet etc. complete as directed by the Engineer-incharge.
- d. Earthwork excavation in soils up to SDR by mechanical means for foundations of structures as per drawing and technical specification including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing sides of bottom, back filling the excavation earth to the extent required etc., complete for finished item of work as per MoRT&H Specification 304 (5th Revision).
- e. P.C.C (1:3:6) Nominal Mix in foundation with crushed stone aggregate 40mm nominal size mechanically mixed placed in foundation and compacted by vibration including curing complete as per MoRT&H Specification No.2100.
- f. Vibrated Reinforced Cement Concrete M 30 Grade concrete using 40mm, 20mm and 10mm size HBG crushed stone aggregate (Coarse aggregate conforming to Table 1000-1 and fine aggregate conforming to Table 1000-2) including cost and conveyance of all materials to site and all labour charges for machine mixing, laying in position, compacting, vibrating and curing including all other incidental and all other operational charges of T&P required etc., complete as per MoRT&H Specification 1500, 1700, 2100 (5th Revision) for Pile Cap.
- g. Vibrated Reinforced Cement concrete M 30 grade using 20mm & 10mm HBG crushed stone aggregate (Coarse aggregate conforming to Table 1000-1 and fine aggregate conforming to Table 1000-2) including cost, conveyance of all materials to site and labor charges, centering, machine mixing, laying, vibrating, curing etc., including other incidental hire and operational charges of all T&P as per approved drawings and as directed during execution but excluding cost of steel and its fabrication charges for finished item as per MoRT&H Specification 1500, 1600, 1700 & 2200 (5th revision) and as directed by the Engineer-in-Charge for Substructure for Retaining Wall Stem.
- h. Construction of Precast VRCC railing of M 30 grade using HBG crushed stone aggregate of size not exceeding 20mm and fine aggregate conforming to Table 1000-2 true to line and grade, tolerance of vertical R.C.C post not to exceed 1 in 500, centre to centre spacing between vertical posts not to exceed 2000mm, leaving adequate space between vertical posts for expansion including cost, conveyance of all materials to site and labor charges, centering, machine mixing, laying, vibrating, curing etc., including other incidental hire and operational charges of all T&P as per approved drawings and as directed during execution, excluding cost of steel and its fabrication charges as per approved drawings and technical specifications for finished item of work as per MoRT&H Specification 2703, 1500, 1600, 1700 (5th Revision).

- i. Furnishing and placing reinforced cement concrete M 25 grade as per approved drawings and technical specifications as per MoRT&H specification 1500, 1600, 1700.
- j. Providing HYSD bars (Fe-415) of different diameters, wrought and put up bars of all diameters including cost and conveyance of steel to site and all labour charges for fabrication of reinforcement including cutting, bending, binding rods, tying grills, placing them in position etc., complete including cost and conveyance of binding wire and all handling charges and operational charges etc., and including over lapping welding if required etc., complete for all R.C.C items for finished item of work as per standard drawings, as per the directions of the Engineer-in-Charge and as per MoRT&H Specification 1600 & 2200 (5th revision) and as per IS: 1786 of 1985 for Super structure of R.C.C items.
- k. Providing Grouted Revetment with rough stone (HBG) of not less than 300 mm size grouted with 0.20 cum of CC (1:4:8) including cost, and conveyance of materials to site and including labor charges for packing the stones for revetment etc., complete for finished item of work as per MoRT&H Specification 2504 (5th Revision) and as directed by the Engineer-in-Charge for Quadrilateral Revetment.
- 1. Pitching with 300 mm size rough stone including cost, and conveyance of materials to site and including labor charges for packing the stones for revetment etc., complete for finished item of work as per MoRT&H Specification 2504 (5th Revision) and as directed by the Engineer-in-charge for Pitching of Slopes for Toe Wall.
- m. Providing and laying filter material with Gravel (selected earth) underneath pitching in slopes including cost, and conveyance of materials to site including labor charges etc., complete for finished item of work as per MoRT&H Specification 2504 (5th Revision) and as directed by the Engineer-in-charge under Revetment.
- n. Back filling behind Abutments with gravel (selected earth) including cost, conveyance of all materials to site etc., complete as per Clause 710.1.4 of IRC: 78 and as per MoRT&H Specification No. 2200 and as per Cl 710.1.4 of IRC: 78.
- o. Providing and laying of filter media using 50% of 150 mm IRC soling stone and 50 % of 40 mm HBG metal satisfying the requirements laid down in clause 2504.2.2 of MoRT&H specifications to thickness of not less than 600mm with smaller size towards the soil and bigger size towards the wal and provided over the entire surface behind the abutment, wing wall and return wall to the full height compacted to a firm condition including cost and conveyance of all metal seignorage charges ,and all labor charges as directed by the departmental officers as per drawing and Technicalspecifications as per clause 710.1.1 of IRC:78 and Clause 2200 of MoRT&H (5th Revision) for finished item of work.
- p. Providing weep holes in VCC Abutments, Return walls and wing walls with 100mm Diameter AC pipe extending through the full width of the structure at 1.00 m C/c in both horizontal and vertical direction so that the weep holes in each horizontal direction is staggered from the weep holes laying above and below lines as shown in drawing including cost and conveyance of the A.C pipes and labor charges for cutting to required length, placing the pipe with a slope of about 1V: 20H towards

stream side face etc., complete for finished item of work for weep holes as per MoRT&H Specification 2706 & 2200 (5th Revision).

13. Operation and Maintenance:

The Scope of work includes Operation and maintenance for Part B, Part C and Part D as defined in this RFP.

APPENDIX XI: TECHNICAL SPECIFICATIONS

Beautification Projects including landscaping, cycle track, cobblestone paving, stone benches, signages etc.

Technical Specifications: Civil Works

1. Excavating foundations

a. Trenches for foundations, footings/cesspits, drains etc. to be excavated to the exact width length and depth shown or figured on the drawings or as may be directed by the Engineer. If taken out to a greater width, length, or depth than shown or required the extra work occasioned thereby shall be done at the Contractor's expense. Extra depth shall be brought up by sound masonry or concrete filling and extra length or width filled in by rammed earth or muram or, if the Engineer thinks it necessary for the stability of the work, by masonry or concrete as may be directed. The excavated material shall be used to fill in on each side of the masonry or to form the filling in of floors or it shall be placed or spread elsewhere on or near the side of the works as may be ordered free of charge. The Contractor shall at his own expense and without extra charge, make provision for all shoring, pumping, dredging, bailing out or draining water, and the trenches shall be kept free of water while the masonry or concrete is in progress and till the Engineer considers that the mortar is sufficiently set. The sides of the trenches to be kept vertical and the bottom horizontal, and to be run at the same level throughout or properly stepped as may be desired by the Engineer. The Contractor shall also, at his own cost remove such portions of boulders or rock as are required to make the bottom of the trench horizontal and level. He shall also make level and hard the bed of all the trenches and consolidate the earth about the same and against all walls, pits, drains etc. The foundation trenches to be inspected and passed by the Engineer before any masonry work is commenced and the Contractor shall hold an order in writing to this effect, other wise he shall be liable to have his work removed for inspection.

All the excavated materials belong to the Nashik Municipal Corporation EIC and therefore shall be property of Nashik Municipal Corporation EIC. It will be mandatory on the part of contractor to use this material in the execution of works under contract if the quality of material available is as per the specification. The contractor shall have to sort out the material in separate stacks and transport the same at his cost. No transportation charges or any other charges will be paid to the contractors. The rate of excavation is deemed to include the cost of transportation and disposal of surplus excavated materials to any location as directed by the Engineering Staff. However, if the contractor is directed to dump the material on the municipal dumping ground, the amount will be recovered from the contractor at the rate of INR500 per trip from 1.1.2006 being tipping charges for which the contractor has to quote the rate accordingly.

b. The measurement of the work will be the exact length and width of the lowest step of the footing according to drawings or the Engineer's instructions and the depth measured vertically.

The contractor shall make every effort to carry out the excavation in rock to the correct formation levels as far as practicable. However, under cut and over cut up to 8 cm. of the formation levels shall be permitted. As far as payment is concerned quantities shall be worked out with respect to

formation levels only. Under cut in excess on 8 cm. shall be removed by chiseling and over cuts for above 8 cm. shall be filled in with 1:3:6 concrete without any extra cost.

2. Filling in with Contractor's Earth or Murum.

- a. The earth or murum, whenever required to be supplied by the Contractors for filling in the low lying ground and wells or in the embankment of the road, shall be dry, friable, and free from mud sludge, vegetable matter or rotten material of any kind, or material likely to decay and of a quality to be approved by the Engineer. All big lumps or clod shall be broken before spreading the earth or murum on the ground.
- b. The filling in of wells and low-lying grounds shall be done in such layers as may be directed from time to time by the Engineer, and no fresh layer shall be allowed to be put on unless the previous one is properly spread, trimmed, leveled, and thoroughly consolidated by rammers or rollers, as the case may be, or as may be ordered by the Engineer.
- c. The embankment shall be raised in regular layers slightly concave in section, beginning from the bottom and gradually raised to the full height, layer by layer not exceeding 300 mm. in thickness in a loose state. Each layer shall be thoroughly consolidated by watering where necessary and rolling it with an approved steam or diesel roller before the next layer is put on. The rolling and consolidation should be done to the entire satisfaction of the Engineer and no rubble packing or metal should be laid on it until the Engineer is satisfied that the earthwork has been thoroughly consolidated and written certificate is given to them effect by the Engineer.
- d. The rates for embankment or filling in with Contractors earth or muram shall include the cost of materials, fencing, lighting, watching haulage, spreading, leveling, watering, rolling and consolidating.

3. Dry Rubble Packing

The dry rubble packing shall consist of a layer of uniform thickness of blue trap stone rubble, or any other approved stone carefully set as close as possible on ground properly formed for the purpose. The width of the upper part of the stone shall not be more than 200 mm. or less than 150 mm. and the packing shall consist of large stones. The interstices between the rubble stones shall be filled up with stone chips, removing the projection of the upper part of the packing with care, as not to loosen the whole, the whole should be thoroughly rammed, watered, settled to place and made compact.

4. Cement Concrete in Foundation and Bedding

- a. Cement concrete in foundation and bedding shall be mixed in the proportion of 1:3:6 or 1:4:8 as directed using Portland cement, sand and metal nos. 1, 2 and 3 in proportions as directed.
- b. The ground to be thoroughly leveled and well rammed before laying the concrete on the work. The concrete shall consist as described above. In case of hand mixing the metal, sand and cement, etc. as the case may be to be stacked, before mixing, in measured layers. The materials to be then

thoroughly mixed in small quantities at a time with sufficient quantity of fresh water and laid in the work in layers, each not exceeding 300 mm. in depth and repeated one above the other. Salt or brackish water will not be allowed to be used. Each layer to be well rammed with heavy wooden or iron rammers. The work to be ground with thin mortar, while ramming, until it fills in all the spaces between stones and cream to the surface. The ramming operation to be continued until the whole work becomes solid and compact to the entire satisfaction of the Engineer. The measurement of the work will be the exact length, breadth and depth ordered by the Engineer or shown or figured on the drawing and after the concrete is consolidated.

- c. The stone metal to be made of good hard blue rubble stone from quarried to be approved of by the Engineer. The metal to be such as to pass through a ring 40 mm. diameter. Larger size metal or chips will not be accepted.
- d. The contractor shall adopt every precaution towards guarding the concrete from admixture with duster dirt of any kind and shall use properly constructed and impervious brick masonry or wooden platform for mixing and keeping it until laid in the work and protect it from rain and sun.

5. Uncoursed Rubble Stone and Cement Masonry for Foundation etc.

- a. To be of the best description of blue basalt stones from quarries approved of by the Engineer and cement mortar in courses not exceeding 450 mm. in the height. The stones shall be large, flat-bedded and laid of flush in mortar. No stone to be less in breadth than 1½time sits height and less in length or tail into the work than twice its height. Every stone, whether large or small, must be set flush in mortar. The small stones used for wedging or filling in to be carefully selected to fill in the voids between large stones. Care must be taken that no dry work or hollow space shall appear in the masonry work. The stones to be arranged so as to break joint least 75mm. and long vertical lines of joints to be carefully avoided everywhere. The joints at the face to be finished off by being neatly struck and smoothed with the trowel while the mortar is fresh. The upper surface of the work to be throughout to uniform level at the height of every course.
- b. When concrete is not used and the Engineer thinks it desirable, the lowest course of footing of about 300 mm. in depth to be formed of small chips properly laid in mortar and well rammed down so as to make a good solid level bed for the upper work.
- c. Rough rubble quoin-stones, flat-bedded and of suitable size, to be provided at all angles, and bond stones having an excess of tail only in the wall and not of height where required, to be also provided to insure-uniform compactness of work. All stones to be laid on their quarry bed.
- d. Before commencing the masonry work the foundation trenches to be leveled right through and the bottom of the same watered and well rammed down. The trenches to be kept free of water while the masonry work is in progress, or if the Engineer thinks it necessary till the mortar used in the masonry, is sufficient set.

- e. The masonry to be well watered until it becomes hard and solid and to be well covered during the rains.
- f. Mortar to be made as described under the head.
- g. The measurement of the work to be exact length, breadth and depth ordered by the Engineer or shown or figured on the drawings.
- h. One header in at least every square yard or 0.84 Sq. Meter of facing shall bind into the work etc. as in specification No.6

6. Uncoursed Rubble, Stone and Cement Masonry for Plinths, Walls, backing to cut-store works etc.

- a. To be of the best description of blue basalt rubble stones from an approved quarry and cement mortar in courses not exceeding 450 mm. in height. The stones to be flat-bedded and laid flush in mortar. No stone to be less in breadth than 1½ times its height and less in length or tail into the work than twice its height. Every stone, whether large or small, must be set flush in mortar, the small stones used for wedging of filling in being carefully selected to fill in the voids between larger stones. Care must be taken that no dry work or hollow space shall be left in the masonry. The stones to be arranged as to break joint at least 75 mm. and long vertical lines of joints to be carefully avoided everywhere. The joints at the face to be finished off by being neatly struck and smoothed with a trowel while the mortar is fresh. The upper surface of the work to be brought to uniform level at the height of every course.
- b. When the rubble masonry is built for backing to coursed rubble or khandkee face work, the height of the course to be the same as that of the khandkee course.
- c. The stones at all courses and junctions of walls to be large size and dressed with the hammer. At all angles formed at the junction of walls that stones to run well into the masonry and laid headers and stretcher alternatively and at every third course the angle to be formed by cutting the stone into an angle.
- d. One header in at least every square yard or 0.80 square meter of facing shall bond into the work. The header to be about 500 sq.cm. in area at face and to run back to the entire width of wall. When the thickness of wall is more than 60 cm. a series of bond stones to be laid through the work so as to form a tie from front to back, breaking joint or over-lapping each other for at least 150 mm. No stone whose length is less than 45 cm. to be used in the work as header.
- e. All walls to be carried up simultaneously and to one level throughout and no part shall be allowed to raise more than one meter above the rest to avoid unequal settlement. If it should be necessary to carry up one part of a wall before the other, it shall be done after previously obtaining the Engineer's permission and in case the end of the portion first build should be racked back i.e. left in steps each course projecting further than the one above it. Care should be taken to see that the

sides of the wall are not built separately from the hearting, the faces and internal filling being done at the same time. The stones should cross from opposite sides of the wall and overlap as much as possible. No course to be laid unless the course below it is perfectly set.

- f. The Masonry to be well watered until it becomes hard and solid and to be well protected from sun and rain.
- g. The measurement of the work to be actual cubical contents of the masonry after deducting all the openings, cut stone work and all other items of work paid for separately.
- h. All bond stones to be marked inside and out and the marks to be retained until ordered by the City Engineer to be removed.
- i. Nothing extra will be allowed for inserting door and window frames or any frames of a similar character nor for the insertion of wooden blocks for fixing hooks rails etc.

7. Lime, Shingle, Sand and Mortar.

- a. The lime to be made of approved Salsette lime stone or kunkur and properly burnt and sLaked with fresh water on the works. It must be free from excess of unburnt kunkurs, ashes cinders salt of other impurities and if the lime be considered to be of inferior quality or sLaked with salt water it shall be rejected. All pieces of unburnt lime of other impurities to be screened or picked out and removed at once from the site.
- b. The different ingredients to be stacked before grinding in alternate layers. The materials of the lime mortar to be then carefully mixed dry in small quantities and thrown into a mortar mill for grinding. The grinding to continue for at least three hours each time or for 150 revolutions of the mill. The mortar to be kept moist and well sheltered from the sun till it is used in the work. No mortar that has been kept for a fortnight after grinding to be used in the work without the special permission of the Engineer. The diameter of the mortar mill shall not exceed 9.10 meter. Where pure water for slaking the lime or mixing the lime and sand is not obtainable, water drawn from wells approved by the Engineer will be allowed to be used. Such water should be free from salt as much as possible, mud clay and other impurities.
- c. The shingle to be obtained from beds or banks of rivers shall be free from shells, salt and earth it shall be well washed. The sand to be clean, sharp and hard, free from large pebbles, salt, shells, earth, dust or other impurities. If the Engineer thinks it necessary he may cause the sand to be screened, windowed or washed with fresh water at the contractor's expense. Salt or blackish water will not be allowed to be used. Sea sand shall not be used in the work.
- d. The common lime mortar to be made of good, fresh lime and clean sand approved of by the Engineer and mixed in the proportion of one parts of lime (by measure) to one part of sand or as directed by Engineer.

- e. The hydraulic lime mortar shall be mixed in the proportion of four parts of lime (by measure) to one part of Aden pumice and four parts of sand.
- f. The cement mortar shall be mixed in the proportion of one part of Portland cement (by measure) and five or six parts of sand, as directed by the Engineer.
- g. The mud mortar shall consist of well-tempered clay mixed with a sufficient quantity of chopped lay or straw and cow dung.

8. Dressing of Stone

All faces of stone required to be dressed shall be true and out of winding, except where it is otherwise specified. The face of stone described as hammer-dressed shall be as far as possible square and leveled with a mason's hammer by knocking off all protuberances and ridges. Where it is described as dressed very rough the protuberances and ridges shall be further reduced with a chisel, leaving the face truly level though rough with depressions. These depressions shall not be more than 10 mm. in depth and in area 90 sq.m. Rough-dressed face shall differ from those dressed very rough in having the depressions not more than 5 mm. in depth and 48 sq. mm. in area. Where the face is required to be medium-dressed the depressions shall not be more than 3 mm. in depth and 13 sq. mm. in area. In fair dressing the face shall be dressed fine, but the chisel marks may be left visible in a few minute dimples scattered over it, in the fine dressing neither chisel mark nor any dimples whatsoever shall be left in the face.

9. Blue Basalt Stone

All blue basalt stone shall be from quarries to be approved by the Engineer and to be of the best approved quality and color. All stones shall be sound, durable, uniform in color and texture and free from flaws, cracks, injurious veins, crystals, minerals, salt cavities and other defects. No earthly, discolored, weathered or water worn or boulders stones to be used.

10. Stone and Brick Masonry Work in general

- a. The work to be built plumb, curved, or batters, as may be required by the design and to be carried out in a thoroughly workman like manner and to the entire satisfaction of the Engineer. The Contractor to provide at his own expense all moulds, templates, centering, scaffolding etc. as may be required for the proper execution of the work which shall be included in the prices of the work, as no separate change to be made for them.
- b. All stones or bricks to be thoroughly cleaned and wetted with fresh water before being put into the work and the mortar to be used stiff
- c. The work to be kept wet while in progress to the entire satisfaction of the Engineer till the mortar is properly set. On Sundays and other holidays also when the work is stopped, the top of all unfinished masonry to be kept flooded and labourers to be employed for this purpose. Watering to be done carefully so as not to wash the mortar out of the joints. The Engineer shall be at liberty to

employ labourers to water the work should the contractors fail to do the same to his (the Engineer's) satisfaction.

- d. Should the mortar perish that is becomes dry, white or powdery through neglect of watering, the work shall be pulled down and rebuilt at the contractor's expense.
- e. As a rule the whole of the masonry work in any structure to be carried up at one uniform level throughout but where breaks are unavoidable the joint to be made in good long steps, so as to prevent cracks arising between the new and old work. All junctions of walls to be formed at the time the walls are being built, and cross walls to be carefully bonded into the main walls.
- f. When new work is to be added to existing structure, the old work must be prepared to receive the new and both must be carefully bonded together.
- g. During the rains, the work to be carefully covered without extra charge, so as to avoid the fresh mortar being washed away.
- h. Where the word cement is used it is to be understood Portland cement of the best description, specified under the head of the Cement.

11. Bricks & Brick work in General.

- a. Bricks shall conform to the latest Indian standard specifications (I.S.S.). Bricks to be whole, sound, well burnt free from cracks to ring when struck and not to crack or break when soaked in water regular in shape and uniform in size. They should be of the best of description obtainable in the market and of the best quality and color, and in every respect to be approved by the Engineer unless otherwise specified they should be of English pattern 230 mm. x 115 mm. x 63.5 mm. No bricks to absorb water more than one fifth of their own weight when dry for use in load bearing wall. For bricks used in panel walls, the water absorption shall not exceed ¼ of their dry weight. Bricks to be thoroughly cleaned, well wetted or soaked in fresh water before being used on the work and no broken bricks to be used except as closures. Crushing strength of the dry bricks shall be not less than 35 kg./cm.2
- b. The mortar should be as described under the head of good quality carefully mixed and used stiff. For joints of face work only Neroo and screened sand should be used in equal proportion.
- c. A good bond should be preserved throughout the work both laterally and transversely. All bed joints should be perpendicular to the pressure upon them, i.e. horizontal in vertical walls, radial in arches and at right angles to the slope in battering walls.
- d. In walling the courses shall be kept perfectly horizontal and rise in plumb. The vertical joints shall break joints with the courses immediately below and above, but they shall be directly over one another in alternate courses to prevent the necessity of bats. The joints shall not exceed 10 mm. thick shall be fully of mortar close, well flushed up and neatly struck or pointed as may be required.

- e. English bond to be used throughout in walling. In arching such bond shall be used as the Engineer or his agent may direct.
- f. Facing of brick work to be specially selected brick of the same color throughout. All external brick walls of thickness 25 mm. and above, shall be constructed in plumb from the outside face with the help of scaffolding erected on the external side.
- g. In other respects, the work should comply with the general specification for brick work given in P.W.D. Hand book.

12. Pointing.

- a. The old mortar to be raked out of the joints at least 20 mm deep. The dust to be brushed out of the joints and the walls well wetted with fresh water until the old mortar in the wall is wet. The pointing to be made with mortar of cement and fine sand, in proportions as specified. The joints to be neatly defined by the pointing and the same to be sunk as per drawings. No false joints will be allowed. The pointing to be kept wet until the cementing material sets and becomes hard. The whole surface to be left clean at the completion of the work.
- b. After the joints are raked out they shall be inspected by the Engineer before being filled up.

13. Cement Plaster.

All stone and brick masonry shall be thoroughly wetted and raked out to a depth of at least 20 mm each and walls washed and wetted before plastering is done. Render with a mortar of specified parts of Portland cement and fine sand of specified thickness and rough but do not beat. Float or set with a thin coat 3 mm of Portland Cement and polished well immediately with a trowel or flat board. The cement mortar to be used within 30 minutes after it leaves the mixing board or mill. Before work is started patches of plaster 150 x 150 mm. should be put on about 3 meters apart as gauges. By this means an even thickness is ensured. Cement plaster must be in even squares or stripe. Care shall be taken to keep the whole surface thoroughly wetted for at least a week. The finishing surface should be as specified and directed. Nothing extra will be paid if the surface is required to be finished with neru and three coats of white or color wash.

14. Sand faced Cement Plaster.

All stone and brick masonry surface to be plastered shall be thoroughly wetted for at least 6 hours in case of brick masonry and the joints shall be raked out to a depth of at least 20 mm. before plastering. The first coat of cement mortar in the proportion as specified in item shall be applied uniformly all over the surface to be plastered to a thickness of 14 mm. with a trovel and flat board in exact plumb. This coat shall be allowed to rest for not less than half an hour. Indentations shall then be made in the form of waves by a wire broom over the surface to form a key for the second coat. The plastered surface shall be allowed to cure for at least four days. First coat will be with addition of water proofing compound in proportion as specified in item. The second coat of cement mortar shall be applied in the proportion of as specified in item using clean and screened through

a mesh of not less than 1.5 mm. and not more than or 3 mm. equal size to a uniform thickness of 6.5 mm by trowel and flat board in exact plumb. The surface shall be trapped with a cork piece to give a desirable uniform granular appearance. Care shall be taken to keep the whole surface thoroughly wetted for at least a week.

15 Concrete Work:

- a. This specification covers the general requirements for concrete to be used on jobs using on-site production facilities including quality, handling, storage of ingredients, proportioning, batching, mixing and testing of concrete. This also covers the transportation of concrete from the mixer to the place of final deposit and the placing, curing protecting, repairing and finishing of concrete.
- b. The rate quoted by the contractor for the item, Plain or reinforced concrete shall include costs of materials, logistics, storage, mix design, testing, mixing, transporting, pouring/laying, compacting, curing, providing & treating construction joints repairing the defects, hacking, cleaning the area before handing over the area for the next activity and taking measures for safety of people and property.

c. Material Specification

- i. **Cement-**Cement to be used in the works shall be any of the following types with the prior approval of the Engineer in charge: Ordinary Portland Cement, 43 Grade, conforming to IS: 8112. Ordinary Portland Cement, 53 Grade, conforming to IS: 12269. (iii)Sulphate Resistant Portland Cement, conforming to IS: 12230.
- ii. Contractor should submit a test certificate to the EIC from the cement manufacturer stating fulfillment of all chemical and physical properties of cement as per respective Indian Standards. EIC may ask the contractor to get the cement samples tested from an independent competent approved testing agency and contractor shall submit test certificates of the cement from competent approved testing agency after getting the cement tested from it before using the cement in the work. Cement will be liable to be rejected and removed from the site if the test results are not satisfactory as per respective Indian Standards.
- iii. Cement should be stored at site in covered sheds. Precaution shall be taken by the contractor to also ensure that cement does not get hardened before it is used in the work. More than 10 bags of cement shall not be stored in one stack of cement bags in the cement store. Cement, if found hardened, shall be rejected and removed from the site. Cement older than three months from the date of manufacture shall not be used in the work.

d. **Aggregates** (Coarse and Fine)

i. Coarse aggregate shall consist of clean, hard, strong, dense, non-porous and durable pieces of crushed stone, crushed gravel, natural gravel or a suitable combination thereof or other approved inert material. They shall not consist pieces of disintegrated stones, soft, flaky, elongated particles, salt, alkali, vegetable matter or other deleterious materials in such quantities as to reduce the strength and durability of the concrete, or to attack the steel

- reinforcement. Coarse aggregate having positive alkali silica reaction shall not be used. All coarse aggregates shall conform to IS: 383 and tests for conformity shall be carried out as per IS: 2386 Parts I to VIII.
- ii. Nominal size of the coarse aggregate shall be as described in the respective item in the schedule of quantities.
- iii. Fine aggregate shall consist of clean, hard, strong and durable pieces of crushed stone, crushed gravel, or a suitable combination of natural sand, crushed stone or gravel. They shall not contain dust, lumps, soft or flaky, materials, mica or other deleterious materials in such quantities as to reduce the strength and durability of the concrete, or to attack the embedded steel. Fine aggregate having positive alkali-silica reaction shall not be used. All fine aggregate shall conform to IS: 383 and test for conformity shall be carried out as per IS: 2386 (Part I to VIII). The Contractor shall submit to the Engineer the entire information indicated in Appendix A of IS: 383. The fineness modules of fine aggregate shall neither be less than 2.0 nor greater than 3.5.
- e. EIC may reject the aggregates if the satisfactory results of testing of concrete cubes made with the aggregates are not obtained during any stage of the work. Aggregates shall be stored on site in such a way that aggregates of different sizes shall not mix. Care shall be taken to ensure that aggregates remain clean till they are used in the concrete and that there will be no segregation.
- f. Samples of the aggregates for mix design and determination of suitability shall be taken under the supervision of the Engineer and delivery to the laboratory, well in advance of the scheduled placing of concrete. Records of tests, which have been made on proposed aggregates and on concrete made from this source of aggregates, shall be furnished, to the Engineer in advance of the work for use in determining aggregate suitability. These tests shall also be done periodically on samples of material actually being used in concreting during course of concreting operations; as directed by the Engineer. The costs of all such tests, sampling, etc., shall be borne by the Contractor.
- g. Water: Water for mixing and curing of concrete shall be clean and free from oils, alkalis, salts, sugar, organic materials or other substances that may be deleterious to concrete and/or steel. Potable water is generally considered satisfactory for mixing concrete. Quality of water for mixing and curing of concrete shall conform to clause 5.4 of IS 456 Indian Standard Plain and reinforced concrete code of practice.
- h. Admixtures Use of chemical admixtures to enhance the properties of concrete may be permitted by the EIC upon tests on trial mixes of concrete to establish that overall chloride content of the concrete mix is within acceptable limit as described in IS 456 and properties of concrete like strength & durability are not compromised. Chemicaladmixtures to be used in the concrete mix shall conform to IS 9103– Indian Standard Concrete Admixtures Specifications. Instructions of the manufacturers of the chemical admixtures shall be followed while mixing them in the concrete.
- i. Mix Design: -Proportions of ingredients of concrete need to be decided to ascertain its strength before it is used in the work. The ingredients are cement, fine aggregates, coarse aggregates, water and admixtures. In order to have dense durable concrete with desired compressive strength it is

important that a) Fine aggregates closely fit in to voids or gaps between the coarse aggregates, b) all aggregates are coated with cement and c) water is sufficient only to coat the aggregates surface with cement and to achieve the desired workability of the mix. Wrong proportions of ingredients of the concrete mix will result in weak concrete. Trial mixes are therefore done sufficiently in advance to decide the proportions of aggregates in a concrete mix of a specified grade. No concrete shall be used in the work till the trial mixes are carried out; mix proportions are decided and approved by the EIC.

- j. Concrete of different strengths is classified in different grade designations like M10, M15, M20, M25, M30, M35, M40 etc. Requirement of a particular grade of concrete is mentioned in the schedule of quantities and/or drawings and/or instructions of the EIC.
- k. IS 456 and IS 10262 Indian standard Concrete Mix Proportioning Guidelines shall be followed for mix design process at the site. Contractor shall have a well-equipped concrete laboratory at the site and it should be manned by competent personnel. The equipment shall be calibrated from time to time. Measurement of moisture content of aggregates, grading of aggregates, slump shall be carried out routinely and mix proportions shall be adjusted accordingly with the approval of the EIC. Mix design procedure shall be carried out separately for each grade of concrete mix and every time the source of aggregates and/or cement is changed. Acceptance criteria shall be as described in IS 456 for approving the proportions of concrete mix. All test records shall be maintained by the contractor and presented to the EIC for seeking approval.
- 1. Mixing of concrete at site:-IS 6461 Indian Standard Glossary of terms relating to cement concrete, part VII Mixing, laying, compaction, curing and other construction aspects Shall be referred for usage of terms. Concrete shall be weigh batched at site using batch type concrete mixers conforming to IS 1791and/or Concrete batching and mixing plants conforming to IS 4925. The cement and fine aggregate shall first be mixed dry until the mixture is uniform in color. The coarse aggregate shall than be added, mixed and water added and the whole batch mixed thoroughly for a period of not less than two minutes until the resulting concrete is uniform in appearance Clean aggregates, measured as determined by the mix design exercise shall be supplied to the mixer in the proportions already established through the mix design exercise, water cement ratio shall be maintained and the concrete mix coming out of the mixer shall be collected on a clean platform or a vessel from where it is transported to the actual location of the pour. The mixing of aggregates within the mixer should last for at least two minutes after placing all the ingredients in the mixer for any individual batch. Test cubes shall be taken and slump shall be measured as per the instructions of the EIC from time to time. IS 456 and IS 516 shall be followed for taking concrete cubes, curing the cubes and testing the cubes.
- m. **Pouring and compaction of concrete**: -Contractor shall submit a method statement to the EIC before starting any concreting operation for the approval of the EIC. The method statement shall describe the work of concreting in terms of quantities of materials, labors, compaction equipment, quality control measures, safety measures, curing procedures etc. Fresh concrete coming out of the mixer or the batching plant should be transported to the location where it is to be poured in the formwork as quickly as possible with due regard to its temperature, exposure to sun and slump. Planning of the concreting operation should be done in such a way that it's pouring and compaction

is done within the initial setting time of concrete. Concrete should be poured in forms in horizontal layers of 150mm to 900mm and each layer should be compacted wellbefore placing the next layer. Care shall be taken to avoid formation of cold joint between any two layers. Fresh concrete, either in forms or in transit should not be exposed to rain. Concrete should not be poured from a height exceeding 1.5m. Temperature of the concrete mix should be within 150C to 350C.

- n. Pouring of concrete should not start till the method statement submitted by the contractor is approved by the EIC, and formwork & reinforcement is fully checked, cleaned and approved by the EIC. Formwork should be checked for its stability during the concreting operation. Reinforcement should be tied in such a way that it will allow the fresh concrete to flow in all parts of the formwork. Contractor should plan all the movements of the laborers during the concreting operation in such a way that cover to reinforcement and spacing of reinforcement bars is not disturbed. Contractor should plan the location of construction joints within the area to be concreted before starting the concreting operation and seek the approval of the EIC of the same.
- o. Consolidation / compaction of concrete in the formwork shall be done with vibrators as per IS 3558, IS 2505, IS 2506, IS 2514 and IS 18652. Care should be taken by the contractor to avoid over vibration of the concrete, bleeding of concrete and under vibration of concrete. All concrete shall be properly consolidated in the formwork. Vibrator immersed in the concrete shall not touch the reinforcement and/ or formwork.
- p. After the concrete in the forms is compacted, the surface shall be levelled with a straight edge and finished smooth with a wooden float or power floating machine.
- q. Sampling of concrete for testing: -Random samples of the concrete mix from each batch of concrete shall be taken as per clause 15.2 of IS 456. Samples shall be taken in cubes of size 150x150x150mm. Three specimen cubes shall be made for each sample for testing at 28th day. Similarly, three more cubes shall be made for testing at 7th day to get an early warning about the strength. More no of cubes may be taken if instructed by the EIC. The cubes shall be tested as described in IS 516. Average of test results of three specimen cubes of one sample shall form one test result. Variation in strength of individual specimen cubes shall not vary more than 15% of their average value. Acceptance criteria of concrete shall be as described in IS 456. In case the concrete fails to satisfy the acceptance criteria then EIC may decide to carry out further tests and subsequent action.
- r. Curing of Concrete: -Concrete poured in the form work should not be disturbed after it is compacted. Freshly laid concrete shall be covered to avoid any loss of moisture from inside of it. Once hardened, the surface shall be kept moist and care shall be taken to ensure that the surface of concrete does not get dried. In case of flat slabs, a 50mm to 100mm layer of water should be stored on the slab surface. In case of beams and columns, the concrete surface shall be effectively covered and kept moist after the forms are removed. Curing of concrete shall be carried out for at least 28 days. Quality of water shall comply with the provisions of IS 456.

16 Construction Joints: -

- a. Construction joints are the locations where cold joints will be formed during the concreting operation due to break in concreting. It is difficult to bond the old and new concrete portions at any cold joint. Construction joints should therefore be provided where minimum critical structural actions are anticipated. Construction joints in beams and slabs should be at the mid span sections and for columns it should be at the mid height. Construction joints shall be perpendicular to the axis of the structural member.
- b. At the time of staring the next pour of concrete at the construction /cold joint, the joint shall be thoroughly washed, cleaned with wire brush, cleaned of any loose material and coated with the approved bonding chemical.
- c. Location of construction joints shall be as approved by EIC. EIC may instruct provision of dowel bars at certain construction/ cold joints and the same shall be provided by the contractor without any extra cost to the employer.
- d. Repairs and rectification: All concrete work shall be inspected by the EIC upon de shuttering. Any rough surface, honey combed areas, shrinkage cracks, deflections and / or any other defects noticed during the inspection will be marked and contractor will have to rectify the defects as directed by EIC without any extra cost to the employer. Honeycombed areas shall be thoroughly washed and cleaned of all dirt and loose material and applied with approved chemical bonding agents followed by filling of the voids by approved repair mortar as per the instructions of the manufacturer of the repair mortar. Any dip in the slab level shall be made up a described above to the satisfaction of the EIC. All concrete surface shall be cleaned of shuttering, nails and /or any other rubbish to the satisfaction of the EIC. Hacking of the concrete surface shall be done as per the requirement of the work as directed by the EIC.
- e. Any major defect leading to excessive settlements, cracking etc. shall be further investigated by the EIC and instructions will be issued to the contractor for further tests and / or rectification of the defects by the EIC. Contractor will have to carry out the tests and/or rectification of the defects to the satisfaction of the Engineer in charge.
- f. Any tests, e.g. taking out in an approved manner concrete cores, examination and tests on such cores removed from such parts of the structure as directed by the Engineer, sonic testing, etc., shal be carried out by the Contractor if so directed, at no extra cost.
- g. Unsatisfactory Tests: -Should the results of any test prove unsatisfactory, or the structure shows signs of weakness, undue deflection or faulty construction, the Contractor shall remove and rebuild the member or members involved or carry out such other remedial measures as may be required by the Engineer. The Contractor shall bear the cost of so doing, unless the failure of the member or members to fulfill the test conditions is proved to be solely due to faulty design. The cost of load and other tests shall be borne by the Contractor it the tests show unsatisfactory results.
- h. **Method of Measurement:** Concrete shall be measured in M3 as per IS 1200 part 2.

17 Formwork:

- a. Scope:-This specification covers the work of providing, making, fabricating, fixing, preparing, oiling/greasing, keeping in position, de-shuttering, stripping, cleaning all form work required for RFP in relation to Selection of a Contractor for Godavari Riverfront Development in ABD Area on EPC Basis under Nashik Smart City Mission, Nashik Maharashtra
- b. Casting the concrete members as per drawings and/or schedule of quantities and/or instructions of the EIC.
- c. Material for the form work shall be timber, plywood, mild steel or any other material approved by the EIC. Form work shall be kept in position with required props, staging, jacks and /or bracings as per the structural requirements as instructed by the EIC.
- d. Form work and staging structure shall remain in position for the time period as described in drawings and/ or schedule of and/or instructions of the EIC. The Contractor shall provide repropring to support the structural members even after de-shuttering for longer time periods as described in the drawings and/or schedule of quantities and/or instructions of the EIC.
- e. General Contractor's rate for the item shall include cost of:
 - i. All material and labor for completing the work as described in the drawings, and/or schedule of quantities and /or instructions of the EIC.
 - ii. Designing, procuring, transporting, storing, making, fabricating, erecting, oiling/greasing, cleaning, removing, de-shuttering, stripping, dismantling the form work for all concrete work as described in the drawings, and/or schedule of quantities and/or instructions of the EIC.
 - iii. Keeping it in position till the concrete members gain strength as described in the drawings and/or schedule of quantities and/or instructions of the EIC.
 - iv. Providing measures to obtain surface finish of the concrete members as described in drawings and/or schedule of quantities and/or instructions of the engineer.
 - v. Bracings, nails, wires, tie rods, bearings, oil, grease, jacks, tools, accessories, equipment, ropes, spacers, stays and/or any other item required to complete the work as described in the drawings, and/or schedule of quantities and /or instructions of the EIC.
 - vi. Providing safety measures to safeguard life and property while carrying out the work.
 - vii. Providing housekeeping pertaining to the work of formwork.
- f. Contractor shall have to submit the design calculations and drawings of the formwork to the EIC for his approval prior to start of work. Contractor shall effect the modifications in the design of the formwork as per the instructions of the EIC. Contractor shall start the work only after obtaining approval of the form work design from the EIC.
- g. Provisions of clause 11 of IS 456 shall be applicable for the formwork. Design of formwork shall conform to IS 14687 Indian Standard Falsework for concrete structures Guidelines.

- h. Form work shall be prepared to cast the concrete members in the sizes as described in the drawings, and/or schedule of quantities and/or instructions of the EIC. It should be capable of supporting the weight of wet concrete along with the loads it is subjected to during the concreting operations. All forms should be watertight and should not allow leakage of cement slurry during concreting operations. Formwork should be capable of supporting the loads it is subjected to during the concreting operations without deflecting, bulging, cracking, breaking etc.
- i. Formwork shall be measured as per the provisions of IS1200-partV.
- j. Method of Measurement: Method of measurement shall be as per IS 1200.

18 Reinforcement Steel:

This specification covers the work of providing and fixing of steel reinforcement in the Reinforced Cement Concrete (RCC) members.

- a. Scope of workScope of work comprises procuring, transporting, testing, storing, preparing bar bending schedules, cutting, shearing, bending, cleaning, fixing in position, erecting, tying, welding, lapping, coupling of the steel reinforcement and measuring of the scrap of steel reinforcement bars of different diameters and different lengths in RCC members as per drawings and/or schedule of quantities and/or instructions of the EIC.
- b. **General**: Contractor's rate of the item shall include cost of:
 - i. All materials and labor required to execute the item. The materials shall include, Steel reinforcement bars, GI binding wires, couplers, pins, concrete cover blocks etc.
 - ii. Energy charges of electrical power, water, fuel etc.
 - iii. Procuring, transporting, testing, storing, cutting, shearing, bending, cleaning, fixing in position, erecting, tying, welding, lapping, coupling of steel reinforcement bars.
 - iv. Preparing bar bending schedules and submitting it for approval of the EIC.
 - v. Storing, stacking of scrap and measuring the scrap of the reinforcement steel.
 - vi. Providing safety measures for workers, public and property.
- c. Reinforcement steel shall comply with the provisions of IS 1786 Indian Standards Thermo mechanically treated (TMT) reinforced steel bars. Contractor shall submit the manufacturer's test certificate to the EIC in support of the compliance. The EIC may also ask the contractor to get the TMT steel tested from any approved testing laboratory and contractor will prepare the sample specimens under the supervision of the EIC, send it to the approved testing laboratory and submit the results of the testing of reinforcement steel to the EIC. In case the tests fail to comply with the required specifications, the EIC shall reject the reinforcement steel and the contractor shall remove the reinforcement steel out of the site without any extra cost to the EIC.
- d. Reinforcement steel shall be stored on site in such a way that it will not come in contact with soil and/or water, it will not get damaged and it will not get excessively bent. Bar Bending Schedules (BBS) shall be prepared by the contractor and submitted to the EIC for approval prior to start of

work. Work of steel reinforcement shall start only after getting approval of the EIC and after effecting all the corrections suggested by the EIC.

- e. Cutting, bending and tying of the steel reinforcement shall be in accordance with provisions of IS 2502 Indian Standard Code of practice for bending and fixing of bars for concrete reinforcement. Reinforcement bars shallbe tied with binding GI annealed binding wire of 18 gauge. Lap lengths, bearing lengths, 'L'Bends, maximum & minimum spacing between the reinforcement bars shall be as described in the drawings, Approved BBS and/or as per the instructions of the EIC. The work shall be as per IS 456. Steel reinforcement shall be held in position with the help of spacers, chairs, pins to the satisfaction of the EIC. Steel reinforcement shall be placed at a stipulated distance (cover to reinforcement) from the concrete face with the help of approved quality concrete cover blocks; strength of the cover block shall be not less than the strength of the concrete around it.
- f. Lap bars, dowel bars shall be provided by the contractor for the future work as described in the drawings and / or as per the instructions of the EIC.
- g. All reinforcement steel shall be clean and free of scales of rust, oil, grease or paint. Contractor shal maintain the steel reinforcement in clean state.
- h. Contractor shall prepare a statement showing reconciliation of the steel reinforcement quantity and submit it to the EIC periodically as agreed with the EIC.
- i. Reinforcement steel shall be thoroughly checked by the EIC before concreting the member containing it. Contractor shall carry out rectifications if instructed by the EIC of the steel reinforcement. In case additional steel reinforcement bars are instructed by the EIC to be provided, contractor shall provide the same and maintain a proper written record of the changes duly signed by the EIC.
- j. **Method of Measurement**: -All Measurement shall be taken as per IS 1200.

19 STONE WORKS

Stone shall be hard, sound dence and homogenous intexture. It shall be free stains, cracks decay and weathering. Before starting the Stone work, the contractor shall get the sample of Stone approved by the EIC and approved, sample shall be kept in the custody of site-in-charge. The work shall conform to the sample. Entire Stone work shall be from the same lot at least floor-wise to match the color and quality of marble. It should comply with I.S. 1130-1969.

First quality

plain pure 95% or more of minimum desirable thickness without any white spots, vain etc. and without any defects of cavities, cracks, holes, flaws, patches, weathering effects, loose of soft material and shall be of fine grained hard and dence. The entire lot shall be from same quarry.

FLOORING

Stone slab or shall be of required size as directed shall be truely horizontal, machine cut all sides shall be to right angle and sides shall be bewelled as required. The slabs/tiles shall be fixed on line mortar 1:2 with filled in with matching white cement. The work shall be kept constantly moist for seven days and then the flooring shall be finished mirror like machine polish and cleaned with solution of adilic Acid and washed cleaned.

DADO

Stone slabs shall be pre-polished and of required sized with minimum thickness as specified by EIC, as directed and shall be truly vertical, machine cut all sides shall be true to right angle and shall be bewelled as required. The wall surface shall be first covered with 1:2 C.S. backing in plumb about 20mm. thick, the stone slabs then shall be arranged in true vertical plans with matching/grains after maxing suitable holes for electrical wiring, switches etc. The stone slabs shall be fixed with brick wall by suitable copper brass or S.S. pin each. shall have 2 to 3 such pins fixed at the edges. Joints between slabs at any point shall not be more than 1.5 mm and shall be filed in with matching cement.

Cement slurry shall be poured in between the wall and back side of marble and shall be stirred properly to avoid cavities. The surface shall be kept moist for seven days and shall be sand polished to remove any unevenness and shall be cleaned with the solution of exalic acid and washed where dado is specified if the height is upto ceiling height and pieces shall be so selected that there shall be minimum No. of vertical and horizontal joints and all slabs shall be of same size.

The rates are inclusive of scaffolding, staging, making be-velled of all edges, corners and junctions etc.

A. Technical Specification: Mechanical items

1. Bordeaux mirror

The Bordeaux mirror element comprises of a shallow rectangular surface accompanied with UGT and control mechanism. The rectangular portion shall be admeasuring 28.6m X 8.6m with a shallow depth of 100mm having 110mm dia and 63mm dia PVC piping network embedded in the concrete base underneath with rough stone finish flooring surface at the top. The piping network shall consist of water supply network with openings of 12mm dia copper casted chrome plated fog jets at a grid of 1m X 1m for the fog effect and another network with linear slit openings at the same grid of 1m X 1m for the mirror effect mechanism. The openings and slits shall be flushed to the floor level to have an area free to walk over. This whole mechanism shall be supported by an adjoining RCC underground tank admeasuring 16.8m X 4.3m X having a depth of 1.5m to accommodate the required amount of 50,000 liters/day essential for the fog and mirror effect and shall be operated by automatic/manual system comprising of water pumps, filter mechanism and control panels This element is placed in front of the open-to-air restaurant, so that the mirror effect will reflect the arched restaurant elevation and the steps leading down to the pool and the same will reflect its different look altogether when lit in the night time. Overall, this element will add to the beauty of the mystic aura of the landscape design theme.

2. Bubbler Jet Fountain

The Bubbler Jet Fountain is proposed at the entrance to give a pleasant flowing water sound as people enter the park. The bubbler jet fountain setup admeasuring 15.6m in length and 6.85m in width comprises of shallow trough at the top, a sloping portion for cascade effect and another trough at the bottom and the whole shall be finished with undulated Basalt stone surface. The trough at the top shall be 0.30m deep having 110mm dia PVC piping system with 25mm size bronze casted natural finish water dependent nozzles at every 1m distance which shall display conical water fountain of approximately 600mm height. The water from this trough shall steadily overflow downwards along the slope having steps forming the cascade effect and shall have light effects with the help of IP68 underwater lights in the night time. The flowing water shall be collected in the bottom trough and shall be recirculated to the top trough with the help of submersible water pump. The underground water tank in RCC is proposed below this water feature measuring 15m x 2.50m x 1m to accommodate the requirement of 30,000 litres of water. Control panels shall be provided to program the mechanism of the water flow and light effect.

3. Water Screen

Laser projection show on water screen shall be value addition to the Goda park beautification. To serve this purpose, the water screen is proposed in front of the amphitheatre from where the public can enjoy the show. The water body is oval in shape with size of 20m in length and 10m in width having shallow depth of 0.15m with undulated Basalt stone finish surface. The water body shall have 110mm dia PVC piping system along the longer length (20m) having 25mm size bronze casted natural finish water independent nozzles with orifice size of 16mm placed at every 25mm that shall create an opaque water screen of 4m height. The water body shall have IP68 light fixtures to create light effects in the night time. An RCC underground water tank proposed below the water body of depth 0.60m. shall take care of the requirement of 1,00,000 litres of water. The water drains provided in the water body shall collect the water back to the water tank in absence of water show and shall be circulated back to the jets during the water screen show. The laser projection show shall be controlled from projection room that is situated at the upper level of the amphitheatre seating which shall also contain the control panels required for programming the water screen, lights and water control systems.

Irrigation works

The plantation scheme is supported with irrigation system required to maintain the landscape. The irrigation system proposed is combination of sub-surface drip irrigation and micro sprinklers that shall be consisting of PVC piping network of 63mm dia, 50mm dia and 40mm dia as required with necessary fixtures and fittings including tee, elbow, valves, connectors for drip and sprinkler mechanism, pumping system and control panel assembly including the necessary cabling and connections. The water requirement of about 30,000 liters/day shall be shared from the RCC Underground water tank meant for the Bordeaux mirror element. The irrigation system shall be integrated control panel system.

List of approved Materials

Disc/Sand Filter	Automat/Aimid/Finolex/Netafim
PVC Ball Valve	Automat/lain /Prince/ Finolex
Air release valve	Automat/Jain/Prince

Pressure Guage	Netafim/Fiebig/Rishabh
Pressure release valve	Automat/Jain/Prince /Finolex
Service Saddle	Finolex/ Jain/Suprem/Prince
Valve Box	Automat/Hunter/Finolex/Rainbird
Swing Joint	Automat/Hunter/Rainbird
MP rotor sprinkler spry, body	Automat/Hunter/Rainbird/Finolex
Flush Valve	Netafim/Automat/Finolex
16 mm Drip Lateral	Netafim/EPC/Jain/Rainbird
Aqua Fit 16mm	Startconnector Netafim/EPC/Jain
Rubber Gromett	12/16 MMO- Netafim/EPC/Jain
16mm Drip Lateral ENDO	Netafim/EPC/Jain
8 LPH online dripper	Netafim/EPC/Jain
Submersible Pump	KSB/Crompton //Kirloskar
Submersible Cable	CCI/Finolex/Polycab
Armad cable	CCI/Finolex/Polycab/L&T/Siemens/ ABB
GI Pipe	Swastik/Jindal/Prakashsurya
U PVC /PVC pipe	Finolex/ Supreme Jain/Prince
FRP Filter	Emaax/Astral/Aqua Star
Fog Jet/Nozzle	Aqua Scape/Water Techniques/Perfect Fountain
Circular Main Drain Frame/ Plate	Emaax/Astral/Aqua Star

All other remaining item as per direction of Engineer in charge.

B. Technical Specifications: Horticulture

The horticulture works consists of excavation, laying of soil, manure, mixing it well and then plantation as proposed. The items considered are as follows –

- 1. Garden Soil supplying on the site red hill earth supply on the site red hill earth well sieved 90% pass through I.S sieve of 10mm size free from stones, rubbish like dried grass roots and other such materials. The soil should be fresh form quarry. The colour of the soil generally is red. The red soil will be measured by measuring box. (Farma Item includes royalty charges, octroy, corporation tax Transporting loading -unloading etc. (Lead charges per 90 km. considered.
- 2. **Preparing Instant Lawn** Excavating the ground to a required depth of 20cms, removing & conveying unwanted stuff to a required distance as directed. Filling fresh garden soil/silt & manure in excavated area in 3:1 proportion to a height of 30cms. Mixing garden soil and manure thoroughly well, levelling, and watering on previous night. Planting required variety of lawn grass as directed and maintaining till well established by watering, weeding, clipping, rolling etc. complete.
- 3. **Preparing Shrubbery** Excavating the ground to required depth of 30cms, removing and conveying unwanted stuff to a required distance as directed. Filling fresh garden soil & manure in excavated area in 3:1 proportion to a height of 30cms. Mixing garden soil and manure thoroughly well, levelling, watering, on previous night. Planting well-rooted shrubs 0.5 Mtrs. apart as directed and maintaining till well established by watering, weeding, stirring replacing of casualties etc, complete.

- 4. Preparing Ground covers excavating the ground to a required depth of 20 cms. Removing & conveying unwanted stuff, rubbish to the required distance as directed. Filling the Excavated area with fresh garden Soil & F.Y Manure in 3:1 proportion to a height of garden of 20cms Mixing, levelling, watering the same on previous night. Planting suitable Ground Covers as directed in staggering pattern distance between two rows 25 cms, watering & maintaining till well established.
- **Planting large / shady trees** (Ht.2 mtr.) Digging pit with size 0.9 X 0.9m X 0.9 m removing and conveying unwanted stuff to a required distance as directed. Filling the pit with approved distance as directed filling the pit with approved height of 0.60m. With fresh garden soil & manure in 3:1 proportion Mixing soil & manure thoroughly well. Levelling, as directed watering previous night planting two to three years old minimum 2.0 mtr. Height healthy tree sapling as per specifications.
- **6. Laying of Geo cells** Since the sloping area in the Goda Park is exposed to water currents it is proposed to prevent the erosion of soil by laying of Geo cells. Each Geo cell when expanded has a depth of 75mm with a cell size of 200mm dia. The soil is first cleared of ranked vegetation, levelled and then the geo cell is laid on top of it, and tied up in position with the help of cable tiles provided with the geo cell. It is then filled up with the right quantity of soil and manure mix. The regular soil pesticides may also be applied. The geo cell as are compacted and the required plantation is then taken as per the specifications in the drawings.
- **7. Planting of Ficus** species Bonsai in the Ramayan circuit garden. The distinctive feature of Ramayan circuit garden are the 5 Ficus trees which needs to be large bonsai placed in movable pots.
- **8. Potted trees** the potted trees proposed in the project are planted in the FRP pots of the size 1m x 1m. These potted trees need to be moved before the monsoon from the site so that their submergence on the floods will be avoided.
- **9. Tree grating** the newly planted trees will have tree grates of size 1.8m x 2m. And specifications provide in the drawing. This will enable the tree roots to breathe and avoid the unnecessary harm by the rodents.
- **10. Maintenance of trees** maintenance of the plantation will include mechanical trimming, pruning of branches, of existing and newly planted trees. Earthing up, raking, weeding, making of basins wherever required and top dressing. The bonsai needs to be maintained as bonsai with regular cutting and pruning.
- C. Technical Specifications: Electrical Works

1. 1X3W IP68 LED GROUND BURRIAL TYPE Step Light,

- Stainless steel faceplate, high pressure die casting light body, electrostatic plastic-coated surface Light fixture adopts high strength toughened glass, resist the impact and friction
- Housing: Moulded stainless-steel SS grade 316,
- Wattage: 3W,
- Input Voltage: DC24V (External Driver),

- Beam Angle: 30-60 Degree,
- Color: Warm White (3000K), IP Rating: IP68,
- Expected Life: 50000 hours, Warranty: 5 years unconditional.

2) 12W/M IP65 & IP 68 3000 CCT LED Linear Light,

- Completely enclosed in transparent optical grade PVC material,
- UV resistant grade: Class 4, Fire retardant grade: V-0,
- Profile Size: Length 1000MM, Pixel Size (mm): Dia 40,
- Wattage: 12W per meter, Input Voltage: DC12V (External Driver), Color: 3000K,
- Light Angle: 120-180°, Electrical Grade: Class III, Protection Grade: IP68,
- Warranty: 5 years unconditional

3) 12W/M IP65 & IP68 RGB LED Linear Light,

- Completely enclosed in transparent optical grade PVC material,
- UV resistant grade: Class 4, Fire retardant grade: V-0,
- Profile Size: Length 1000MM, Pixel Size (mm): Dia 40,
- Wattage: 12W per meter, Input Voltage: DC12V (External Driver), Color: RGB,
- Light Angle: 120-180°, Electrical Grade: Class III, Protection Grade: IP68,
- Warranty: 5 years unconditional

4) 9W IP68 LED Underwater Light, RGB

- Stainless steel faceplate, high pressure die casting light body, electrostatic plastic coating surface, Light fixture adopts high strength toughened glass, resist the impact and friction,
- Housing: Molding shaped stainless-steel grade SS 316,
- Wattage: 9W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree,
- Color: RGB including DMX System, IP Rating: IP68,
- Expected Life: 50000 hours, Warranty: 5 years unconditional

5) 8W (4X2W) IP 68 LED Underwater Light,

- Stainless steel faceplate, high pressure die casting light body, electrostatic plastic coating surface, Light fixture adopts high strength toughened glass, resist the impact and friction,
- Housing: Molding shaped stainless-steel Grade SS 316,
- Wattage: 8W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree,
- Color Temperature: 3000K (Warm White), IP Rating: IP68,
- Expected Life: 50000 hours, Warranty: 5 years unconditional

6) 12W (6X2W) IP68 LED Underwater Light,

• Stainless steel faceplate, high pressure die casting light body, electrostatic plastic

coatingsurface, Light fixture adopts high strength toughened glass, resist the impact and friction,

- Housing: Molding shaped stainless-steelGrade SS 316,
- Wattage: 12W, Input Voltage: DC24V (External Driver), Beam Angle: 15-25 Degree,
- Color: Warm White (3000K), IP Rating: IP68,
- Expected Life: 50000 hours, Warranty: 5 years unconditional

7) 20W IP 68 lights

 for lighting up the gabion from inside color temperature 2200 k CCT extruded Aluminium body with borosilicate glass lens Warranty: 5 years unconditional

8) 18W (6X3W) IP68 LED Spot Light,

- Stainless steel faceplate, high pressure die casting light body, electrostatic plastic coatingsurface, Light fixture adopts high strength toughened glass, resist the impact and friction,
- Housing: Molding shaped stainless-steel Grade SS 316,
- Wattage: 18W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree,
- Color: Warm White (3000K), IP Rating: IP68,
- Expected Life: 50000 hours, Warranty: 5 years unconditional

9) 12W IP65 Linear Recessed LED Light,

- Stainless steel faceplate, high pressure die casting light body, electrostatic plastic coatingsurface, Light fixture adopts high strength toughened glass, resist the impact and friction,
- Housing: Molding shaped stainless-steel Grade SS 316,
- Wattage: 12W, Input Voltage: DC24V (External Driver), Beam Angle: 15-25 Degree,
- Color: Warm White (3000K), Size (mm): L350, IP Rating: IP68,
- Expected Life: 50000 hours, Warranty: 5 years unconditional,

10) 16W IP40 LED Surface Light,

- Injection for PC housing and PC cover offering IP65 protection against moisture and dust and an impact rating of IK08,
- Aluminium based LED module for better heat dissipating, Easy installation by ceiling through two holes at the frame of the housing,
- LED based provides energy efficient solution and reduces maintenance costs,
- uniform light, IP65 ingress protection,
- Wattage: 16W, Input Voltage: AC 220-240V, Frequency Range: 50/60 Hz,

- Color Temperature: 3000K,
- LED Type: SMD LED, Ingress Protection: IP65, Beam Angle: 120°,
- Expected Life:>50000 hours, Warranty: 5 years unconditional

11) 60W Single Arm IP67 Pole Light,

- MS Body with Anti-corrosion treatment and UV-proof powder coating, Pole Height: 3
 Meters.
- Effective light point 4 mtr from ground surface, concrete pedestal of 1mtr. is to be provided for pole.
- modular technology, robust design and cooling technology, highly efficient heat dissipation,
- IP68 LED Optical Engine, Highest Waterproof rating,
- Wattage: 60W, Input Voltage: AC 100-240V, LED Lumen: 120-140 lm/W,
- Color Temperature: 3000K, IP Rating: IP67, Beam Angle: 85x145 Degree,
- LED Type SMD
- Expected Life: 50000 hours, Power Factor: >0.95, Warranty: 5 years unconditional,

12) 60Wx2 Double Arm IP67 Pole Light,

- MS Body with Anti-corrosion treatment and UV-proof powder coating, Pole Height: 3
 Meters
- Effective light point 4 mtr from ground surface, concrete pedestal of 1mtr. is to be provided for pole
- Modular technology, robust design and cooling technology, highly efficient heat dissipation, IP68
- LED Optical Engine, Highest Waterproof rating,
- Wattage: 60Wx2, Input Voltage: AC 100-240V, LED Lumen: 120-140 lm/W,
- Color Temperature: 3000K, IP Rating: IP67, Beam Angle: 85x145 Degree,
- LED Type SMD
- Expected Life: 50000 hours, Power Factor: >0.95, Warranty: 5 years unconditional,

13) 48W RGB LED Linear Wall Washer,

- Isolated housing design should have the separate heat dissipation fully ensure the stability and long lifespan of LED Light, fashionable and beautiful appearance, Size (mm): Length 1000mm
- Secondary optical lens for proper light throw, Light body adopts high pressure diecasting aluminum, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass to resist the impact and friction, adopt high wattage LED light source, high flux output, excellent consistency of light color,
- Wattage: 48W, Ingress Protection: IP65, Beam Angle: 45-60 Degree, Input Voltage: DC24 (External Driver), Color: RGB, Controller: DMX System,

• Expected Life: 50000 hours, Warranty: 5 years unconditional

14) 48W RGB LED Linear Wall Washer,

- fashionable and beautiful appearance, adopt isolated housing design could have the separate heat dissipation fully ensure the stability and long lifespan of LED Light,
- Secondary optical lens for proper light throw, Light body adopts high pressure diecasting aluminum, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, adopt high wattage LED light source, high flus output, excellent consistency of light color,
- Wattage: 120W, Ingress Protection: IP65, Beam Angle: 45-60 Degree,
- Input Voltage: DC24 (External Driver), Color: RGB, Controller: DMX System,
- Expected Life: 50000 hours, Warranty: 5 years unconditional

15) DMX CONTROL SYSTEM

S.I.T.C. and programming of DMX Master Controller, with following specifications.

- Graphical color displays to show selected environment
- Color/dimmer/speed palette
- Color temperature mixing
- Touch sensitive buttons. No mechanical parts
- Multi-zone micro SD memory
- Multi-room control with 500 scenes, 10 zones
- •1024 DMX channels. Control 340 RGB fixtures
- USB & Ethernet connectivity for programming and control
- Network communication. Control lighting remotely
- Windows/Mac software to set dynamic colors/effects
- IPhone/iPad/Android remote and programming apps

The DMX has a provision of controlling and programming through a USB cable via a computer as well as remotely through internet. Its system should include the signal enhancers/ boosters& repeaters etc wherever required in order to take care of smooth & proper functioning of the entire systems.

- DMX Decoder
- RGB Data Repeaters
- DC24V 100W LED Driver

16) HIGH PROTECTION WATERPROOF MINI-CONNECTOR.

- For 2-3-4 POLES. IP68, Housing made of PA66, with co-molded TPA seals making it totally waterproof.
- UL94 V0/V2 (f1) materials are suitable for underground installation and guarantee

reliability over time.

- UV radiation resistance test according to EN60079-0.
- Light ageing method (ISO 4892-2). Duration 1000 hours.
- Electrical insulation tests up to 3.75KV, Resistance to external agents (EN60529).
- In addition: ageing test in air with ozone concentration (ISO1431-1). Resistance in saline environment Corrosion test (EN60068-2-11:2000). Resistance to impact (NEMKO EN62262:2002), Resistance to ame.
- Use of materials reinforced with fiberglass UL94 V0/V2 (f1). Glow-wire 850°C/960°C. Realized with materials compliant with the most rigorous Reach/RoHs regulations.
- Suitable for cable types max. 4G1.5 FG7OR max. 4G1.5 3G2.5 2G4 H07RN-F max.
 4G2.5 FG7OR max.4G4 H07RN-F, Suitable for conductor sizes .5 to 4sqmm. Cable OD from 7 -12mm, Tested for 30mtrs

17) RADIAL CLOSING GEL PRE-FILLED JOINT BOXES FOR EXTRUDED INSULATION CABLES UP TO 1 KV.

- Primary insulation, consisting of a cross-linked polymer gel, and the exceptionally robust insulating plastic casing render Class 2 joints in accordance with the definitions contained in standard CEI 64-8.
- The joint has been tested in accordance with the main international specifications, with repeated flexing and torsion tests and immersion in water, and has been declared as conforming to the mechanical, electrical and sealing specifications required for plastic cable accessories. The joint and its components have an unlimited shelf life, are chemically inert and therefore completely safe. Conductor connections are re-enterable even after long periods of operation. Packaged with self-extinguishing material/, flame retardant, for cables at 90°C working temperature.
- The radial closing system facilitates joint application, making them re-enterable only by means of a tool. Electrical performance: CEI EN 50393 CEI 20-33 (with testing under water head and water between the cable cores) Class 2 in accordance with CEI 64-8. No flame propagation: CEI 20-35 IEC 60332-1 HD405-1 (as applicable) Low smoke and toxic and corrosive gas emissions. Gel: UL 94-HB, Casing mix: UL 94-V2, Degree of protection: IPX8, Installation temperature: -40°C / +50°C, Operating temperature: 90°,
- Rapid Joint L 10-ARM supplied with supplied with armor continuity device,

18) CCTV CAMERA

Dome camera 1/2.8" 2Megapixel progressive scan CMOS,

- H.265+/H.265/H.264+/H.264
- Streaming Capability: -3 Streams
- Electronic Shutter Speed: Auto/Manual, 1/3(4) ~1/100000s
- Minimum Illumination: 0.007Lux/F1.6(Color,1/3s,30IRE)
 0.06Lux/F1.6(Color,1/30s,30IRE)
 0Lux/F1.6(IR on)
- 50/60fps@1080P (1920×1080),

- Smart Detection supported,
- BLC / HLC / WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC,
- 2.8mm fixed lens (3.6mm, 6mm optional),
- Intelligent function: -intelligent video systems & Tripwire, Intrusion, Abandoned/Missing, Face detection
- Micro SD memory: 128GB,
- IP67, IK10, Poe,
- IR LEDs Length 30m,
- 1/1 Alarm in/out,
- 1/1 audio in/out,
- Ram: 256MB/32MB
- Protocols: HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS;
 DDNS; PPPOE; IPv4/v6; QoS; UPnP; NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP;
 SNMP, Certificate: UL CE FCC
- IP67, IK10
- Pole mount,

64channel NVR

- Main Processor: Quad-core embedded processor
- Compression: Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
- Resolution: -, 1080P to 12MP
- 720P, D1 etc.
- Internal HDD: 8 SATA III Ports, Up to 10 TB capacity for each HDD
- e SATA: 1 e SATA
- USB: 4 USB Ports (2 Rear USB 3.0, 2 Front USB 2.0)
- Alarm input: 16 Channel
- Relay Output: 6 Channel
- Bit Rate: 16Kbps ~ 20Mbps Per Channel
- RS232, RS485 support
- Sync Playback: 16 playback
- Certificate: UL, FCC, CE

41 -42" TV

- for view camera 42" Dual core Smart Full HD LED TV ,3 HDMI Ports,
- Max resolution:1920 x 1080, Operating Power consumption 58W
- Supply and laying 16 Core Single Mode Fiber Make Molex or equivalent
- SC Pigtail& splicing of SC Pigtail
- SC-LC Duplex Fiber Patch Cord 3 Meter
- Cat 6 Patch Cord 3 Meters
- Rack Side 24 Port LIU
- 6 Pak Adapter Plate
- Blank Plate

- 24U rack
- Power Source 2 socket for switch
- Splicing of OFC

19) SMART STREET LIGHT CONTROL PANEL (SLCP)

Shall be conforming following IS standards – IS: 2147 – 1962 Degree of protection Floor / wall/ structure mounted, free standing, suitable for cable entry from bottom side, dust proof, vermin proof, 3 phase and neutral, bus bar, aluminum, neutral bus shall be of same size as phase bus bars, Short circuit capacity for the bus bars and switches shall be 10 kA. The smart light control panel shall contain the following features

- The feeder panel functionalities shall consist of class 1 energy, meter, feeder panel control unit &wireless communication unit
- The feeder panel controller shall be capable of switching on/off all the luminaries of a particular switching point based on the lighting schedule set by the central management server (CSLMS)
- It shall communicate to the CSLMS through the wireless communication unit over GSM/Wi-Fi//Ethernet.
- Once the lighting schedule is set, it shall operate the luminaries according to that schedule till the lighting schedule is changed by the CSLMS.
- It shall operate the luminaries according to the lighting schedule even if there is a communication fault between CSLMS itself.
- in the absence of any lighting schedule it shall operate (On/OFF) the luminaries according to time of the day.
- It shall communicate the real time status (on/Off / fault) of the luminaries to CSLMS.
- if it is not able to communicate with CSLMS, it shall store all the luminary's data internally and relay that data to CSLMS once the communication is established.
- it shall be able to store luminary's log /data for up to 7 days.
- it shall have IP55 protection.
- MSEDCL meter space in feeder panel controller.
- Uniform rating for all the panels.
- The vendor needs to use the appropriate communication mechanism from GSM/Wi-Fi/Ethernet for establishing connectivity between feeder panel controller & CSLSM.
- Group control via feeder panel, but individual street light fixture data should be available via CSLMS.

20) 5W LED FLAME/CANDLE LAMP WITH IP65 TRANSPARENT GLASS ENCLOSED,

- Wattage: 5W, Input Voltage: AC 220V, Color Temperature: 3000K, Color: Warm White,
- Expected Life: 50000 hours, Beam Angle: 120 Degree, Warranty: 5 years unconditional

21) SMART LED street light fitting

- suitable for 75-85 W, including lamp, with PF > 0.95 class IP 66,
- impact resistance of IK07 and above Housing of pressure die cast Aluminum alloy and heat sink extruded Aluminum complete (Above Pathway)
- WITH 5 years unconditional COMPREHENCIVE MAINTAINENCE

22) HIGH MAST REPAIRING & OVERHAULING

- Dismantling 30 Mtr High mast, overhauling of winch and Changing of wire rope and EPR cable and Reinstallation of 30 MTR HIGH MAST with Crane
- Supply of 6mm diameter SS wire rope for 30 MTR HIGHMAST 70 meter each x 2 wire rope = 140 meter required for two wire rope system
- Supply of Trailing Cable Copper 5 pair, 4 sq.mm 35mtr long
- Supply of Double Drum winch for 30-Meter-High mast
- Supply connector, junction box, MCB glands for incoming /outgoing cable depending upon size of cable, 1.5ltr OIL for winch to complete work in all respect.
- Supply of bolts manufactured from special steel along with nuts, washers (set of 1 bolt with 2 washers & 3 Nuts)
- Supply power tool motor, manual handle,

24 Miscleneous:

- Every pole shall have a weight slip before unloading of vehicle. The weight slip shall be submitted and receipt of the same shall be submitted while billing.
- Stage Inspection: All material prior to manufacturing shall be approved on stage inspection and the test results after manufacturing shall be submitted to the Authority.
- Material Testing: All material inspection after unloading shall be inspected at site or stores and shall be inspected by the Authority before Commissioning.

- List of Approved makes as approved by NMSCDCL
- . High Mast: Bajaj/ Crompton/ Philips/ Surya/ Wipro

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 LED Fittings: Philips/ Bajaj/ Crompton/ E-smart/ Surya/ Havells/ Osram/ HPL/ Wipro/ Samudra or equivalent

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Octagonal Pole: Bajaj/ Volmont/ Surya/ Transrail

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FRP Box: MEW/ Sintex/ Nil Kamal/ Ajay/ National

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Cable: Polycab/ Finolex/ KEI/ Havells/ RR Kable/ Vishal/ HPL

•

Cable Lugs: 3D/ Chetana/ Braco/ KEW/ Dowells/ ECC

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MCB: Legrand/ L&T/ Havells/ Anchor/ Siemens

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• Wires: Polycab/ Finolex/ KEI/ RR Kable/ Vishal/ HPL/ Havells

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DWC Pipe: Rex/ Duraline/ Electrex/ Finolex/ Tirupati

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• GI Pipes: Jindal/ Tata/ Surya prakash/ Zenith Birla/ Apollo

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Any Other: As approved by Engineer In charge

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- Panel/steel enclosures should be as per IS and IP 65 Water proof and venin proof.
- Insulation test and earth testing result to recorded and submitted to authorities.
- Stage inspection, initial inspection of material at manufacturing level and test result at actual, should be submitted.
- Material inspection should be done at site/store before starting the work by concern authorities.
- Required drawings should be submitted duly approved by authorities.
- Necessary commissioning permission got installations from NMSCDCL/NMC and Electrical inspector, and required authorities should be obtain and submitted. The required ties and other if any will be in bidder as scope
- Panel or Steel enclosures, if any shall be as per IS standrads and IP 65 with water resistant and vermion proof31 Insulation test and earthing test results are to be recorded and submitted to concerned Authority prior to Commissioning
- 32 Any drawings required shall be preapred by the contractor and shall be duly approved by the Authority prior tpo commencement of work.
- 33. Necessaray permissions for Installation and Commissioning from electrical inspectors and MSEDCL authorities shall be onatined by the Contractor and submitted to the Authority. Any bcost in relation of ionbtainbing these permissions shall be in the scope pof the contractor.

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NOTE:

The poles for pole lights shall have base plate at the base that shall be anchored on m25 c.c. pedestal at height of not less than 900 mm or as per site requirements to prevent submering of poles in water.

High mast poles shall have base plate and shall be anchored on m30 c.c. pedestal as per site conditions to prevent submertion of poles in water.

Supply and erection of all the electrical equipments/fixtures shall bear 5 years' unconditional warranty

The s.l.d. shall be prepared by the contractor and to be approved by the consultant/engineer-incharge

Third party inspection for all the Electrical equipment's will be carried out by the reputed third party finalized by the NMC in consultation with the PMC.

D. Technical Specifications: Retaining Wall

1. Excavating foundations

h. Trenches for foundations, footings/cesspits, drains etc. to be excavated to the exact width length and depth shown or figured on the drawings or as may be directed by the Engineer. If taken out to a greater width, length, or depth than shown or required the extra work occasioned thereby shall be done at the Contractor's expense. Extra depth shall be brought up by sound masonry or concrete filling and extra length or width filled in by rammed earth or muram or, if the Engineer thinks it necessary for the stability of the work, by masonry or concrete as may be directed. The excavated material shall be used to fill in on each side of the masonry or to form the filling in of floors or it shall be placed or spread elsewhere on or near the side of the works as may be ordered free of charge. The Contractor shall at his own expense and without extra charge, make provision for all shoring, pumping, dredging, bailing out or draining water, and the trenches shall be kept free of water while the masonry or concrete is in progress and till the Engineer considers that the mortar is sufficiently set. The sides of the trenches to be kept vertical and the bottom horizontal, and to be run at the same level throughout or properly stepped as may be desired by the Engineer. The Contractor shall also, at his own cost remove such portions of boulders or rock as are required to make the bottom of the trench horizontal and level. He shall also make level and hard the bed of all the trenches and consolidate the earth about the same and against all walls, pits, drains etc. The foundation trenches to be inspected and passed by the Engineer before any masonry work is commenced and the Contractor shall hold an order in writing to this effect, other wise he shall be liable to have his work removed for inspection.

All the excavated materials belong to the Nashik Municipal Corporation EIC and therefore shall be property of Nashik Municipal Corporation EIC. It will be mandatory on the part of contractor to use this material in the execution of works under contract if the quality of material available is as per the specification. The contractor shall have to sort out the material in separate stacks and transport the same at his cost. No transportation charges or any other charges will be paid to the contractors. The rate of excavation is deemed to include the cost of transportation and disposal of surplus excavated materials to any location as directed by the Engineering Staff. However, if the contractor is directed to dump the material on the municipal dumping ground, the amount will be recovered from the contractor at the rate of INR500 per trip from 1.1.2006 being tipping charges for which the contractor has to quote the rate accordingly.

i. The measurement of the work will be the exact length and width of the lowest step of the footing according to drawings or the Engineer's instructions and the depth measured vertically.

The contractor shall make every effort to carry out the excavation in rock to the correct formation levels as far as practicable. However, under cut and over cut up to 8 cm. of the formation levels shall be permitted. As far as payment is concerned quantities shall be worked out with respect to formation levels only. Under cut in excess on 8 cm. shall be removed by chiseling and over cuts for above 8 cm. shall be filled in with 1:3:6 concrete without any extra cost.

2. Filling in with Contractor's Earth or Murum.

- e. The earth or murum, whenever required to be supplied by the Contractors for filling in the low lying ground and wells or in the embankment of the road, shall be dry, friable, and free from mud sludge, vegetable matter or rotten material of any kind, or material likely to decay and of a quality to be approved by the Engineer. All big lumps or clod shall be broken before spreading the earth or murum on the ground.
- f. The filling in of wells and low-lying grounds shall be done in such layers as may be directed from time to time by the Engineer, and no fresh layer shall be allowed to be put on unless the previous one is properly spread, trimmed, leveled, and thoroughly consolidated by rammers or rollers, as the case may be, or as may be ordered by the Engineer.
- g. The embankment shall be raised in regular layers slightly concave in section, beginning from the bottom and gradually raised to the full height, layer by layer not exceeding 300 mm. in thickness in a loose state. Each layer shall be thoroughly consolidated by watering where necessary and rolling it with an approved steam or diesel roller before the next layer is put on. The rolling and consolidation should be done to the entire satisfaction of the Engineer and no rubble packing or metal should be laid on it until the Engineer is satisfied that the earthwork has been thoroughly consolidated and written certificate is given to them effect by the Engineer.
- h. The rates for embankment or filling in with Contractors earth or muram shall include the cost of materials, fencing, lighting, watching haulage, spreading, leveling, watering, rolling and consolidating.

3. Dry Rubble Packing

The dry rubble packing shall consist of a layer of uniform thickness of blue trap stone rubble, or any other approved stone carefully set as close as possible on ground properly formed for the purpose. The width of the upper part of the stone shall not be more than 200 mm. or less than 150 mm. and the packing shall consist of large stones. The interstices between the rubble stones shall be filled up with stone chips, removing the projection of the upper part of the packing with care, as not to loosen the whole, the whole should be thoroughly rammed, watered, settled to place and made compact.

4. Cement Concrete in Foundation and Bedding

- e. Cement concrete in foundation and bedding shall be mixed in the proportion of 1:3:6 or 1:4:8 as directed using Portland cement, sand and metal nos. 1, 2 and 3 in proportions as directed.
- f. The ground to be thoroughly leveled and well rammed before laying the concrete on the work. The concrete shall consist as described above. In case of hand mixing the metal, sand and cement, etc. as the case may be to be stacked, before mixing, in measured layers. The materials to be then thoroughly mixed in small quantities at a time with sufficient quantity of fresh water and laid in the work in layers, each not exceeding 300 mm. in depth and repeated one above the other. Salt or brackish water will not be allowed to be used. Each layer to be well rammed with heavy wooden or iron rammers. The work to be ground with thin mortar, while ramming, until it fills in all the spaces between stones and cream to the surface. The ramming operation to be continued until the whole work becomes solid and compact to the entire satisfaction of the Engineer. The measurement of the work will be the exact length, breadth and depth ordered by the Engineer or shown or figured on the drawing and after the concrete is consolidated.
- g. The stone metal to be made of good hard blue rubble stone from quarried to be approved of by the Engineer. The metal to be such as to pass through a ring 40 mm. diameter. Larger size metal or chips will not be accepted.
- h. The contractor shall adopt every precaution towards guarding the concrete from admixture with duster dirt of any kind and shall use properly constructed and impervious brick masonry or wooden platform for mixing and keeping it until laid in the work and protect it from rain and sun.

5. Uncoursed Rubble Stone and Cement Masonry for Foundation etc.

i. To be of the best description of blue basalt stones from quarries approved of by the Engineer and cement mortar in courses not exceeding 450 mm. in the height. The stones shall be large, flat-bedded and laid of flush in mortar. No stone to be less in breadth than 1½time sits height and less in length or tail into the work than twice its height. Every stone, whether large or small, must be set flush in mortar. The small stones used for wedging or filling in to be carefully selected to fill in the voids between large stones. Care must be taken that no dry work or hollow space shall appear in the masonry work. The stones to be arranged so as to break joint least 75mm. and long vertical lines of joints to be carefully avoided everywhere. The joints at the face to be finished off by being

neatly struck and smoothed with the trowel while the mortar is fresh. The upper surface of the work to be throughout to uniform level at the height of every course.

- j. When concrete is not used and the Engineer thinks it desirable, the lowest course of footing of about 300 mm. in depth to be formed of small chips properly laid in mortar and well rammed down so as to make a good solid level bed for the upper work.
- k. Rough rubble quoin-stones, flat-bedded and of suitable size, to be provided at all angles, and bond stones having an excess of tail only in the wall and not of height where required, to be also provided to insure-uniform compactness of work. All stones to be laid on their quarry bed.
- 1. Before commencing the masonry work the foundation trenches to be leveled right through and the bottom of the same watered and well rammed down. The trenches to be kept free of water while the masonry work is in progress, or if the Engineer thinks it necessary till the mortar used in the masonry, is sufficient set.
- m. The masonry to be well watered until it becomes hard and solid and to be well covered during the rains.
- n. Mortar to be made as described under the head.
- o. The measurement of the work to be exact length, breadth and depth ordered by the Engineer or shown or figured on the drawings.
- p. One header in at least every square yard or 0.84 Sq. Meter of facing shall bind into the work etc. as in specification No.6

6. Uncoursed Rubble, Stone and Cement Masonry for Plinths, Walls, Backing to cut-store works etc.

- j. To be of the best description of blue basalt rubble stones from an approved quarry and cement mortar in courses not exceeding 450 mm. in height. The stones to be flat-bedded and laid flush in mortar. No stone to be less in breadth than 1½ times its height and less in length or tail into the work than twice its height. Every stone, whether large or small, must be set flush in mortar, the small stones used for wedging of filling in being carefully selected to fill in the voids between larger stones. Care must be taken that no dry work or hollow space shall be left in the masonry. The stones to be arranged as to break joint at least 75 mm. and long vertical lines of joints to be carefully avoided everywhere. The joints at the face to be finished off by being neatly struck and smoothed with a trowel while the mortar is fresh. The upper surface of the work to be brought to uniform level at the height of every course.
- k. When the rubble masonry is built for backing to coursed rubble or khandkee face work, the height of the course to be the same as that of the khandkee course.

- The stones at all courses and junctions of walls to be large size and dressed with the hammer. At
 all angles formed at the junction of walls that stones to run well into the masonry and laid headers
 and stretcher alternatively and at every third course the angle to be formed by cutting the stone into
 an angle.
- m. One header in at least every square yard or 0.80 square meter of facing shall bond into the work. The header to be about 500 sq.cm. in area at face and to run back to the entire width of wall. When the thickness of wall is more than 60 cm. a series of bond stones to be laid through the work so as to form a tie from front to back, breaking joint or over-lapping each other for at least 150 mm. No stone whose length is less than 45 cm. to be used in the work as header.
- n. All walls to be carried up simultaneously and to one level throughout and no part shall be allowed to raise more than one meter above the rest to avoid unequal settlement. If it should be necessary to carry up one part of a wall before the other, it shall be done after previously obtaining the Engineer's permission and in case the end of the portion first build should be racked back i.e. left in steps each course projecting further than the one above it. Care should be taken to see that the sides of the wall are not built separately from the hearting, the faces and internal filling being done at the same time. The stones should cross from opposite sides of the wall and overlap as much as possible. No course to be laid unless the course below it is perfectly set.
- o. The Masonry to be well watered until it becomes hard and solid and to be well protected from sun and rain.
- p. The measurement of the work to be actual cubical contents of the masonry after deducting all the openings, cut stone work and all other items of work paid for separately.
- q. All bond stones to be marked inside and out and the marks to be retained until ordered by the City Engineer to be removed.
- r. Nothing extra will be allowed for inserting door and window frames or any frames of a similar character nor for the insertion of wooden blocks for fixing hooks rails etc.

7. Lime, Shingle, Sand and Mortar.

- c. The lime to be made of approved Salsette lime stone or kunkur and properly burnt and sLaked with fresh water on the works. It must be free from excess of unburnt kunkurs, ashes cinders salt of other impurities and if the lime be considered to be of inferior quality or sLaked with salt water it shall be rejected. All pieces of unburnt lime of other impurities to be screened or picked out and removed at once from the site.
- d. The different ingredients to be stacked before grinding in alternate layers. The materials of the lime mortar to be then carefully mixed dry in small quantities and thrown into a mortar mill for grinding. The grinding to continue for at least three hours each time or for 150 revolutions of the mill. The mortar to be kept moist and well sheltered from the sun till it is used in the work. No mortar that

has been kept for a fortnight after grinding to be used in the work without the special permission of the Engineer. The diameter of the mortar mill shall not exceed 9.10 meter. Where pure water for slaking the lime or mixing the lime and sand is not obtainable, water drawn from wells approved by the Engineer will be allowed to be used. Such water should be free from salt as much as possible, mud clay and other impurities.

- j. The shingle to be obtained from beds or banks of rivers shall be free from shells, salt and earth it shall be well washed. The sand to be clean, sharp and hard, free from large pebbles, salt, shells, earth, dust or other impurities. If the Engineer thinks it necessary he may cause the sand to be screened, windowed or washed with fresh water at the contractor's expense. Salt or blackish water will not be allowed to be used. Sea sand shall not be used in the work.
- k. The common lime mortar to be made of good, fresh lime and clean sand approved of by the Engineer and mixed in the proportion of one parts of lime (by measure) to one part of sand or as directed by Engineer.
- 1. The hydraulic lime mortar shall be mixed in the proportion of four parts of lime (by measure) to one part of Aden pumice and four parts of sand.
- m. The cement mortar shall be mixed in the proportion of one part of Portland cement (by measure) and five or six parts of sand, as directed by the Engineer.
- n. The mud mortar shall consist of well-tempered clay mixed with a sufficient quantity of chopped lay or straw and cow dung.

8. Dressing of Stone

All faces of stone required to be dressed shall be true and out of winding, except where it is otherwise specified. The face of stone described as hammer-dressed shall be as far as possible square and leveled with a mason's hammer by knocking off all protuberances and ridges. Where it is described as dressed very rough the protuberances and ridges shall be further reduced with a chisel, leaving the face truly level though rough with depressions. These depressions shall not be more than 10 mm. in depth and in area 90 sq.m. Rough-dressed face shall differ from those dressed very rough in having the depressions not more than 5 mm. in depth and 48 sq. mm. in area. Where the face is required to be medium-dressed the depressions shall not be more than 3 mm. in depth and 13 sq. mm. in area. In fair dressing the face shall be dressed fine, but the chisel marks may be left visible in a few minute dimples scattered over it, in the fine dressing neither chisel mark nor any dimples whatsoever shall be left in the face.

9. Blue Basalt Stone

All blue basalt stone shall be from quarries to be approved by the Engineer and to be of the best approved quality and color. All stones shall be sound, durable, uniform in color and texture and free from flaws, cracks, injurious veins, crystals, minerals, salt cavities and other defects. No earthly, discolored, weathered or water worn or boulders stones to be used.

10. Stone and Brick Masonry Work in general

- i. The work to be built plumb, curved, or batters, as may be required by the design and to be carried out in a thoroughly workman like manner and to the entire satisfaction of the Engineer. The Contractor to provide at his own expense all moulds, templates, centering, scaffolding etc. as may be required for the proper execution of the work which shall be included in the prices of the work, as no separate change to be made for them.
- j. All stones or bricks to be thoroughly cleaned and wetted with fresh water before being put into the work and the mortar to be used stiff
- k. The work to be kept wet while in progress to the entire satisfaction of the Engineer till the mortar is properly set. On Sundays and other holidays also when the work is stopped, the top of all unfinished masonry to be kept flooded and labourers to be employed for this purpose. Watering to be done carefully so as not to wash the mortar out of the joints. The Engineer shall be at liberty to employ labourers to water the work should the contractors fail to do the same to his (the Engineer's) satisfaction.
- 1. Should the mortar perish that is becomes dry, white or powdery through neglect of watering, the work shall be pulled down and rebuilt at the contractor's expense.
- m. As a rule the whole of the masonry work in any structure to be carried up at one uniform level throughout but where breaks are unavoidable the joint to be made in good long steps, so as to prevent cracks arising between the new and old work. All junctions of walls to be formed at the time the walls are being built, and cross walls to be carefully bonded into the main walls.
- n. When new work is to be added to existing structure, the old work must be prepared to receive the new and both must be carefully bonded together.
- o. During the rains, the work to be carefully covered without extra charge, so as to avoid the fresh mortar being washed away.
- p. Where the word cement is used it is to be understood Portland cement of the best description, specified under the head of the Cement.

11. Bricks & Brick work in General.

h. Bricks shall conform to the latest Indian standard specifications (I.S.S.). Bricks to be whole, sound, well burnt free from cracks to ring when struck and not to crack or break when soaked in water regular in shape and uniform in size. They should be of the best of description obtainable in the market and of the best quality and color, and in every respect to be approved by the Engineer unless otherwise specified they should be of English pattern 230 mm. x 115 mm. x 63.5 mm. No bricks to absorb water more than one fifth of their own weight when dry for use in load bearing wall. For bricks used in panel walls, the water absorption shall not exceed ¼ of their dry weight. Bricks to be thoroughly cleaned, well wetted or soaked in fresh water before being used on the work and no

broken bricks to be used except as closures. Crushing strength of the dry bricks shall be not less than 35 kg./cm.2

- i. The mortar should be as described under the head of good quality carefully mixed and used stiff. For joints of face work only Neroo and screened sand should be used in equal proportion.
- j. A good bond should be preserved throughout the work both laterally and transversely. All bed joints should be perpendicular to the pressure upon them, i.e. horizontal in vertical walls, radial in arches and at right angles to the slope in battering walls.
- k. In walling the courses shall be kept perfectly horizontal and rise in plumb. The vertical joints shall break joints with the courses immediately below and above, but they shall be directly over one another in alternate courses to prevent the necessity of bats. The joints shall not exceed 10 mm. thick shall be fully of mortar close, well flushed up and neatly struck or pointed as may be required.
- 1. English bond to be used throughout in walling. In arching such bond shall be used as the Engineer or his agent may direct.
- m. Facing of brick work to be specially selected brick of the same color throughout. All external brick walls of thickness 25 mm. and above, shall be constructed in plumb from the outside face with the help of scaffolding erected on the external side.
- n. In other respects, the work should comply with the general specification for brick work given in P.W.D. Hand book.

12. Pointing.

- c. The old mortar to be raked out of the joints at least 20 mm deep. The dust to be brushed out of the joints and the walls well wetted with fresh water until the old mortar in the wall is wet. The pointing to be made with mortar of cement and fine sand, in proportions as specified. The joints to be neatly defined by the pointing and the same to be sunk as per drawings. No false joints will be allowed. The pointing to be kept wet until the cementing material sets and becomes hard. The whole surface to be left clean at the completion of the work.
- d. After the joints are raked out they shall be inspected by the Engineer before being filled up.

13. Cement Plaster.

All stone and brick masonry shall be thoroughly wetted and raked out to a depth of at least 20 mm each and walls washed and wetted before plastering is done. Render with a mortar of specified parts of Portland cement and fine sand of specified thickness and rough but do not beat. Float or set with a thin coat 3 mm of Portland Cement and polished well immediately with a trowel or flat board. The cement mortar to be used within 30 minutes after it leaves the mixing board or mill. Before work is started patches of plaster 150 x 150 mm. should be put on about 3 meters apart as gauges. By this means an even thickness is ensured. Cement plaster must be in even squares or stripe. Care

shall be taken to keep the whole surface thoroughly wetted for at least a week. The finishing surface should be as specified and directed. Nothing extra will be paid if the surface is required to be finished with neru and three coats of white or color wash.

14. Sand faced Cement Plaster.

All stone and brick masonry surface to be plastered shall be thoroughly wetted for at least 6 hours in case of brick masonry and the joints shall be raked out to a depth of at least 20 mm. before plastering. The first coat of cement mortar in the proportion as specified in item shall be applied uniformly all over the surface to be plastered to a thickness of 14 mm. with a trovel and flat board in exact plumb. This coat shall be allowed to rest for not less than half an hour. Indentations shall then be made in the form of waves by a wire broom over the surface to form a key for the second coat. The plastered surface shall be allowed to cure for at least four days. First coat will be with addition of water proofing compound in proportion as specified in item. The second coat of cement mortar shall be applied in the proportion of as specified in item using clean and screened through a mesh of not less than 1.5 mm. and not more than or 3 mm. equal size to a uniform thickness of 6.5 mm by trowel and flat board in exact plumb. The surface shall be trapped with a cork piece to give a desirable uniform granular appearance. Care shall be taken to keep the whole surface thoroughly wetted for at least a week.

15 Concrete Work:

- s. This specification covers the general requirements for concrete to be used on jobs using on-site production facilities including quality, handling, storage of ingredients, proportioning, batching, mixing and testing of concrete. This also covers the transportation of concrete from the mixer to the place of final deposit and the placing, curing protecting, repairing and finishing of concrete.
- t. The rate quoted by the contractor for the item, Plain or reinforced concrete shall include costs of materials, logistics, storage, mix design, testing, mixing, transporting, pouring/laying, compacting, curing, providing & treating construction joints repairing the defects, hacking, cleaning the area before handing over the area for the next activity and taking measures for safety of people and property.

u. Material Specification

- Cement-Cement to be used in the works shall be any of the following types with the prior approval of the Engineer in charge: Ordinary Portland Cement, 43 Grade, conforming to IS: 8112. Ordinary Portland Cement, 53 Grade, conforming to IS: 12269. (iii)Sulphate Resistant Portland Cement, conforming to IS: 12230.
- ii. Contractor should submit a test certificate to the EIC from the cement manufacturer stating fulfillment of all chemical and physical properties of cement as per respective Indian Standards. EIC may ask the contractor to get the cement samples tested from an independent competent approved testing agency and contractor shall submit test certificates of the cement from competent approved testing agency after getting the cement tested from it before using the cement in the work. Cement will be liable to be rejected and

removed from the site if the test results are not satisfactory as per respective Indian Standards.

iii. Cement should be stored at site in covered sheds. Precaution shall be taken by the contractor to also ensure that cement does not get hardened before it is used in the work. More than 10 bags of cement shall not be stored in one stack of cement bags in the cement store. Cement, if found hardened, shall be rejected and removed from the site. Cement older than three months from the date of manufacture shall not be used in the work.

v. **Aggregates** (Coarse and Fine)

- i. Coarse aggregate shall consist of clean, hard, strong, dense, non-porous and durable pieces of crushed stone, crushed gravel, natural gravel or a suitable combination thereof or other approved inert material. They shall not consist pieces of disintegrated stones, soft, flaky, elongated particles, salt, alkali, vegetable matter or other deleterious materials in such quantities as to reduce the strength and durability of the concrete, or to attack the steel reinforcement. Coarse aggregate having positive alkali silica reaction shall not be used. All coarse aggregates shall conform to IS: 383 and tests for conformity shall be carried out as per IS: 2386 Parts I to VIII.
- ii. Nominal size of the coarse aggregate shall be as described in the respective item in the schedule of quantities.
- iii. Fine aggregate shall consist of clean, hard, strong and durable pieces of crushed stone, crushed gravel, or a suitable combination of natural sand, crushed stone or gravel. They shall not contain dust, lumps, soft or flaky, materials, mica or other deleterious materials in such quantities as to reduce the strength and durability of the concrete, or to attack the embedded steel. Fine aggregate having positive alkali-silica reaction shall not be used. All fine aggregate shall conform to IS: 383 and test for conformity shall be carried out as per IS: 2386 (Part I to VIII). The Contractor shall submit to the Engineer the entire information indicated in Appendix A of IS: 383. The fineness modules of fine aggregate shall neither be less than 2.0 nor greater than 3.5.
- w. EIC may reject the aggregates if the satisfactory results of testing of concrete cubes made with the aggregates are not obtained during any stage of the work. Aggregates shall be stored on site in such a way that aggregates of different sizes shall not mix. Care shall be taken to ensure that aggregates remain clean till they are used in the concrete and that there will be no segregation.
- x. Samples of the aggregates for mix design and determination of suitability shall be taken under the supervision of the Engineer and delivery to the laboratory, well in advance of the scheduled placing of concrete. Records of tests, which have been made on proposed aggregates and on concrete made from this source of aggregates, shall be furnished, to the Engineer in advance of the work for use in determining aggregate suitability. These tests shall also be done periodically on samples of material actually being used in concreting during course of concreting operations; as directed by the Engineer. The costs of all such tests, sampling, etc., shall be borne by the Contractor.

- y. Water: Water for mixing and curing of concrete shall be clean and free from oils, alkalis, salts, sugar, organic materials or other substances that may be deleterious to concrete and/or steel. Potable water is generally considered satisfactory for mixing concrete. Quality of water for mixing and curing of concrete shall conform to clause 5.4 of IS 456 Indian Standard Plain and reinforced concrete code of practice.
- z. Admixtures Use of chemical admixtures to enhance the properties of concrete may be permitted by the EIC upon tests on trial mixes of concrete to establish that overall chloride content of the concrete mix is within acceptable limit as described in IS 456 and properties of concrete like strength & durability are not compromised. Chemicaladmixtures to be used in the concrete mix shall conform to IS 9103– Indian Standard Concrete Admixtures Specifications. Instructions of the manufacturers' of the chemical admixtures shall be followed while mixing them in the concrete.
- aa. **Mix Design:**-Proportions of ingredients of concrete need to be decided to ascertain its strength before it is used in the work. The ingredients are cement, fine aggregates, coarse aggregates, water and admixtures. In order to have dense durable concrete with desired compressive strength it is important that a) Fine aggregates closely fit in to voids or gaps between the coarse aggregates, b) all aggregates are coated with cement and c) water is sufficient only to coat the aggregates surface with cement and to achieve the desired workability of the mix. Wrong proportions of ingredients of the concrete mix will result in weak concrete. Trial mixes are therefore done sufficiently in advance to decide the proportions of aggregates in a concrete mix of a specified grade. No concrete shall be used in the work till the trial mixes are carried out; mix proportions are decided and approved by the EIC.
- bb. Concrete of different strengths is classified in different grade designations like M10, M15, M20, M25, M30, M35, M40 etc. Requirement of a particular grade of concrete is mentioned in the schedule of quantities and/or drawings and/or instructions of the EIC.
- cc. IS 456 and IS 10262 Indian standard Concrete Mix Proportioning Guidelines shall be followed for mix design process at the site. Contractor shall have a well-equipped concrete laboratory at the site and it should be manned by competent personnel. The equipment shall be calibrated from time to time. Measurement of moisture content of aggregates, grading of aggregates, slump shall be carried out routinely and mix proportions shall be adjusted accordingly with the approval of the EIC. Mix design procedure shall be carried out separately for each grade of concrete mix and every time the source of aggregates and/or cement is changed. Acceptance criteria shall be as described in IS 456 for approving the proportions of concrete mix. All test records shall be maintained by the contractor and presented to the EIC for seeking approval.
- dd. **Mixing of concrete at site:-**IS 6461 Indian Standard Glossary of terms relating to cement concrete, part VII Mixing, laying, compaction, curing and other construction aspects Shall be referred for usage of terms. Concrete shall be weigh batched at site using batch type concrete mixers conforming to IS 1791and/or Concrete batching and mixing plants conforming to IS 4925. The cement and fine aggregate shall first be mixed dry until the mixture is uniform in color. The coarse aggregate shall than be added, mixed and water added and the whole batch mixed thoroughly for a period of not less than two minutes until the resulting concrete is uniform in appearance Clean

aggregates, measured as determined by the mix design exercise shall be supplied to the mixer in the proportions already established through the mix design exercise, water cement ratio shall be maintained and the concrete mix coming out of the mixer shall be collected on a clean platform or a vessel from where it is transported to the actual location of the pour. The mixing of aggregates within the mixer should last for at least two minutes after placing all the ingredients in the mixer for any individual batch. Test cubes shall be taken and slump shall be measured as per the instructions of the EIC from time to time. IS 456 and IS 516 shall be followed for taking concrete cubes, curing the cubes and testing the cubes.

- ee. **Pouring and compaction of concrete**:-Contractor shall submit a method statement to the EIC before starting any concreting operation for the approval of the EIC. The method statement shall describe the work of concreting in terms of quantities of materials, labors, compaction equipment, quality control measures, safety measures, curing procedures etc. Fresh concrete coming out of the mixer or the batching plant should be transported to the location where it is to be poured in the formwork as quickly as possible with due regard to its temperature, exposure to sun and slump. Planning of the concreting operation should be done in such a way that it's pouring and compaction is done within the initial setting time of concrete. Concrete should be poured in forms in horizontal layers of 150mm to 900mm and each layer should be compacted wellbefore placing the next layer. Care shall be taken to avoid formation of cold joint between any two layers. Fresh concrete, either in forms or in transit should not be exposed to rain. Concrete should not be poured from a height exceeding 1.5m. Temperature of the concrete mix should be within 150C to 350C.
- ff. Pouring of concrete should not start till the method statement submitted by the contractor is approved by the EIC, and formwork & reinforcement is fully checked, cleaned and approved by the EIC. Formwork should be checked for its stability during the concreting operation. Reinforcement should be tied in such a way that it will allow the fresh concrete to flow in all parts of the formwork. Contractor should plan all the movements of the laborers during the concreting operation in such a way that cover to reinforcement and spacing of reinforcement bars is not disturbed. Contractor should plan the location of construction joints within the area to be concreted before starting the concreting operation and seek the approval of the EIC of the same.
- gg. Consolidation / compaction of concrete in the formwork shall be done with vibrators as per IS 3558, IS 2505, IS 2506, IS 2514 and IS 18652. Care should be taken by the contractor to avoid over vibration of the concrete, bleeding of concrete and under vibration of concrete. All concrete shall be properly consolidated in the formwork. Vibrator immersed in the concrete shall not touch the reinforcement and/ or formwork.
- hh. After the concrete in the forms is compacted, the surface shall be levelled with a straight edge and finished smooth with a wooden float or power floating machine.
- ii. Sampling of concrete for testing:-Random samples of the concrete mix from each batch of concrete shall be taken as per clause 15.2 of IS 456. Samples shall be taken in cubes of size 150x150x150mm. Three specimen cubes shall be made for each sample for testing at 28th day. Similarly three more cubes shall be made for testing at 7th day to get an early warning about the strength. More no of cubes may be taken if instructed by the EIC. The cubes shall be tested as

described in IS 516. Average of test results of three specimen cubes of one sample shall form one test result. Variation in strength of individual specimen cubes shall not vary more than 15% of their average value. Acceptance criteria of concrete shall be as described in IS 456. In case the concrete fails to satisfy the acceptance criteria then EIC may decide to carry out further tests and subsequent action.

jj. Curing of Concrete:-Concrete poured in the form work should not be disturbed after it is compacted. Freshly laid concrete shall be covered to avoid any loss of moisture from inside of it. Once hardened, the surface shall be kept moist and care shall be taken to ensure that the surface of concrete does not get dried. In case of flat slabs, a 50mm to 100mm layer of water should be stored on the slab surface. In case of beams and columns, the concrete surface shall be effectively covered and kept moist after the forms are removed. Curing of concrete shall be carried out for at least 28 days. Quality of water shall comply with the provisions of IS 456.

16 Construction Joints:-

- i. Construction joints are the locations where cold joints will be formed during the concreting operation due to break in concreting. It is difficult to bond the old and new concrete portions at any cold joint. Construction joints should therefore be provided where minimum critical structural actions are anticipated. Construction joints in beams and slabs should be at the mid span sections and for columns it should be at the mid height. Construction joints shall be perpendicular to the axis of the structural member.
- j. At the time of staring the next pour of concrete at the construction /cold joint, the joint shall be thoroughly washed, cleaned with wire brush, cleaned of any loose material and coated with the approved bonding chemical.
- k. Location of construction joints shall be as approved by EIC. EIC may instruct provision of dowel bars at certain construction/ cold joints and the same shall be provided by the contractor without any extra cost to the employer.
- Repairs and rectification:- All concrete work shall be inspected by the EIC upon de shuttering. Any rough surface, honey combed areas, shrinkage cracks, deflections and / or any other defects noticed during the inspection will be marked and contractor will have to rectify the defects as directed by EIC without any extra cost to the employer. Honeycombed areas shall be thoroughly washed and cleaned of all dirt and loose material and applied with approved chemical bonding agents followed by filling of the voids by approved repair mortar as per the instructions of the manufacturer of the repair mortar. Any dip in the slab level shall be made up a described above to the satisfaction of the EIC. All concrete surface shall be cleaned of shuttering, nails and /or any other rubbish to the satisfaction of the EIC. Hacking of the concrete surface shall be done as per the requirement of the work as directed by the EIC.
- m. Any major defect leading to excessive settlements, cracking etc. shall be further investigated by the EIC and instructions will be issued to the contractor for further tests and / or rectification of the defects by the EIC. Contractor will have to carry out the tests and/or rectification of the defects to the satisfaction of the Engineer in charge.

- n. Any tests, e.g. taking out in an approved manner concrete cores, examination and tests on such cores removed from such parts of the structure as directed by the Engineer, sonic testing, etc., shal be carried out by the Contractor if so directed, at no extra cost.
- o. **Unsatisfactory Tests:-**Should the results of any test prove unsatisfactory, or the structure shows signs of weakness, undue deflection or faulty construction, the Contractor shall remove and rebuild the member or members involved or carry out such other remedial measures as may be required by the Engineer. The Contractor shall bear the cost of so doing, unless the failure of the member or members to fulfill the test conditions is proved to be solely due to faulty design. The cost of load and other tests shall be borne by the Contractor it the tests show unsatisfactory results.
- p. **Method of Measurement:-** Concrete shall be measured in M3 as per IS 1200 part 2.

17 Formwork:

- k. **Scope:-**This specification covers the work of providing, making, fabricating, fixing, preparing, oiling/greasing, keeping in position, de-shuttering, stripping, cleaning all form work required for RFP in relation to Selection of a Contractor for Godavari Riverfront Development in ABD Area on EPC Basis under Nashik Smart City Mission, Nashik Maharashtra
- 1. Casting the concrete members as per drawings and/or schedule of quantities and/or instructions of the EIC.
- m. Material for the form work shall be timber, plywood, mild steel or any other material approved by the EIC. Form work shall be kept in position with required props, staging, jacks and /or bracings as per the structural requirements as instructed by the EIC.
- n. Form work and staging structure shall remain in position for the time period as described in drawings and/ or schedule of and/or instructions of the EIC. The Contractor shall provide repropping to support the structural members even after de-shuttering for longer time periods as described in the drawings and/or schedule of quantities and/or instructions of the EIC.
- o. General Contractor's rate for the item shall include cost of:
 - i. All material and labor for completing the work as described in the drawings, and/or schedule of quantities and /or instructions of the EIC.
 - ii. Designing, procuring, transporting, storing, making, fabricating, erecting, oiling/greasing, cleaning, removing, de-shuttering, stripping, dismantling the form work for all concrete work as described in the drawings, and/or schedule of quantities and/or instructions of the EIC.
 - iii. Keeping it in position till the concrete members gain strength as described in the drawings and/or schedule of quantities and/or instructions of the EIC.
 - iv. Providing measures to obtain surface finish of the concrete members as described in drawings and/or schedule of quantities and/or instructions of the engineer.

- v. Bracings, nails, wires, tie rods, bearings, oil, grease, jacks, tools, accessories, equipment, ropes, spacers, stays and/or any other item required to complete the work as described in the drawings, and/or schedule of quantities and /or instructions of the EIC.
- vi. Providing safety measures to safeguard life and property while carrying out the work.
- vii. Providing housekeeping pertaining to the work of formwork.
- p. Contractor shall have to submit the design calculations and drawings of the formwork to the EIC for his approval prior to start of work. Contractor shall effect the modifications in the design of the formwork as per the instructions of the EIC. Contractor shall start the work only after obtaining approval of the form work design from the EIC.
- q. Provisions of clause 11 of IS 456 shall be applicable for the formwork. Design of formwork shall conform to IS 14687 Indian Standard Falsework for concrete structures Guidelines.
- r. Form work shall be prepared to cast the concrete members in the sizes as described in the drawings, and/or schedule of quantities and/or instructions of the EIC. It should be capable of supporting the weight of wet concrete along with the loads it is subjected to during the concreting operations. All forms should be watertight and should not allow leakage of cement slurry during concreting operations. Formwork should be capable of supporting the loads it is subjected to during the concreting operations without deflecting, bulging, cracking, breaking etc.
- s. Formwork shall be measured as per the provisions of IS1200-partV.
- t. Method of Measurement: Method of measurement shall be as per IS 1200.

18 Reinforcement Steel:

This specification covers the work of providing and fixing of steel reinforcement in the Reinforced Cement Concrete (RCC) members.

- k. Scope of workScope of work comprises procuring, transporting, testing, storing, preparing bar bending schedules, cutting, shearing, bending, cleaning, fixing in position, erecting, tying, welding, lapping, coupling of the steel reinforcement and measuring of the scrap of steel reinforcement bars of different diameters and different lengths in RCC members as per drawings and/or schedule of quantities and/or instructions of the EIC.
- 1. **General:** Contractor's rate of the item shall include cost of:
 - i. All materials and labor required to execute the item. The materials shall include, Steel reinforcement bars, GI binding wires, couplers, pins, concrete cover blocks etc.
 - ii. Energy charges of electrical power, water, fuel etc.
 - iii. Procuring, transporting, testing, storing, cutting, shearing, bending, cleaning, fixing in position, erecting, tying, welding, lapping, coupling of steel reinforcement bars.
 - iv. Preparing bar bending schedules and submitting it for approval of the EIC.

- v. Storing, stacking of scrap and measuring the scrap of the reinforcement steel.
- vi. Providing safety measures for workers, public and property.
- m. Reinforcement steel shall comply with the provisions of IS 1786 Indian Standards Thermo mechanically treated (TMT) reinforced steel bars. Contractor shall submit the manufacturer's test certificate to the EIC in support of the compliance. The EIC may also ask the contractor to get the TMT steel tested from any approved testing laboratory and contractor will prepare the sample specimens under the supervision of the EIC, send it to the approved testing laboratory and submit the results of the testing of reinforcement steel to the EIC. In case the tests fail to comply with the required specifications, the EIC shall reject the reinforcement steel and the contractor shall remove the reinforcement steel out of the site without any extra cost to the EIC.
- n. Reinforcement steel shall be stored on site in such a way that it will not come in contact with soil and/or water, it will not get damaged and it will not get excessively bent. Bar Bending Schedules (BBS) shall be prepared by the contractor and submitted to the EIC for approval prior to start of work. Work of steel reinforcement shall start only after getting approval of the EIC and after effecting all the corrections suggested by the EIC.
- o. Cutting, bending and tying of the steel reinforcement shall be in accordance with provisions of IS 2502 Indian Standard Code of practice for bending and fixing of bars for concrete reinforcement. Reinforcement bars shallbe tied with binding GI annealed binding wire of 18 gauge. Lap lengths, bearing lengths, 'L'Bends, maximum & minimum spacing between the reinforcement bars shall be as described in the drawings, Approved BBS and/or as per the instructions of the EIC. The work shall be as per IS 456. Steel reinforcement shall be held in position with the help of spacers, chairs, pins to the satisfaction of the EIC. Steel reinforcement shall be placed at a stipulated distance (cover to reinforcement) from the concrete face with the help of approved quality concrete cover blocks; strength of the cover block shall be not less than the strength of the concrete around it.
- p. Lap bars, dowel bars shall be provided by the contractor for the future work as described in the drawings and / or as per the instructions of the EIC.
- q. All reinforcement steel shall be clean and free of scales of rust, oil, grease or paint. Contractor shal maintain the steel reinforcement in clean state.
- r. Contractor shall prepare a statement showing reconciliation of the steel reinforcement quantity and submit it to the EIC periodically as agreed with the EIC.
- s. Reinforcement steel shall be thoroughly checked by the EIC before concreting the member containing it. Contractor shall carry out rectifications if instructed by the EIC of the steel reinforcement. In case additional steel reinforcement bars are instructed by the EIC to be provided, contractor shall provide the same and maintain a proper written record of the changes duly signed by the EIC.
- t. **Method of Measurement**:-All Measurement shall be taken as per IS 1200.
- u. Shoring and Bracing

The Contractor shall supply, fix and maintain necessary sheathing, shoring, strutting and bracing etc., in steel or wood, as may be required to support the sides of the excavation, to protect workmen in the trench and to prevent any trench movement which might any way injure or delay the work, change the required width of the trench, make unsafe condition for adjacent pavements, utilities, buildings or other structures above or below ground.

Sheathing, shoring and bracing shall be withdrawn and removed as the backfilling is being done, except when the Engineer-in-charge may agree that such sheathing, shoring and bracing be left in place, at the Contractor's request. In any case, the Contractor shall cut off any such sheathing at least 600 mm below the surface and shall remove the cut off material from the trench.

All sheathing, shoring and bracing which is to be removed under the foregoing provisions shall be removed in a manner so as to not endanger the completed work or other structures, utilities or property, whether public or private. No extra payment shall be made for shoring and bracing inless otherwise specified in the BOQ.

v. Dewatering

- -The rate of the items requiring dewatering viz. excluding foundation concrete RCC or masonry shall be deemed to be inclusive of provision of dewatering and no separate claim shall be entertained. The amount is restricted. In any case no extra will be paid for dewatering unless otherwise specified in the Bill of Quantities. The specifications hereunder shall cover diversion of steams, providing coffer dams, bunds, etc. as necessary for carrying out work and bailing out and pumping work as per requirement of work.
- The foundation trenches shall kept dry by resort to pumping alone or pumping in combination with diversion, channels, cofferdams, bunds, diversion weirs, drainage channels, or other method suitable for the local conditions at the choice of the contractor. The responsibility of adequacy of dewatering arrangements and quality and safety of work rests solely with the contractor.
- Though the method to be adopted is the choice of the contractor, the scheduled programme shall have to be strictly adhered to.

The contractor shall plan, construct and maintain necessary diversion and protective works, so as to keep the work safe at all stages. The coffer dams where required shall be carried out to required depths and heights and safety designed and constructed with suitable dimensions and protections and shall be made enough water tight for facility of construction inside it. The coffer dam shall leave sufficient clearance for construction and inspection facility and permit installation of pumping machinery as required.

The item includes the entire dewatering operation from start of work till its completion in all respect. The measurement under RCC works for net dimension cast as directed without allowance for rendering finishing etc.

APPENDIX XII: BILL OF QUANTITIES

Estimate for the work "Goda Riverfront Development including beautification in ABD area under Nashik Smart City Mission, Nashik".

Estimate for the work "Goda Riverfront Development including beautification in ABD area under Nashik Smart City Mission, Nashik".

Part	GODA BEUTIFICATION	BASIC COST	O&M	TOTAL AMOUNT
Α	Goda Civil Work	47,24,16,137	-	47,24,16,137
В	Landscaping Work	1,74,88,151	1,24,48,224	2,99,36,375
С	Electrical Work	3,95,85,536	19,30,681	4,15,16,217
D	Irrigation and mechanical Work	40,83,650	25,47,265	66,30,915
		53,35,73,474	1,69,26,170	55,04,99,644

Document No.: MAH-NAS-032-053-RFP-V02-01

Part A: Civil Work

Sr no	Description	Unit	Quantity	Rate	Amount
	Dismantling the R.C.C. Work 1:2:4 and sorting out the				
1	materials such as steel etc. as directed and stacking them within the specified lead as directed etc. complete.	CLIM	602.20	1 002 50	720 661 42
1	PWD,SSR 18-19 Item No.46.29	CUM	683.29	1,082.50	739,661.43
	Dismantling brick masonry in lime / cement mortarand				
	stacking the materials as directed with all leads, lifts etc.				
2	complete.	CUM	152.00	249.9	37,984.80
	PWD,SSR 18-19 Item No.46.09				,
	Dismantling Stone Masonry in lime or cement mortar including				
	stacking the materils as directed with all leads, lifts etc.(RA				
3	2018-19, Sr.no.1716,BWD 8, SSR No.46.11)	CUM	73.00	283.5	20,695.50
	PWD,SSR 18-19 Item No.46.11				
4	Removing lime or lean cement concrete including stacking the spoils as directed with all leads, lifts etc, complete.	CUM	753.00	416.9	212 025 70
4	PWD,SSR 18-19 Item No. 46.12	COM	753.00	410.9	313,925.70
	Removing rich mix cement concrete including stacking the				
5	spoils as directed with all leads, lifts etc, complete	СИМ	8727.68	694	6,057,009.92
	PWD,SSR 18-19 Item No.46.13				
	Removing shahabad, Tandur stones or Paver Block from floor				
	without bed concrete including stacking the materials as directed				
6	with all leads, lifts etc. complete	SQM	5014.00	26.3	131,868.20
	PWD,SSR 18-19 Item No. 46.20				
	Removing Wire Fencing with iron/ C.C. fencing post and				
	stacking the materials as directed with all leads, lifts etc. complete.	DNAT	120.00	FO 4	C 552.00
7	PWD,SSR 18-19 Item No. 46.25	RMT	130.00	50.4	6,552.00
	FWU,33K 10-13 ILEIII NU. 40.23				

Sr no	Description	Unit	Quantity	Rate	Amount
	Demolishing cement concrete manually/ by mechanical		Quantity	110.00	7 11110 01110
8	means includingdisposal of material within 50 metres lead as per direction of Engineer- in - charge."	CUM	8279.00	894.6	7,406,393.40
	PWD,SSR 18-19 Item No.3.11				
9	Excavation for Foundation in earth, soils of all types, sand,gravel, Soft Murum including shoring and strutting as necessary and disposing off excavated stuff as directed etc. complete(RA 2018-19, Sr.no.388,BR 3A, SSR No.12.02)	CUM	1616.00	181.7	202 627 20
9	PWD,SSR 18-19 Item No.12.02	COM	1010.00	101.7	293,627.20
	Excavation for Foundation in Hard Murum including shoring &				
10	strutting as necessary & disposing off excavated stuff as directed(RA 2018-19, Sr.no.389,BR 3A , SSR No. 12.04)	CUM	517.00	194.3	100,453.10
	PWD,SSR 18-19 Item No.12.04				
	Excavation for Foundation in Hard Murum and Boulders including shoring and strutting as necessary and disposing off excavated stuff as directed.(RA 2018-19, Sr.no.390,BR 3C, SSR				
11	No.12.06)	CUM	264.00	228.9	60,429.60
	PWD,SSR 18-19 Item No.12.06				
12	Excavation for Foundation in Soft Rock including shoring and strutting as necessary and disposing off excavated stuff as directed(RA 2018-19, Sr.no.391,BR 3D, SSR No.12.08)	CUM	95.00	466.2	44,289.00
	PWD,SSR 18-19 Item No.12.08				,
13	Excavation for Foundation in Hard Rock (Chieselled & wedged or line drilled) including Shoring & Strutting as necessary and disposing off excavated stuff as directed etc. completed(RA 2018-19, Sr.no.392,BR 3E , SSR No. 12.09)	CUM	10.00	914.5	9,145.00
	PWD,SSR 18-19 Item No.12.09			-	,

Sr no	Description	Unit	Quantity	Rate	Amount
13.a	Excavation for Foundation in Hard Rock (Chieselled & wedged or line drilled) including Shoring & Strutting as necessary and disposing off excavated stuff as directed etc. completed				
1314	3.00 to 4.50 m (PWD-SSR- 2018-19-12.11)	CUM	85.00	1640	139,400.00
14	Dewatering including diversion of stream, providing coffer dam, bunds etc. as may be necessary for foundation and other parts of work and bailing out and pumping out water during and after excavation as required.	Hour	1988.00	144.9	288,061.20
	PWD,SSR 18-19 Item No.12.22				
15	Dewatering on BHP basis by using water pump including diversion of stream, providing cofferdams, earthern bunds etc. as may be necessary for foundation and other parts of the the works and pumping out water during and after excavation as may be required by using 10.0 to 19.0 BHP pumpetc. complete. (prior approval of Superintending Engineer will be necessary)(RA 2018-19, Sr.no.407,BR 4C, SSR No. 12.24)	Hour	310.00	186.9	57,939.00
	PWD,SSR 18-19 Item No.12.24				
16	Excavation for foundation in earth, soils of all types, sand,gravel and soft murum, including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete.	CUM	11703.00	150.2	1,757,790.60
	PWD,SSR 18-19 Item No. 21.02				

Sr no	Description	Unit	Quantity	Rate	Amount
17	Excavation for foundation in Hard Murum and Boulders including removing the excavated material up to a distance of 50 meters beyond the building area & stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. Sp. No.: BR.3/102		175.00	164.8	28,840.00
17	PWD,SSR 18-19 Item No. 21.06	COM	173.00	104.0	20,040.00
18	Excavation for foundation /pipe trenches in Slush Muddy/Marshy /Soils including use of poclain, labour for dewatering during execution including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, preparing the bed by cleaning the mud, labour required for execution for shuttering item but excluding back filling etc. complete. Providing and fixing shuttering shall be paid separately. Lift upto 0.0 to 1.50 m depth	CUM	811.00	372.9	302,421.90
	MJP,DSR 18-19, Section-E-8,9	33.1	011.00	3,2.3	332,122130
19	Excavation for foundation /pipe trenches in Slush Muddy/Marshy /Slushy /Soil including use of poclain, labour for dewatering during execution including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, preparing the bed by cleaning the mud, labour required for execution for shuttering item but excluding back filling etc. complete. Providing and fixing shuttering shall be paid separately. Lift upto 1.50 to 3.0 m depth	CUM	811.00	398.2	322,940.20
1.5	MJP,DSR 18-19, Section-E-8,9,	CON	011.00	330.2	322,340.20

Sr no	Description	Unit	Quantity	Rate	Amount
	Excavation for foundation /pipe trenches in Slush Muddy/ Marshy /Slushy /Soil including use of poclain, labour for dewatering during execution including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, preparing the bed by cleaning the mud, labour required for execution for shuttering item but excluding back filling etc. complete. Providing and fixing shuttering shall be paid separately. Lift				
20	upto 3.0 to 4.5 m depth	CUM	705.00	423.5	298,567.50
	MJP,DSR 18-19, Section-E-8,9				
21	Excavation for foundation / pipe trenches in soft rock and old cement and lime masonry foundation asphalt road including removing the excavated material upto a distance of 50 M beyond area and lifts as below, stacking as directed by Engineer-incharge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. Qty as 25 % of the Qty of Lift upto 3.0 to 4.5 m depth	CUM	186.00	592.9	110,279.40
	MJP,DSR 18-19, Section-E-5				
22	Excavation for foundation / pipe trenches in hard rock by Chieselingcontrolled blasting, including trimming and levelling the bed by chiselling where necessary and removing the excavated material and stacking it in measurable heaps within a distance of 50 metres from the area and lifts as below, normal dewatering, excluding backfilling, etc. complete. Qty as 50 % of the Qty of 3.0 to 4.5 mtrs Lift upto 3.0 to 4.5 m depth	CUM	371.00	954.8	354,230.80
	MJP,DSR 18-19, Section-E-7	2011	371.00	331.0	33 1,233.00

Sr no	Description	Unit	Quantity	Rate	Amount
23	Excavation for foundation in Hard rock by chiselling, wedging, line drilling, etc. including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the building area stacking as directed, dewatering and back filling with available earth/ murum watering, ramming etc.complete.	CUM	2544.00	1,148.70	2,922,292.80
	PWD,SSR 18-19 Item No.21.20				
24	Open timbering in trenches of depth more than 1.5 m for shoring and strutting including use of and waste of all necessary timber works including walling, struts, open polling boards/ horizontal sheeting, runners, etc. as may be necessary and fixing and removal complete. (Measurements to be taken of the face/area timbered)(NBO Item No.4-15 page No.59)	SQM	3134.00	177.5	556,285.00
	MJP DSR 18-19, Sec-E-20-a		0 20 1100		
25	Providing and laying insitu / ready mix M-25 controlled reinforced cement concrete of trap metal for piers,abutment,returns,wingsetc , formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant / pan mixer with Natural / VSI standard Artificial Sand) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/concrete batch mix plant (pan mixer)	CUM	277.00	6,520.90	1,806,289.30
	PWD, SSR Item No-17.40			-,	
26	Providing earth work in embankment with approved materials obtained from departmental land or other sources upto lead of	CUM	5513.60	524.6	2,892,434.56

Document No.: MAH-NAS-032-053-RFP-V02-01

Sr no	Description	Unit	Quantity	Rate	Amount
	50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades and section, watering and compaction with Power roller to achieve not less than 97 % of standard proctor density etc. complete as per MORTH specification Clause 305		Quantity		
	PWD SSR 2018-19,Item No-2.27				
27	Providing dry trap / granite / quartzite / gneiss, rubble stone soling in 15cm to 20 cm thick layers (including hand packing and compacting), etc. complete.	CUM	2922.00	1,073.30	3,136,182.60
	MJP,DSR 2018-19, Section-E-18			,	-,,
28	Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.	CUM	536.00	1,449.50	776,932.00
	PWD SSR 2018-19, Item No. 21.38	33.1	333.33	27.13130	7,707302.00
29	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for single rim bored pile of 450 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement)	RMT	105.00	1,292.30	135,691.50
	PWD SSR 2018-19,Item No 22.09			·	·

Nashik Municipal Smart City Development Corporation Limited
Document No.: MAH-NAS-032-053-RFP-V02-01

Sr no	Description	Unit	Quantity	Rate	Amount
	Providing and laying cast in situ / Ready Mix Cement Concrete M-25 for single rim bored pile of 450 mm dia. each of load capacity as per design and of specified diameter of pile and bulb as directed, sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand by tremie arrangement compaction of concrete including chipping and dressing etc. complete. (Excluding steel reinforcement) R.C.C. M25 for Machine Driven End Bearing				
30	Piles-450 mm	RMT	126.00	2,558.60	322,383.60
	PWD SSR 2018-19, Item No 22.18			_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3,333.33
31	Empty Boring for 425 to 500 mm dia. bored R.C.C. cast in situ piles including withdrawal of shell, removal of earth to a distance of 50 metres etc. complete. Spec :(As directed by Engineer in Charge)(RA 2018-19, Sr.no.803, SSR No. 22.51) (RA 2018-19, Sr.no.647, SSR No. 22.51)	RMT	3074.00	524	1,610,776.00
	(PWD SSR 2018-19,Item No 22.51				
32	Extra for Chiselling in Hard Rock including removing and stacking the loose material and disposing the unserviceable materials as directed etc. complete. A) With Concrete Mixer (i) 550 mm dia (RA 2018-19, Sr.no.647, BR, SSR No. 17.01)	RMT	490.00	945	463,050.00
	PWD SSR 2018-19, Item No 17.01				

Nashik Municipal Smart City Development Corporation Limited

Document No.: MAH-NAS-032-053-RFP-V02-01

Sr no	Description	Unit	Quantity	Rate	Amount
33	Providing placing and Driving in position 6 millimeter Mild Steel Liner for R.C.C. Piles upto required depth with 12mm thick mild steel cutting edge of 0.50m length at bottom including fabricating cutting the mild steel sheet to required diameter and shape ,welding the joints and driving with the help of required machineries including all materials labours and lifts etc. complete as directed by the Engineer in charge. Spec :(As directed by Engineer in Charge From 3.00 to 9.50 meter deep liner (RA 2018-19, Sr.no.810, SSR No. 22.58)	MT	224.80	76,440.00	17,183,712.00
33	PWD SSR 2018-19,Item No 22.58	1*11	224.00	70,440.00	17,163,712.00
34	Providing and laying cast in situ / ready mix M30 RCC for 450mm diameter bored piles each of load capacity as per design and of specified diameter of as directed, placed through steel shell sunk to the required depth through all strata except rock, excluding provision of reinforcement including placing concrete by tremie arrangement, compaction of concrete and withdrawal of steel shell with fully automatic micro processor based PLC with SCADA enabled with reversible drum type mixer/ concrete batch mix plant (pan mixer) etc. complete.with natural sand /VSI quality artifical sand (RA 2018-19, Sr.no.512, BR, SSR No.15.02)	RMT	3506.00	3,051.70	10,699,260.20
	PWD SSR 2018-19,Item No 15.02				
35	Chipping and dressing of the RCC cast in situ bored piles up to cut-off level (Min. 600 mm) including cleaning of reinforcement and disposal of dismantled materials, with all leads & lifts etc. for providing pile caps as directed by Engineer and as per specifications. Sp. No.: As Directed by Engineer-in-charge	No.	29.00	555.5	16,109.50
	PWD, SSR 2018-19, Item No-17.66				

Sr no	Description	Unit	Quantity	Rate	Amount
36	Chipping and Dressing of the R.C.C. piles upto 0.60 meter including cleaning reinforcement and removal of dismantled materials upto a distance of 50 meter beyond the building area etc. for providing pile caps. Spec :(As directed by Engineer in Charge (RA 2018-19, Sr.no.807, SSR No. 22.55)	No.	250.00	555.5	138,875.00
	PWD, SSR 2018-19, Item No-22.55				
37	Carrying out Load Test for 1.5 times the proposed safe working load on the pile in driven position above 400 mm and upto to 550 mm diameter including construction of test cap, use of accessories and instruments including providing graphs as per I.S. code or Std.Specifications and dismantling the test cap after testing and cleaning the site complete.(RA 2018-19, Sr.no.796, Bd/B-8 P-271, SSR No.22.44)	No.	15.00	101,593.80	1,523,907.00
	PWD, SSR Item No-22.44				
38	Providing and laying in situ / ready mix M-15 Plain Cement Concrete of trap /granite/quartzite/ gneiss metal for cast in citu piers, abutment,returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the faces to approve design with compacting by vibrating and curing complete, including plywood/steel form work centering etc. complete. as directed by engineer in charge.(RA 2018-19, Sr.no.684,BR-17.38)	CUM	100.00	6,106.30	610,630.00
	PWD, SSR 2018-19, Item No-17.38				

Sr no	Description	Unit	Quantity	Rate	Amount
39	Providing and laying Cast in situ/Ready Mix cement concrete M25 of trap metal for R.C.C. Pile Caps as per detailed designs and drawings, including bailing out water manually, centering, formwork, laying/ pumping, compacting, finishing and curing etc. with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand, complete. (Excluding steel reinforcement) (RA 2018-19, Sr.no.679,BR-17.33, SSR Item No. 22.6)	CUM	162.00	6,934.60	1,123,405.20
	PWD, SSR Item No-22.60			3,55 1155	=/===/:-==
40	Providing and laying in situ / ready mix M-25 plain cement concrete of trap/ granite/ quartzite/ gneiss metal for cast in citu piers, abutment, returns, wings etc. including provision of "V" shaped false joints to form suitable panels on the face sto approve design with compacting by vibrating and curing complete, including plywood/ steel form work centering (excluding dewatering by means of pump) and including bailling out water and curing finishing in CM 1:3 etc.complete as directed by engineer in charge basic rate shall be increased for height above 500 m in followinh manners b) Height upto 5 M. (With Batch Mix Plant) With fully automatic micro processor based PLC with SCADA enable with Natural / VSI standard Artificial Sand (A) Depth to 10 m percent extra for rate for (B) Depth upto 15m Add 40 percen textra for rate (C) Depth upto 20m Add 60 percent extra for rate (D) Depth upto 20 m Add 100 percent extra for rate		373.00	6,987.10	2,606,188.30
40	PWD, SSR 2018-19, Item No-17.44	CUM	3/3.00	0,987.10	2,000,188.30

Sr no	Description	Unit	Quantity	Rate	Amount
	Providing and laying in situ plum cement concrete M 10 / 1:3:6				
	of trap /granite /quartzite /gniess metal for foundation and bedding including bailing out water manually, formwork,				
	compacting, covering newly laid concrete by gunny bag, plastic				
	or tarpaulin, curing etc. complete. (Wooden planks/ shuttering				
41	will not be allowed) Sp. No.: BR.5/105/ IS 456:2000	CUM	200.00	F 210 70	1 641 006 30
41	PWD, SSR 2018-19, Item No-24.01	COM	309.00	5,310.70	1,641,006.30
	Providing & laying in situ cement concrete M 15 of				
	trap/granite/quartzite/gniess metal for foundation and bedding				
	including bailing out water manually,formwork,				
	compacting, covering newly laid concrete by gunny bag, plastic				
	or tarpaulin, curing etc. complete. (Wooden planks/ shuttering				
42	will not be allowed) Sp. No.: Bd.E.1/287/ IS 456:2000	CUM	1480.00	5,782.10	8,557,508.00
, , , , , , , , , , , , , , , , , , ,	PWD, SSR 2018-19, Item No-24.04				
	Providing cast in situ / ready mix M20grade cement concrete for				
	head walls of CD work/ retaining walls etc. including necessary				
	formwork, compaction, finishing and curing etc. complete. (with				
	reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with Natural / VSI				
43	·	CUM	36.90	7,716.80	284,749.92
	PWD, SSR 2018-19, Item No-11.29				
	Providing and laying Cast in situ/ Ready Mix cement concrete				
	M25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. work in				
	foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc including				
	centering, formwork, cover blocks, compaction, finishing the				
	formed surfaces with cement mortar 1:3 of sufficient minimum				
	thickness to give a smooth and even surface or roughening if				
	special finish is to be provided and curing etc.				
44	complete.(Excluding reinforcement and structural steel).with	CUM	1105.00	6,584.90	7,276,314.50

Sr no	Description	Unit	Quantity	Rate	Amount
	fully automatic micro processor based PLC with SCADA enabled				
	reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial				
	Sand				
	PWD SSR 2018-19, Item No- 25.13				
	Providing and laying Cast in situ/Ready Mix cement concrete				
	M-25 of trap/ granite / quartzite/ gneiss metal for Columns as				
	per detailed designs and drawings including centering, formwork, cover blocks, compaction, finishing the formed				
	surfaces with cement mortar 1:3 of sufficient minimum				
	thickness to give a smooth and even surface or roughening if				
	special finish is to be provided and curing etc.				
	complete.(Excluding reinforcement and structural steel).with				
	fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan				
	mixer) etc. complete. With natural sand/V.S.I. quality Artificial				
45	Sand	CUM	235.40	11,643.80	2,740,950.52
	PWD SSR 2018-19, Item No- 25.33				
	Providing and laying Cast in situ/Ready Mix cement concrete				
	M-25 of trap/ granite / quartzite/ gneiss metal for R.C.C.				
	Beams and Lintels as per detailed designs and drawings including centering, formwork, cover blocks, compaction,				
	finishing the formed surfaces with cement mortar 1:3 of				
	sufficient minimum thickness to give a smooth and even surface				
	or roughening if special finish is to be provided and curing				
	etc.complete.(Excluding reinforcement and structural				
	steel). with fully automatic micro processor based PLC with				
	SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality				
46	Artificial Sand	CUM	121.00	10,527.70	1,273,851.70

Sr no	Description	Unit	Quantity	Rate	Amount
	PWD SSR 2018-19, Item No- 25.52		Constitution	13000	
47	Providing and laying Cast in situ/Ready Mix cement concrete M20 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including centering, formwork, cover blocks, compaction, finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand Sp. No.: BD.F.8/302 AND B7/38	CUM	88.30	11,344.60	1,001,728.18
17	PWD SSR 2018-19, Item No-25.70	2011	00.50	11,511.00	1,001,720.10
48	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including centering, formwork, cover blocks, compaction, finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand	CUM	1179.00	11,657.50	13,744,192.50
40	PWD SSR 2018-19, Item No-25.72	COM	11/9.00	11,037.30	13,/44,192.30

Sr no	Description	Unit	Quantity	Rate	Amount
49	Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding, cleaning and supporting as required complete.	MT	355.40	67,193.70	23,880,640.98
	PWD SSR 2018-19, Item No-26.33		0.00	,	, ,
50	Providing and erecting structural steel for sakav with all bracing gusset plates etc. as per detailed design and drawing or as directed including cutting, fabricating, hoisting, erecting, fixing in position, making riveted /bolted/ welded connection and oil painting with 2 coats of approved quality and shade etc. complete.	MT	33.00	01 252 10	2.014.652.20
30	PWD SSR 2018-19, Item No-23.06	1411	33.00	91,353.10	3,014,652.30
51	Providing, Lowering & Laying ISI standard R.C.C. pipes in standard lengths of following class and diameter suitable for either collar/ spigot & socket joints or rubber ring joints, including all cost of rubber rings of Company make all taxes (Central and local), statutary duties and taxes such as GST levied by Gol and GoM in all respect, inspection charges, transport to departmental stores/site, unloading and stacking etc. complete as per IS-458/1988, lowering & Laying and giving satisfactory Hydraulic testing of the laid pipe line as specified and directed by Engineer in charge etc. complete. dia of pipe = 450mm, class NP3	RMT	1244.00	1,560.30	1,941,013.20
<u> </u>	dia of pipe = 600mm, class NP3	RMT	53.00	2,246.70	119,075.10
	MJP,DSR 2018-19, Sec-I-(VI)-1-e			·	•

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr no	Description	Unit	Quantity	Rate	Amount
	Providing and constructing on sewer, Fly Ash Brick masonry				
	circular manhole concentric cone 1.5 M dia . at bottom and 0.5 M dia. at top and upto a depth of 5.0 M with 25 cm thick CC				
	1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for				
	2.0M with 0.23m thk & 3.0 M depth of Vertical Cylinder with 0.35				
	M thick Fly Ash Brick masonry in CM 1:4 proportion with 20 mm				
	thick on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:2, providing C.I. dapuri type steps				
	each weighing 5.5 kg. at every 40cm c/c horizontal & vertical				
	(Staggered),,15cm thk 1:2:4 coping and providing and fixing				
	approved make and quality S.F.R.C. frame and cover of 56 cm.dia. etc. complete as directed by Engineer-in-charge.				
52	ciri.dia. etc. complete as directed by Engineer-in-charge.	Nos	19.00	65,871.00	1,251,549.00
	MJP DSR 18-19, SEC-I(XX)-7				
	Constructing additional / Rebate depth for Manhole of 1500mm				
	Dia. & below 5000 mm. depth with 350mm.thick Fly Ash Brick				
	masonry work in CM 1:6, proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3,				
	providing C.I. dapuri type steps at every 40cm c/c horizontal &				
53	vertical (Staggered)	RM	27.00	13,356.40	360,622.80
	MJP DSR 18-19, Sec-I(XX)-7-a				

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr no	Description	Unit	Quantity	Rate	Amount
	Providing, Lowering & Laying ISI standard R.C.C. pipes in standard lengths of following class and diameter suitable for either collar/ spigot & socket joints or rubber ring joints, including all cost of rubber rings of Company make all taxes (Central and local), statutary duties and taxes such as GST levied by Gol and GoM in all respect, inspection charges, transport to departmental stores/site, unloading and stacking etc. complete as per IS-458/1988, lowering & Laying and giving satisfactory Hydraulic testing of the laid pipe line as specified and directed by Engineer in charge etc. complete.				
54	(dia. of pipe = 250 mm, class NP2)	RM	111.00	503.9	55,932.90
	MJP,DSR,18-19, SecI(VI)RCC Pipes,1d,e,f,2)Page No. 94,95,96				
55	Providing and constructing Brick Masonry Inspection Chamber 60cm x 45cm x 90cm including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W. pipes, Brick Masonry, plastering from inside and with frame fixed in cement concrete with R.C.C. Cover medium duty 140 kg with frame etc complete.	No.	12.00	7,159.30	85,911.60
33	PWD, SSR 2018-19, Item No-42.12	140.	0.00	7,133.30	33,311.00
56	Providing and fixing in position steel fiber reinforced concrete (S.F.R.C.) frame and covers of approved make including loading, unloading, transportation, all taxes, etc. complete as directed by Engineer-in-charge (20 tones capacity) (560 mm dia)	No.	19.00	3,434.60	65,257.40
30	MJP , DSR 18-19, Sec-I(XX)-17,	INU.	19.00	3,434.00	03,237.40

Sr no	Description	Unit	Quantity	Rate	Amount
	Providing and constructing gabion structures for erosion control, river training works and protection works with wire crates of size 2.0m x 1.0m x 0.30m each divided into 1m compartments by crossnetting, made from 4 mm galvanized steel wire @ 32 kg per 10 sqm having minimum tensile strength of 300 Mpa conforming to IS:280 and galvanizing coating conforming to IS 4826, wovan into mesh with double twist, mesh size not exceeding 100 x 100 mm, filled with boulders with least dimension of 200 mm, all loose ends to be securely tied with 4 mm galvanized steel wire etc. complete.				
57	PWD SSR 2018-19, Item No-7.21	CUM	1189.00	2,864.40	3,405,771.60
58	Providing uncoursed rubble masonry of trap / granite / quartzite/ gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc.complete.	CUM	2124.00	4,730.50	10,047,582.00
	PWD, SSR 2018-19, Item No-28.01	0011	222.1100	1,7,50.50	10/01/7002100
59	Providing fly ash brick masonry with conventional /I.S.type fly ash bricks in C.M.1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. complete	CUM	381.00	6,055.40	2,307,107.40
	PWD, SSR 2018-19, Item No-27.12			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,
60	Providing Weep Holes in brick masonry /plain /reinforced concrete abutment, wing wall / return wall with 100mm diameter AC pipe extending through the full width of the structure with slope of 1V: 20H towards drawing face as per drawings and technical specifications etc. complete.(RA 2018-19, Sr.no.438,MORTH, SSR No. 12.69)	RMT.	1514.00	714	1,080,996.00

Sr no	Description	Unit	Quantity	Rate	Amount
	PWD SSR 2018-19, Item No-12.69		C		1 3330 6330
61	Cutting down trees including trunks and branches with girths above 30cm to 60cm and stacking the materials neatly with all lifts and lead of 1000m as directed and earth filling in the depression / pit if any.	No.	11.00	388.5	4,273.50
	PWD SSR 2018-19,Item No-2.01				
62	Cutting down trees including trunks and branches with girths above 60cm to 90cm and stacking the materials neatly with all lifts and lead of 1000m. as directed and earth filling in the depression/pit if any.	No.	11.00	648.9	7,137.90
	PWD SSR 2018-19, Item No-2.02				
63	Providing and applying two coats of textured synthetic paint of approved shade and quality and one coat of primer before applying textured paint including scaffolding if necessary preparing surface by thoroughly cleaning oil, grease, dirt and other materials as required, etc. complete.	SQM	263.00	134.4	35,347.20
	PWD SSR 2018-19, Item No 35.24				,
64	Providing and applying water proofing treatment using acrylic polymer modified cement based water proofing coating with fibre glass mesh mixing at the rate of powder to liquid (2:1) by weight covering 9 to 10 sqm/kg with two coat using Dr.Fixit or alike of chemicals for masonry and concrete surface by brush covering 7 years guarantee on Stamp Papers etc. complete	SQM	639.00	830.5	530,689.50
	PWD SSR 2018-19, Item No 31.09				
65	Providing internal cement plaster 12mm thick in single coat in cement mortar 1:3 without neeru finish to concrete or brick surfaces, in all position including scaffolding and curing etc. complete	SOM	263.00	247.2	65 013 60
05	F	SQM	203.00	247.2	65,013.60

Sr no	Description	Unit	Quantity	Rate	Amount
	PWD SSR 2018-19, Item No 32.05		C	31000	2 3330 3330
66	Providing rough cast cement plaster externally in two coats to concrete, brick or stone masonry surfaces in all positions with base coat of 12 to 15mm thick in C.M. 1:4 and rough cast treatment 12mm thick in proportion 1:11/2:3 including scaffolding and fourteen days curing complete	SQM	719.00	534.2	384,089.80
	PWD SSR 2018-19, Item No 32.12				
67	Providing and applying Texture plaster with finishing with Purlina /Rustic texture material (with texture material of Asian/Renava/ Nitco/ Temtex or equivalant company make) in 3to4 milimeter thick ness on previously finished plastered surface including plaster Groove 6mm thick or Tape Grooves 35to45 mm thickness or as required in all postion in cluding preparing the surface scaffolding etc.complete.(Excluding texture Paint and Texture Paint Finishing)(Prior permission of S.E.is required before inclusion of this item in the estimate.	SQM	1873.00	663.6	1,242,922.80
	PWD SSR 2018-19, Item No 32.14				=/= :=/===:0
68	Providing tuck pointing with cement mortar 1:3 for stone/Brick masonry including scaffolding and curing etc	SQM	489.00	141.6	69,242.40
	PWD SSR 2018-19, Item No 32.18				
69	Providing and applying two coats of Water Proof Cement Paint of approved manufacture and of approved colour to the plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.(RA 2018-19, Sr.no.1261,BDO 8, SSR No. 35.13)	SQM	3730.00	60.9	227,157.00
	PWD SSR 2018-19, Item No 35.13				

Sr no	Description	Unit	Quantity	Rate	Amount
70	Providing and laying Needle Punched and mechanically bonded Non Woven Geotextile of Type II indigenously manufactured from high quality Propylene staple fibers (continuous filament will not be accepted) on the prepared subgrade for Seperation.(RA 2018-19, Sr.no.320, MORTH-701, SSR No. 7.24)	SQM	1810.00	131.3	237,653.00
7.0	PWD SSR 2018-19, Item No 7.24	<u> </u>	1010100	131.3	237,033100
	Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Laying By Grader/Paver.as per MORTH				
71	specification Clause 406	CUM	417.00	2,082.30	868,319.10
	PWD SSR 2018-19, Road works -3.23				
	Providing and laying dense bituminous macadam using crushed aggregate of grading 2, premixed with bituminous binder,@ 4.50 % by weight of total mix and filler, transported at site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 50/75 mm compacted thickness with drum mix type hot mix plant with SCADA having complying essential features of Hot mix plant as per IRC-27-2009 specified conditions and attachments such as electronic load sensor based belt conveyers, automatic synchronization of bitumen and aggregate fedder, built in dust controller system and PLC for Drum Mix plant ,Sensor paver, and Vibratory roller excluding prime/Tack coat etc. complete Bitumen VG-30 grade with				
72	stone dust filler	CUM	160.00	7,218.10	1,154,896.00
	(Rate Analysis)				

Sr no	Description	Unit	Quantity	Rate	Amount
	Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including cleaning of road				
	surface and spraying, primer at the rate of 0.60 kg/sqm using				
73	mechanical means.	Sqm	2699.00	19.9	53,710.10
	PWD SSR 2018-19, Road works -3.29				
	Providing and applying tack coat on the prepared surface heating by fames in Boiler and spraying bitumen set footed in				
74	bitumen boller on B.T. surface 5 kg/10 sqm.VG-30 bulk bitumen	Sqm	2699.00	21	56,679.00
	PWD SSR 2018-19, Road works -3.31				·
	Providing and laying bituminous concrete using crushed				
	aggregate of grading 1, premixed with bituminous binder @6.25% by weight of total mix and filler, transported at site with				
	VTS, laid over a previously prepared surface, finished to the				
	required grade ,level, alignment, and rolling to achieve the				
	desired density for 50mm compacted thickness with drum mix				
	plant with SCADA, Sensor paver and Vibratory roller excluding prime/Tack coat etc. complete Bitumen VG-30 grade with				
75	stone dust filler.	CUM	641.00	8,505.90	5,452,281.90
	PWD SSR 2018-19, Road works -3.50			,	, ,
	Road Marking with Hot Applied Thermoplastic Compound				
	with Reflectorizing Glass Beads on Bituminous Surface-				
	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing 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,				
76	uniform and free from streaks and holes complete.	SQM	4460.00	594.3	2,650,578.00
	PWD SSR 2018-19, Item No- 6.12				

Sr no	Description	Unit	Quantity	Rate	Amount
51 110	Empty boring for 325 to 400 mm dia bored R.C.C. cast in situ piles including withdrawal of shell, removal of earth to a distance of 50 metres etc. complete. Spec :(As directed by Engineer in	Ome	Quantity	Nucc	Amount
77	Charge)	RMT	48.00	454.6	21,820.80
	PWD SSR 2018-19, Item No 22.50				
78	Back Filling behind abutment, wing wall and return wall as per drawings and technical specifications etc. complete. (RA 2018-19,Sr.no.439,MORTH, SSR No. 12.7)	CUM	3610.00	1,745.90	6,302,699.00
	(RA 2018-19, Sr.no.439, MORTH, SSR No. 12.7)			•	
79	Conveying materials obtained from road cutting including all lifts, laying in layers, breaking clods, dressing to the required lines, curves, grades and section from the site of the excavation to the site of deposition as directed with 5.00km lead Spec. No. : Rd.18 Page No. 197	CUM	34298.80	216.2	7,415,400.56
	PWD SSR 2018-19, Item no- 483				
80	Providing and laying of Filter Media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2 of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition as per drawing and technical specifications etc. complete.(RA 2018-19, Sr.no.441, MORTH, SSR No.12.72)	CUM	1160.00	1,486.50	1,724,340.00
	Total of SSR Items			Rs.	

Sr no	Description	Unit	Quantity	Rate	Amount
81	Providing and fixing 18-20 mm thick sand blasted kadappah with minimum undulated finish in vertical surfaces, walls and risers of steps and staircases with quarter rounded nosing wherever necessary, including preparing the surface and levelling in the desired line, backing of 20 mm thick cement mortar in proportion 1:3, square cut top edge in cement mortar 1:3, cement float, machine cutting, leveling, jointing, filling the joints with neat cement slurry or pigments mixed with cement, finishing, curing etc complete as directed by Engineer In Charge. Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.				
		SQM	100.00	980	98,000.00
82	Providing and fixing 50 mm thick sand blasted kadappah as per approved pattern and sample, in required position laid on a bed of 25 mm thick 1:4 cement mortar including cement float, machine cutting, dressing, leveling, jointing, filling joint with matching colour cement slurry / cement mortar (1:3), inclusive of pointing the joints (joints thickness shall not exceed 6 mm) fixed over surface / concrete bed , curing, finishing champhored edges wherever necessary etc complete as directed by Engineer-in-charge. Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.				
	The strain and strain	SQM	3462.00	1,550.00	5,366,100.00

Sr no	Description	Unit	Quantity	Rate	Amount
83	Providing & Fixing 18-20 mm thk Machine cut Basalt stone, dressed with minimum undulated finish in vertical surfaces, walls and risers of steps and staircases, including preparing the surface and levelling in the desired line, backing of 20 mm thick cement mortar in proportion 1:3, square cut top edge or chamfered top edge in cement mortar 1:3, cement float, machine cutting, leveling, jointing, filling the joints with neat cement slurry or pigments mixed with cement, finishing, curing, champhored edges wherever necessary etc complete as directed by Engineer In Charge. Note - After work completion, stability and wear and tear of all		Quantity	Rate	Amount
	cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.	SQM	2581.00	1,950.00	5,032,950.00

Sr no	Description	Unit	Quantity	Rate	Amount
84	Providing & Fixing 25 mm thk. Machine cut Basalt stone, dressed with undulated finish as per approved pattern and sample, in required position laid on a bed of 25 mm thick 1:4 cement mortar including cement float, machine cutting, dressing, leveling, jointing, filling joint with with matching colour cement slurry / cement mortar (1:3), inclusive of pointing the joints (joints thickness shall not exceed 6 mm) fixed over surface / concrete bed or as shown on the drawing, curing, finishing, champhored edges wherever necessary etc complete as directed by Engineer-in-charge. Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.	Onic	Quantity	Kate	Amount
		SQM	212.00	2,550.00	540,600.00

Sr no	Description	Unit	Quantity	Rate	Amount
85 85	Providing & Fixing 36-40 mm thk. Machine cut Basalt stone, dressed with hammer point finish as per approved pattern and sample, in required position laid on a bed of 25 mm thick 1:4 cement mortar including cement float, machine cutting, dressing, leveling, jointing, filling joint with with matching colour cement slurry / cement mortar (1:3), inclusive of pointing the joints (joints thickness 6 mm) fixed over surface / concrete bed or as shown on the drawing, curing, finishing, champhored edges wherever necessary etc complete as directed by Engineerin charge. Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the	Unit	Quantity	Кате	Amount
	contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.	SQM	1530.00	3,050.00	4,666,500.00

Sr no	Description	Unit	Quantity	Rate	Amount
86	Providing & Fixing 36-40 mm thk. Machine cut Basalt stone, dressed with minimum undulated finish as per approved pattern and sample, in required position laid on a bed of 25 mm thick 1:4 cement mortar including cement float, machine cutting, dressing, leveling, jointing, filling joint with with matching colour cement slurry / cement mortar (1:3), inclusive of pointing the joints (joints thickness shall not exceed 6 mm) fixed over surface / concrete bed or as shown on the drawing, curing, finishing, champhored edges wherever necessary etc complete as directed by Engineer-in-charge. Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.		210.00	3,650.00	766,500.00

Sr no	Description	Unit	Quantity	Rate	Amount
87	Providing & Fixing 50 mm thk. Machine cut Basalt stone, dressed with hammer point finish as per approved pattern and sample, in required position laid on a bed of 25 mm thick 1:4 cement mortar including cement float, machine cutting, dressing, leveling, jointing, filling joint with with matching colour cement slurry / cement mortar (1:3), inclusive of pointing the joints (joints thickness shall not exceed 6 mm) fixed over surface / concrete bed or as shown on the drawing, curing, finishing, champhored edges wherever necessary etc complete as directed by Engineer-in charge. Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.	SQM	44348.00	4,150.00	184,044,200.00
88	Providing & Fixing 50 mm thk. Machine cut Basalt stone, dressed with undulated finish as per approved pattern and sample, in required position laid on a bed of 25 mm thick 1:4 cement mortar including cement float, machine cutting, dressing, leveling, jointing, filling joint with matching colour cement slurry / cement mortar (1:3), inclusive of pointing the joints (joints thickness 6 mm) fixed over surface / concrete bed or as shown on the drawing, curing, finishing, champhored edges wherever necessary etc complete as directed by Engineerin charge.	SQM	1566.00	4,250.00	6,655,500.00

Sr no	Description	Unit	Quantity	Rate	Amount
	Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.				
89	Supply and installation of Anchorage system for basalt flooring by an assembly of Powder coated MS fixture with Anchor fastener as per drwg no AGH/088/02/03. The Mechanical Anchor Fasteners as specified M12 x 127, of Hilti Make or equivalent confirming to IS 1367 (Part 3) at required locations and level including drilling/cutting the bore/stone for assembly, placing it flush to the basalt floor, cleaning and anchoring the bolt as per manufacturers specifications etc. Complete as directed by Engineer In Charge. The void portion of the assembly shall be filled with EPOXY grout complete.	Nos	9080.00	630	5,720,400.00
90	Providing and fixing 60 mm thick Shot blasted and coated HSF Turf grass pavers in required shade and color, fixed over 100mm thick well graded sand bed; compacted to 95% proctor density, all complete including turf grass. (Tile sample should be approved by Landscape Architect before execution) etc complete as directed by Engineer-in charge. The rate inclusive of laying of sand bed including line and level. complete	SQM	179.00	2,800.00	501,200.00
91	P/A Of Two Coats of High Build EPOXY PAINT of 80-125 Microns and cleaning all surfaces by EMERY CLOTH and final coat of EPOXY PAINT in 125 MICRONE DFT COMPLETE etc as directed by Engineer in Charge	SQM	18454.00	375	6,920,250.00

162 | P a g e

Sr no	Description	Unit	Quantity	Rate	Amount
92	Supply and laying Natural unpolished White and Gray coloured Pebbles (50%+ 50%) of size 3 (30-50mm) and filling up the void in white polished pebbles of size 1 (40%) in one or two layer, on bed of white cement mortar of 30 mm thk etc complete as per drawing as specified as directed by Engineer.	SQM	163.00	3,500.00	570,500.00
93	Providing and fixing Basalt stone pillars of type A- as per drawing no. AGH/882/B/01 of size 0.45m X 0.45m X 2.4m (ht above ground level) along Goda walk, in desired finish and texture, fixed in existing RCC pedestals, finished with grout / cement mortar of matching colour (1:3), inclusive of pointing the joints (joints thickness 6 mm) complete as directed by Engineer In Charge.	Nos	44.00	23,500.00	1,034,000.00
94	Providing and fixing 25 mm thick basalt stone as per design and patterns with carvings on flush/projected walls including preparing the surface and levelling in the desired line, backing of 20mm thk. cement mortar in proportion 1:3, cement float, machine cutting, leveling, jointing, filling the joints with neat cement or pigment mixed with cement, polishing, finishing, curing etc complete as directed by Engineer In Charge. Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.	SQM	870.00	4,500.00	3,915,000.00

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

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Sr no	Description	Unit	Quantity	Rate	Amount
95	Supply and Fixing of Bollards made of Basalt stone as per drawing no. AGH/882/F/02 of 175 X 175 mm . Height of the Bollard should be at least 1000 mm as measured from the top of the road/ground surface to the top of the Bollard assembly. Bollard system should include Reflective Tape etc. complete.(inclusive of boring / Cutting/excavation in any surface, fixing on bed 100 mm thick cement mortar (1:3), with bore hole of required diameter for fixing chain ropes. finishing, curing etc, inclusive of making good the				
	damage portion of footpath/road removing debris etc. Complete as per specifications and as directed by the Engineer Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.	Nos	571.00	12,500.00	7,137,500.00

C	Description	11	0	Data	A
Sr no	Description	Unit	Quantity	Rate	Amount
96	Supply and Fixing of Divider made of Basalt stone 500 X 200 X 100 mm, as per drawing no. AGH/882/F/02, on bedding of M-10, 10 cm thick, filling of joints in C.M. 1:2 Height of the Divider should be at least 150 mm above finish level as measured (inclusive of cutting of pavement and fixing of divider in cement mortar, finished neatly, compacting, curing, form work, etc) finishing, curing etc, inclusive of making good the damage portion of footpath/road removing debris etc. Complete as per specifications and as directed by the Engineer Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.				
		Nos	670.00	3,100.00	2,077,000.00

Sr no	Description	Unit	Quantity	Rate	Amount
97	SITC of Deep Stambh Divati (lantern profiles/blocks) of size 150mmX100mmX75mm in basalt stone per drawing no. AGH/882/F/02 in required size and finish in vertical surfaces of deepstambh wall, with quarter rounded nosing wherever necessary, including preparing the surface and levelling in the desired line, backing of 20 mm thick cement mortar in proportion 1:3, cement float, machine cutting, leveling, jointing, filling the joints with neat cement slurry or pigments mixed with cement, finishing, curing etc complete with all necessary provision of light fixtures and to fix the assembly in its desired positions. as directed by Engineer In Charge. Note - After work completion, stability and wear and tear of all cladding and paving stones will be the responsibility of the contractor for period of 5 years. It is to be noted that the wear	Onic	Quantity	Rate	Amount
	and tear as well as accidental damage of the same shall be taken care of by the contractor for the said amount of 5 years.	Nos.	2584.00	2,700.00	6,976,800.00
98	M.S body Portable Cabin: Supply and Installation of model no-PTS-001 MS body. only 1 person of Size:1.2m x 1.2m x 2.65m Includes- ISI mark Khaitan Fan, Wooden shelf 1.15m X 0.45m (without drawers) Cello plastic Chair, 2 nos.Melo LED Lights (In & Out), Roma Switch, M.S.Door 0.75m X 2.1m; and window in aluminum frame and glass 1m X 1m,	Nos	6.00	147,972.00	887,832.00
99	M.S body Portable Cabin: Supply and Installation of model no-PTS-002 MS body. only 2 person of Size:1.8m x 1.2m x 2.65m Includes- ISI mark Khaitan Fan, Wooden table 0.9m X 0.45m (with drawers) Cello plastic Chair 2 nos., 2 nos.Melo LED Lights (In & Out), Roma Switch, M.S.Door 0.75m X 2.1m; and window in aluminum frame and glass 1m X 1m,	Nos	4.00	218,064.00	872,256.00

166 | P a g e

Sr no	Description	Unit	Quantity	Rate	Amount
100	SITC of cast in situ safety rubberized flooring system for outdoor area as per final drawings having 36mm thickness including base layer of R-grade rubber shreds and top layer of SBR coated granules/EPDM granules complete in all respects. 36mm thickness including 30mm thk base layer of R-grade rubber shreds and 6mm top layer of SBR coated granules (80%) complete in all respects (including Taxes as applicable) complete in all respects (including Taxes as applicable) laid on IPS/PCC surface free from paint, wax, grease, oil, dust and dirt. The item includes cost of material, cleaning the IPS/PCC surface before installation and installation as directed by EIC.		443.10	3,544.00	1,570,346.40
101	SITC of cast in situ safety rubberized flooring system for outdoor area as per final drawings having 36mm thickness including base layer of R-grade rubber shreds and top layer of SBR coated granules/EPDM granules complete in all respects. 36mm thickness including 30mm thk base layer of R-grade rubber shreds and 6mm top layer of EPDM granules (20%) complete in all respects (including Taxes as applicable) laid on IPS/PCC surface free from paint, wax, grease, oil, dust and dirt. The item includes cost of material, cleaning the IPS/PCC surface before installation and installation as directed by EIC.		147.00	5,102.00	749,994.00
102	Supply and installation of geocell of 75 mm depth and grid diameter not more than 200 mm on non vegetated slope on gradient of 30-45 degree including the anchoring to existing soil, with all necessary fixture as directed by Engineer in charge. The rate is inclusive of murrum laying and royalty.				,
	The rate is inclusive of marrain laying and royalty.	SQM	2505.00	255	638,775.00

Sr no	Description	Unit	Quantity	Rate	Amount
103	S & F of half relief FRP Murals as per drawing no.		Quantity	110.00	7
	AGH/882/F/03 in basalt stone finish, depicting various				
	Ramayana themes carving of size not less than 1.2 m X 1.5				
	m along Goda walk. The murals shall be of 6-10 layers of				
	FRP on 1 mm Gel coat matting with powder coat paint of 83				
	micron in approved colour and texture fixed firmly with armature				
	fixed firmly with armature of M.S grid (size not less than 600				
	X 600 mm) made of 35 X 35 X 2 mm box pipe , fixed on the existing RCC pedestals (1.2 M X 1.5 X 0.3 M) including all				
	fittings and fixtures and making the joints seamless with color				
	grout as per drwgscomplete as directed by Engineer -in -				
	charge.	Nos	6.00	52,500.00	315,000.00
104	S & F of half relief FRP Murals as per drawing no.			5_/55555	5 - 5 / 5 5 7 5 5 7 5 7 5 7 5 7 5 7 5 7 5 7
	AGH/882/A/06 in basalt stone finish of size not less than				
	3.0 m X 1.5 m based on Historical heritage of different				
	dynasties of the rulers of Nashik in Goda Park - The heritage				
	wall - as per drawings finalized by Architect/Consultant. The				
	murals shall be of 6-10 layers of FRP on 1 mm Gel coat				
	matting with powder coat paint of 83 micron in approved				
	colour and texture fixed firmly with armature fixed firmly with				
	armature of M.S grid (size not less than 600 X 600 mm) made				
	of 35 X 35 X 2 mm box pipe , fixed on the existing stone /brick masonry wall including all fittings and fixtures and making the				
	joints seamless with color grout as per drwgscomplete as				
	directed by Engineer -in -charge.				
	and detail by Engineer in Charge	Nos	4.00	288,750.00	1,155,000.00

Sr no	Description	Unit	Quantity	Rate	Amount
105	SITC of Kalaram temple (miniature) of size 1.5 m height		Quantity	1446	7
	at Talkuteshwar ghat as per drawing and strictly in proportion				
	to the existing structure made in FRP, thickness of FRP				
	comprises of 12-18 layers of 1 mm Gel coat matting with				
	powder coat paint of 83 micron in approved colour and				
	texture fixed firmly with armature of M.S grid (size not less				
	than 250 X 250 mm) made of 35 X 35 X 2 mm box pipe,				
	fixed on the existing Concrete / RCC Pedestal including all				
	fittings and fixtures and making the joints seamless with color				
	grout as per drwgscomplete as directed by Engineer -in -				
	charge.	Nos.	1.00	991,100.00	991,100.00
106	S I T C of Sita sarovar (miniature) of size 1.5 m height at				
	Talkuteshwar ghat as per drawing and strictly in proportion				
	to the existing Sita Sarovar made in FRP, thickness of FRP				
	comprises of 12-18 layers of 1 mm Gel coat matting with				
	powder coat paint of 83 micron in approved colour and texture				
	fixed firmly with armature of M.S grid (size not less than 250				
	X 250 mm) made of 35 X 35 X 2 mm box pipe, fixed on the				
	existing Concrete / RCC Pedestal including all fittings and				
	fixtures and making the joints seamless with color grout as per				
	drwgscomplete as directed by Engineer -in -charge.	Nos.	1.00	645,150.00	645,150.00

Sr no	Description	Unit	Quantity	Rate	Amount
107	SITC of Ramshej fort (miniature) of size 1.5 m height at Talkuteshwar ghat as per drawing and strictly in proportion to the existing structure made in FRP, thickness of FRP comprises of 12-18 layers of 1 mm Gel coat matting with powder coat paint of 83 micron in approved colour and texture fixed firmly with armature of M.S grid (size not less than 250 X 250 mm) made of 35 X 35 X 2 mm box pipe, fixed on the existing Concrete / RCC Pedestal including all fittings and fixtures and making the joints seamless with color grout as per drwgscomplete as directed by Engineer -in -charge.	N	1 00	274 000 00	274.000.00
108	S I T C of Sita gumpha (miniature) of size 1.5 m height at Talkuteshwar ghat as per drawing and strictly in proportion to the existing structure made in FRP, thickness of FRP comprises of 12-18 layers of 1 mm Gel coat matting with powder coat paint of 83 micron in approved colour and texture fixed firmly with armature of M.S grid (size not less than 250 X 250 mm) made of 35 X 35 X 2 mm box pipe , fixed on the existing stone /brick masonry wall including all fittings and fixtures and making the joints seamless with color grout as per drwgscomplete as directed by Engineer -in -charge.	Nos.	1.00	374,000.00 897,600.00	374,000.00 897,600.00

Sr no	Description	Unit	Quantity	Rate	Amount
109	S I T C of Triambakeshwar (miniature) of size 1.5 m				
	height at Talkuteshwar ghat as per drawing and strictly in				
	proportion to the existing structure made in FRP, thickness of FRP comprises of 12-18 layers of 1 mm Gel coat matting				
	with powder coat paint of 83 micron in approved colour and				
	texture fixed firmly with armature of M.S grid (size not less				
	than 250 X 250 mm) made of 35 X 35 X 2 mm box pipe,				
	fixed on the existing Concrete / RCC Pedestal including all				
	fittings and fixtures and making the joints seamless with color				
	grout as per drwgscomplete as directed by Engineer -in - charge.	Nos.	1.00	927,520.00	927,520.00
110	S I T C of Kavani kapil dhara (miniature) of size 1.5 m	1103.	1.00	327,320.00	327,320.00
	height at Talkuteshwar ghat as per drawing and strictly in				
	proportion to the existing structure made in FRP , thickness				
	of FRP comprises of 12-18 layers of 1 mm Gel coat matting				
	with powder coat paint of 83 micron in approved colour and				
	texture fixed firmly with armature of M.S grid (size not less than 250 X 250 mm) made of 35 X 35 X 2 mm box pipe,				
	fixed on the existing Concrete / RCC Pedestal including all				
	fittings and fixtures and making the joints seamless with color				
	grout as per drwgscomplete as directed by Engineer -in -				
	charge.	Nos.	1.00	882,640.00	882,640.00

Sr no	Description	Unit	Quantity	Rate	Amount
111	S I T C of Tapovan (miniature) of size 1.5 m height at Talkuteshwar ghat as per drawing and strictly in proportion to the existing structure made in FRP, thickness of FRP comprises of 12-18 layers of 1 mm Gel coat matting with powder coat paint of 83 micron in approved colour and texture fixed firmly with armature of M.S grid (size not less than 250 X 250 mm) made of 35 X 35 X 2 mm box pipe, fixed on the existing Concrete / RCC Pedestal including all fittings and fixtures and making the joints seamless with color grout as per drwgscomplete as directed by Engineer -in -				
112	charge. S I T C of tree pots in FRP as per drawing no. AGH/882/F/03 in the desired shape and size 1 X 1 X 1 M thickness of FRP comprises of 15-20 layers of 1mm gel coat matting with powder coat paint of 83 microns in the desired color and shade, texture with the bolt and lever type lifting arrangement. Assem bly etc. complete as specified and directed by EIC	Nos.	1.00	536,690.00 32,000.00	536,690.00 3,456,000.00
113	S & F of Drain Cover as per drawing AGH/882/A/ of width 0.6 m made in FRP, comprising of MS framework of 45 X 45 X 4 mm L angle frame with 35 X35 X 4 mm plate fixed @ 35 mm c/c distance with all necessary operations like bending, cutting, drilling, welding, cleaning etc. with all necessary fittings, covered with layers of FRP in the desired finish and color shade each unit 1.5 m in length as specified and directed by Architect/Consultant. The thickness of the FRP shall be 4 mm to 6mm comprises of 6 layers of 1mm gel coat matting with powder coat paint of 83 microns fixed firmly with on MS angles fixed firmly on the drain sides in line and level as directed by Engineer -in -charge.	RMT	550.00	7,152.00	3,933,600.00

Sr no	Description	Unit	Quantity	Rate	Amount
114	S & F of compound wall (panel) fencing as per drawing no. AGH/882/F/04 in laser cutting of MS sheets of 3 mm thick of size 1.8 X 1.4 m and MS hollow pipes along three sides of 25 X 25 X 2 mm intermediate support, fixed to 60 X 60 X 4 mm hollow fabrication MS main support pipe fixed in concrete/ UCR with all necessary operations like bending, cutting, drilling, welding, cleaning etc. with all necessary fittings and fixtures, applying one coat of red oxide chromate powder and two coats of enamel paint of approved color and shade complete, including removal of surplus material/debries and restoring damaged portion as specified and directed by EIC	SQM	84.00	41,518.00	3,487,512.00
115	S & F of compound wall Grill as per drawing no. AGH/882/F/04 comprising assembly of MS pipes, 20 X 20 X 2 mm primary vertical, 35 X 35 X 2 mm intermediate horizontal pipe, fixed on 60 X 60 X 4 mm thick pipe with MS fabrication with all necessary operations like bending, cutting, drilling, welding, cleaning etc. with all necessary fittings and fixtures, applying one coat of red oxide chromate powder and two coats of enamel paint of approved color and shade etc. including removal of surplus material/debries and restoring damaged portion as specified and directed by Architect/Consultant. complete as specified and directed by EIC	SQM	294.00	6,600.00	1,940,400.00

Sr no	Description	Unit	Quantity	Rate	Amount
116	S & F of half relief FRP Murals on entrance pillars as per drawing no. AGH/882/A/09 of size having width 1.0 m x 4m height in basalt stone finish based on theme of the important dates/events in the history of Nashik complete as per the final drawings approved by the Architect/Consultant. The murals shall be of 6-10 layers of FRP on 1 mm Gel coat matting with powder coat paint of 83 micron in approved colour and texture fixed firmly with armature of M.S grid (size not less than 600 X 600 mm) made of 35 X 35 X 2 mm box pipe, fixed on the existing stone /brick masonry wall including all fittings and fixtures and making the joints seamless with color grout as per		Quantity		
	drwgscomplete as directed by Engineer -in -charge.	Nos	5.00	872,850.00	4,364,250.00
117	Providing and fabrication and fixing M.S. railing along the river bank as per drawing no. AGH/882/F/04 in , MS fabrication in MS square pipes assembly of 18 X 18 X 2 mm vertical bars, intermediate support of 40 X 40 X 2 mm and 65 X 65 X 4mm main supports with MS pedestal with all necessary operations like bending , cutting, drilling, welding, cleaning etc. with all necessary fittings and fixtures, applying one coat of red oxide chromate powder and two coats of enamel paint of approved color and shade etc. including removal of surplus material/debries and restoring damaged portion as specified and directed by Architect/Consultant. complete as specified and				
	directed by EIC.	Rmt	800.00	3,250.00	2,600,000.00

Sr no	Description	Unit	Quantity	Rate	Amount
118	Providing , detailing, and fabricating as per specifications,				
	transporting to site and erecting MS Openable / Sliding /				
	Ornamental Entrance Gate 1 as per drawing no.				
	AGH/882/F/04 in laser cutting of MS sheets of 3 mm thick				
	of size width 6m x height 2.1m including track and wheel,				
	locking arrangement, fixing bolts, nuts, washers, cleats,				
	stiffeners, gussets decorative balusters, arrow heads etc. and all				
	necessary operations like straightening, bending, cutting,				
	drilling, grinding, machining if specified, welding etc. complete				
	weighing not less than 40 to 45 kg/SQM , including				
	cleaning, Grinding and removing the welding burr and preparing				
	surface and applying one coat of red oxide zinc chromate				
	primer and one coat of Synthetic Enamel paint after				
	fabrication and second coat of Synthetic Enamel paint after				
	erection, with approved colour, shade and brand etc. Including				
	touching up with primer etc. complete as directed by Engineer				
	In Charge.	Nos	1.00	731,272.00	731,272.00

Sr no	Description	Unit	Quantity	Rate	Amount
119	Providing , detailing, and fabricating as per specifications, transporting to site and erecting MS Openable / Sliding / Ornamental Entrance Gate 2 as per drawing no. AGH/882/F/04 in laser cutting of MS sheets of 3 mm thick of of size width 3.2m x height 1.8m locking with arrangement, fixingbolts, nuts, washers, cleats, stiffeners, gussets decorative balusters, arrow heads etc. and all necessary operations like straightening, bending, cutting, drilling, grinding, machining if specified, welding etc. complete weighing not less than 30 to 35 kg/SQM , including cleaning, Grinding and removing the welding burr and preparing surface and applying one coat of red oxide zinc chromate primer and one coat of Synthetic Enamel paint after fabrication and second coat of Synthetic Enamel paint after erection, with approved colour, shade and brand etc.including touching up with primer etc. complete as directed by Engineer In Charge.				
		Nos	1.00	343,200.00	343,200.00

Sr no	Description	Unit	Quantity	Rate	Amount
120	Providing, detailing, and fabricating as per specifications, transporting to site and erecting MS Openable / Sliding / Ornamental Entrance Gate 3 as per drawing no. AGH/882/F/04 of size width 6m x height 1.8m MS fabrication in vertical bars of 12 X 12 mm and intermidiate bars of 40 X 40X 2 mm box as support fixed on I-section of 250 with arrangement, fixingbolts, nuts, washers, cleats, stiffeners, gussets decorative balusters, arrow heads etc. and all necessary operations like straightening, bending, cutting, drilling, grinding, machining if specified, welding etc. complete, weighing not less than 20 to 25 kg/SQM including cleaning, Grinding and emoving the welding burr and preparing surface and applying one coat of red oxide zinc chromate primer and one coat of Synthetic Enamel paint after fabrication and second coat of Synthetic Enamel paint after erection, with approved colour, shade and brand etc.including touching up with primer etc. complete as directed by Engineer In Charge.		Quantity	itate	Amount
		No	1.00	120,400.00	120,400.00
121	S I T C of gabion bench as per drawing no. AGH/882/F/01 of size width 1.5m X height 0.45m in mix media comprising of seating top made in FRP in wooden finish in desired color and shade. The seating base shall be kept hollow in the centre to incorporate lighting fixtures by installing 2 frames of 0.15m X 0.15m metal grid 4mm gauge anchored to ground of filled with stones with space for fixing of light fixtures. The whole assembly shall be fixed firmly on framework of 75mm X 75mm L-angles that shall be embedded in RCC foundation M20 bed below ground level for the stability of the whole assembly with all necessary fittings and fixtures complete as specified and directed by EIC.				
	directed by Lie.	Nos	41.00	90,750.00	3,720,750.00

Sr no	Description	Unit	Quantity	Rate	Amount
122	S & F of nameplate as per drawing no. AGH/882/A/09 of size 2.9m width x 1.2m height in mix media comprising of framework in 0.10m X 0.10m metal grid of 4mm gauge of 0.45m width filled with stones. the entire framework shall be covered/outlined by 75mm thk FRP frame. The facia of the metal grid shall have the lettering GODA PARK in FRP, The thickness of FRP shall be 10mm to12mm comprises of 10-12 layers of 1mm gel coat matting with powder coat paint of 83 microns fixed firmly with armature in M.S. made by 35mm x 35mm square pipe of 2 mm thk with metal grid complete as specified and directed by EIC				
	directed by LIC	Nos	1.00	767,250.00	767,250.00
123	S & F of bird house as per drawing no. AGH/882/F/01 of size of base 0.60m x 0.60m, depth below entry of about 0.35 - 0.45m and overall height of 0.55 and sloping roof u pto 0.35m of FRP, wild bird cages at various locations as per drawing made with sloping roof. Complete as specified and directed by EIC	Nos	10.00	1,320.00	13,200.00
124	S & F of tree grating as per drawing no. AGH/882/F/03 in FRP of thickness 4 mm to 6mm and comprises of 6 layers of 1mm gel coat matting with powder coat paint of 83 microns and shall have top abrasion resistant layer conforming to IS-15658:2006 fixed firmly with (armature) M.S. foundation made by 35mm x 35mm square pipe with metal grid complete as specified and directed by EIC	Nos	73.00	40,575.00	2,961,975.00

Nashik Municipal Smart City Development Corporation Limited

Sr no	Description	Unit	Quantity	Rate	Amount
125	S & F of information signage as per drawing no.				
	AGH/882/F/01 of ht 2.3m x w 1.2m x depth 0.12m made in FRP				
	in wooden finish having thickness 6mm to 8mm comprises of 8				
	layers of 1mm gel coat matting with powder coat paint of 83				
	microns fixed firmly with armature in M.S. framework made by				
	35mm x 35mm square pipe with applying coat of red oxide				
	chromate primer and two coats of exterior paint in required color				
	and shade etc. complete as specified and directed by EIC	Nos	6.00	18,645.00	111,870.00
126	S I T C of Play eqipments as per drawing no.				
	AGH/882/F/10- A,B,C element in FRP, in alphabetical form				
	made in FRP in various sizes as per the drawings, FRP thickness				
	6mm to 8mm comprises of 14-16 layers of 1mm gel coat				
	matting with powder coat paint of 83 microns in desired				
	color and shade, fixed firmly with armature M.S. foundation				
	made by 35mm x 35mm square pipe with metal grid				
	complete for A- size with ht 0.9 m length 1M and width 0.15 M, for letter B-Ht 1.6 X L 1.1 X W 0.2 M, for letter C				
	H 1.05 X L 1.8 X W 0.15 as specified and directed by EIC				
	as specified and directed by Lic	Nos	1.00	932,910.00	932,910.00

Sr no	Description	Unit	Quantity	Rate	Amount
127	SITC of assembly of stone play apparatus as per Drwg no AGH/882/F/03 1)-Stepping stone 0.6 M dia and 0.5 M				
	depth(0.3 M depth abv gr lvl) total 31 nos in black flammed				
	granite 2)- Balancing stone plank of 4 M X 0.3 M X 0.075				
	M of Red agra stone 1 no <u>3)-</u> Gravel pit boundary 0.3 X 0.6				
	of black flamed granite 30 nos 4) single step Ladder 1 X				
	0.450 X 0.450 M in Black Flammed Granite. 5) Stepping				
	Stones of size 0.3 X 0.3 X0.3 M, 7 nos 6) Stepping Stones of				
	size 0.3 X 0.3 X0.6 M, 4 nos_7) Stepping Stones of size 0.3 X				
	0.3 X0.75 M, 2 nos complete as per instruction of EIC				
	Note - After work completion, stability and wear and tear of all				
	cladding and paving stones will be the responsibility of the				
	contractor for period of 5 years. It is to be noted that the wear				
	and tear as well as accidental damage of the same shall be taken				
	care of by the contractor for the said amount of 5 years.				
		Nos	1.00	1,904,826.00	1,904,826.00

Providing & installing of E- toilet with Super structure of the electronic toilet to have asthetic ambience with inner room size 1.2 x 0.8 x 2.4 (LXWXH)meters and Size of electronic toilet overall size in meters 2.30x1.25x2.80 (LXWXH) Total area 35 Sft. with Built-acess controlled main door and side walls made of SS Grade 304,Toilet floor and closet are to be stainless steel of grade 304.E-Toilet shall have Built-in water tank with minimum 225 Lit capacity and Acess controll using coin validator for entering the unit based on automatic payment collection mechanism exit from the unit should be manual.Automatic lights inside the unit with gloves on opening the door.E-Toilet shall be Automatic flushing system which includes Automatic Pre flush cleaning before use,Automatic closet washing mechanism after	Amount
electronic toilet to have asthetic ambience with inner room size 1.2 x 0.8 x 2.4 (LXWXH)meters and Size of electronic toilet overall size in meters 2.30x1.25x2.80 (LXWXH) Total area 35 Sft. with Built-acess controlled main door and side walls made of SS Grade 304,Toilet floor and closet are to be stainless steel of grade 304.E-Toilet shall have Built-in water tank with minimum 225 Lit capacity and Acess controll using coin validator for entering the unit based on automatic payment collection mechanism exit from the unit should be manual.Automatic lights inside the unit with gloves on opening the door.E-Toilet shall be Automatic flushing system which includes Automatic Pre flush	
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overall size in meters 2.30x1.25x2.80 (LXWXH) Total area 35 Sft. with Built-acess controlled main door and side walls made of SS Grade 304, Toilet floor and closet are to be stainless steel of grade 304.E-Toilet shall have Built-in water tank with minimum 225 Lit capacity and Acess controll using coin validator for entering the unit based on automatic payment collection mechanism exit from the unit should be manual. Automatic lights inside the unit with gloves on opening the door. E-Toilet shall be Automatic flushing system which includes Automatic Pre flush	
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inside the unit with gloves on opening the door.E-Toilet shall be Automatic flushing system which includes Automatic Pre flush	
Automatic flushing system which includes Automatic Pre flush	
use and Automatic platform cleaning mechanism programmed after specific numbers.In addition to these flush switch is to be	
provided for manual operation. Standard features should include	
heath faucet,exhaust fan and cloth hanger.The E-Toilet shall	
have Alert to users-different indication on 'ready to use', busy	
are to be provided in the unit also with Voice guidence in the	
unit for users. Web enabled support-GPRS based Real time data	
to be provided from the unit through web for knowing the health	
status like number of users per day and coins collected.E-toilet	
shall have Modular and portable design enabling easy	
assembling and installation at site.Call ceneter and web portal	
facilities for registering complience and tracking usage,coin	
collection etc.Status display in LED,Printed instruction stickers	
are to be provided.For Advertisment purpose space for	
advertisement dispaly to be povided on the exterior of the unit	
for income generation and sustainability.	ı
Nos 5.00 594,752.00	

Sr no	Description	Unit	Quantity	Rate	Amount
	Backup power facility like UPS is to be provided to supplement upto 30 Min				
	Base of the unit to be placed on a suitable concrete structure with a ashthetic finish. as directed by Engineer-in-charge				
129	Providing and Installing Waste water treatment and recycling unit for each E-Toilet: Bio digester tank suitable for maintenance free processing the soil waste with 2000 litre capacity, made of FRP. The bio digester shall be of anaerobic type with compartments followed by disinfection. The compartments shall have polygrass mats for protection of bacteria on side partition walls. The bio digester shall be fitted with ball valve or bypass arrangement. Dosed with approved microbial solution at recommended interval as directed by Engineer-in-charge	Nos	5.00	150,000.00	750,000.00
130	SITC of HDPE Floating docks for jetty with High Molecular High Density Polyethylene (HMHDPE) with each module of size 0.69m*0.69m*0.4m with load capacity of 100 kg/Float with Anti skid & UV Resistant body surface.with connecting pins, side nut washer, railing & Anchoring, testing and installation etc. complete in all respects as directed by Engineer -n- charge. including transportation and taxes as applicable.	sqm	147.00	25,772.00	3,788,484.00
	Total of Non SSR Items			•	292,368,562.40
	Total SSR Items+ Non SSR Items				472,416,137.47

Part :B Name of Works - Estimate for Horticulture works Goda Riverfront , Nashik

Sr.	Description of Item				Total Amount in
no		Unit	Quantity	Rate	Rs.
1	Garden Soil:-supplying on the site red hill earth: supply on				
	the site red hill earth well sieved 90% pass through I.S sieve of 10mm size free from stones, rubbish like dried grass roots and				
	other such materials. The soil should be fresh form quarry. the				
	color of the soil generally is red . the red doil will be meaured				
	by measuting box.(Farma Item includes royalty charges, octroi				
	, corporation tax Transporting loading -unloading etc.(Lead				
	charges per 90 km. considered.)		2 020 50	454.50	04 5 04 0 07
	DOC 2014 15/ N. 5/14 1 50/ E 4	m3	2,029.50	451.50	916,319.25
	P&G 2014-15/page. No-5/ Item no 1 x 5% Extra				
	430+21.50=451.50				
2	Preparing Instant Lawn :- Excavating the ground to a				
	required depth of 20cms, removing & conveying unwanted				
	stuff to a required distance as directed. Filling fresh garden soil/silt & manure in excavated area in 3:1 proportion to a				
	height of 30cms. Mixing garden soil and manure thoroughly				
	well, levelling, watering on previous night. Planting required				
	variety of lawn grass as directed and maintaining till well				
	established by watering, weeding, clipping, rolling etc.				
	complete.	m2	1,551.000	519.75	806,132.25
	P&G 2014-15/page. No-7/ Item no 3 x 5% Extra				
	495+24.75= 519.75				
3	Preparing Shrubbery:- Excavating the ground to required	_			
	depth of 30cms, removing and conveying unwanted stuff to a	m2	1,447.00	406.35	587,988.45

Nashik Municipal Smart City Development Corporation Limited

183 | P a g e

Sr.	Description of Item				Total Amount in
no		Unit	Quantity	Rate	Rs.
	required distance as directed. Filling fresh garden soil &				
	manure in excavated area in 3:1 proportion to a height of				
	30cms. Mixing garden soil and manure thoroughly well, levelling, watering, on previous night. Planting well-rooted				
	shrubs 0.5 Mtrs.apart as directed and maintaining till well				
	established by watering, weeding, stirring replacing of				
	casualties etc, complete.				
	P&G 2014-15/page. No-8/ Item no 8 x 5% Extra				
	387+19.35= 406.35				
4	Preparing Ground covers: excavating the ground to a				
	required depth of 20 cms. Removing & conveying unwanted				
	stuff, rubbish to the required distance as directed. filling the				
	Excavated area with fresh garden Soil & F.Y Manure in 3:1				
	proportion to a height of garden of 20cms Mixing, leveling, watering the same on previous night. Planting suitable Ground				
	Covers as directed in staggering pattern distance between two				
	rows 25 cns, watering & maintaining till well established	m2	1,406.25	360.15	506,460.94
	P&G 2014-15/page. No10/ Item no 4 x 5% Extra		2,100.20		
	343+17.15= 360.15				
	Fair Item				
5	Planting large / shady trees(Ht.2 mtr.) Digging pit with size				
	0.9 X 0.9m X 0.9 m removing and conveying unwanted stuff				
	to a required distance as directed. Filling the pit with approved				
	distance as directed Filling the pit with approved height of				
	0.60m. with fresh garden soil & manure in 3:1 proportion Mixing soil & manure thoroughly well. leveling, as directed				
	watering previous night planting two to three years old				
	minimum 2.0 mtr. height healthy tree sapling as per				
	specifications.				
	-F				

Sr.	Description of Item				Total Amount in
no		Unit	Quantity	Rate	Rs.
	Fair Item				
	Cassia fistula				
		Nos.	57		
	Millingtonia hortensis				
	T. 1 .	Nos.	10		
	Tabebuia rosea	Nos.	115		
	Terminalia mantalay		-		
		Nos.	140		
	Tabebuia argentina				
		Nos.	184		
	Total	N.T.	506	2.500.00	1 265 000 00
		Nos.	506	2,500.00	1,265,000.00
6	ficus benghalensis Big bonsai of height 8 to 10 feet fully stabilized		5	150,000.00	750,000.00
	stabilized		3	130,000.00	730,000.00
7	SITC landscape netting (jio net) for slop for Goda park	Sqmt	622.50	2,500.00	1,556,250.00
		Sqiii	022.30	2,300.00	1,330,230.00
8	Tree Grating				
0	Tree Grating	Nos	370	30,000.00	11,100,000.00
	Total A	1103	370	30,000.00	11,100,000.00
					17,488,150.89
	36 months Maintence BOQ for Goda Park				
9	maintenance of garden in the all respect for keeping gardening		-		
	in good condition such as weeding Cleaning, watering, cutting				-
	, gap filling , manuring , cutting (lawn, hedges , tree, flowers,				
	Etc.) and composting preparation of bed plantation, trees				

Sr.	Description of Item				Total Amount in
no		Unit	Quantity	Rate	Rs.
	Shrub, ground cover, flowerbed, lawn, etc, minor civil,				
Λ 1	mechanical, electrical work for 1 month.				
A.1	Goda park				
	Softscape Area	per sqm	- - 00000	3.70	27.121.10
			6,793.00		25,134.10
A.2	Goda walk				
	Softscape Area	per sqm		3.70	
	•		71.00		262.70
A.3	sunder narayan temple				
			-		
	Softscape Area	per sqm		3.70	
			219.00		810.30
A.4	Sambhaji park Udyan	per sqm			
			-		
	Garden Area	per sqm	1 207 00	3.70	4.465.00
A 5	Classic		1,207.00		4,465.90
A.5	Ghat area				
	Softscape Area	per sqm	-	3.70	
	bonscape Thea	per sqiii	3,190.00	3.70	11,803.00
A.6	Talkuteshwar		3,170.00		11,003.00
12.0			_		
	Garden Area	per sqm		3.70	
			606.00		2,242.20
10	Appointment of Security Head				
	•		3	16900	50,700.00
11	Appointment of Security Head				
			15	16691	250,365.00
	Total				
					345,783.20

Sr.	Description of Item				Total Amount in
no		Unit	Quantity	Rate	Rs.
	Rounded Amount				
					345,784.00
	One Year Cost				
					4,149,408.00
	Three Year Cost - Total B				
					12,448,224.00
	Total $A + B$				
					29,936,374.89

Part: C
Estimate for the work "Goda Riverfront Development including beautification in ABD area under Nashik Smart City Mission, Nashik".

PART	AREA / Description	Amount
Α	Bridge fascade	3921551.00
В	Street lighting	3778747.00
С	High mast	6934387.36
D	Goda park landscape Lighting	12423419.00
Е	Goda walk	5022903.00
F	Sundar narayan Temple & historical park	2072889.00
G	DEEP MALA	5431640.00
Н	Operation and Maintenance	1930680.69
11	(Basic + O&M) Total	41516217.00

A. FAÇADE ILLUMINATION OF BRIDGES

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
1	9.1.1	Providing earthing with Galvanized cast iron earth plate size 60 x 60 x 0.6 cm complete with all mat erials, testing & recording the results as per specification No. EA-EP	nos	2.00	3931.00	7862.00
2	1.3.26	Suppl yi ng PVC insulated PVC round sheat hed 1 sq.mm (32 no. x 0. 20mm dia.) 3 core fl exible multi stranded copper Industrial cable for voltage grade up to 1.1 kV	MTR	100.00	39.00	3900.00
3	7.1.28	Suppl yi ng, erecting & terminating PVC armoured cable 4 core 10 sq mmaluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pole or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR	350.00	153.00	53550.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
4	7.1.29	Suppl yi ng, erecting & terminating PVC armoured cable 4 core 16 sq mmaluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR	150.00	179.00	26850.00
5	7.6.9	Supplying and laying (including excavation) 50 mm outside dia. double wall corrugated pipes (DWC)of HDPE for encl osing cable below ground/road surface, to required depth complete.	MTR	50.00	179.00	8950.00
6	7.6.9	Suppl yi ng and laying (without excavation) 50 mm outside dia. double wall corrugated pipes (DWC)of HDPE for encl osing cable below ground/road surface, to required depth complete.	MTR	500.00	71.00	35500.00
7	16.1.2	Making the trench in Hard murum/Tar roadof suitable width and depth as per IS for laying provi ded L.T cable up to 10 sq.mm. complete. As per specification No. CW-EXN-CTR	MTR	50.00	170.00	8500.00
8	5.4.4	Suppl yi ng & erecting triple pole and neutral distribution board (TPNDB) surface/ flush mounted SP /TP MCBs of total 12 ways, on iron / G.I. frame/wooden board.(Vertical Busbar type) as per specification No. SW-SWR/MCBDB	nos	1.00	3836.00	3836.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
9	5.6.16	Suppl yi ng, fixing and commissioning RCBO (Residual Current Breaker with Overcurrent Protection), type AC with 30/100/300 mA sensitivity and having capacity of 63A 4 Pole 3 phase as per specificationSW-RCCB/RCBO	nos	1.00	4258.00	4258.00
10	5.3.19	Suppl yi ng, erecting & marki ng TPN MCB 40A to 63A, C-Series in provided distribution board as per specification No. SW-SWR/MCB	nos	3.00	1140.00	3420.00
11	5.3.2	Suppl yi ng, erecting & marking SPMCB 6A to 32A, C-series (for motor/power) in provided distribution board as per specification No. SW-SWR/MCB	NOS	6.00	153.00	918.00
_		Total of SSR Items				157544.00
	Non SSR Items					
12	FAIR ITEM	Smart Street Light Control Panel (SLCP) Supply, installation, testing and commissioning of SLCP Shall be conforming following IS standards — IS: 2147 — 1962 Degree of protection Floor / wall/ structure mounted, free standing, suitable for cable entry from bottom side, dust proof, vermin proof, 3 phase and neutral, bus bar, aluminium, neutral bus shall be of same size as phase bus bars, Short circuit capacity for the bus bars and switches shall be 10 kAThe smart light control pannel shall contain the following features 1) The feeder panel functionalities shall consist of class 1 energy, meter, feeder panel control unit & wireless communication unit 2) The feeder panel controller shall be capable of switching	nos	1.00	46667.00	46667.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		on/off all the luminaries of a particular switching point based on the lighting schedule set by the central management				
		server (CSLMS)				
		3)It shall communicate to the CSLMS through the wireless				
		communication unit over GSM/Wi-Fi//Ethernet.				
		4) once the lighting schedule is set, it shall operate the				
		luminaries according to that schedule till the lighting				
		schedule is changed by the CSLMS. 5) it shall operate the luminaries according to the lighting				
		schedule even if there is a communication fault between				
		CSLMS itself.				
		6) in the absence of any lighting schedule it shall operate				
		(On/OFF) the luminaries according to time of the day.				
		7) It shall communicate the real time status (on/Off / fault)				
		of the luminaries to CSLMS. 8) if it is not able to communicate with CSLMS, it shall store				
		all the luminary's data internally and relay that data to				
		CSLMS once the communication is established.				
		9) it shall be able to store luminary's log /data for up to 7				
		days.				
		10) it shall have IP55 protection.				
		11) MSEDCL meter space in feeder panel controller.12) Uniform rating for all the panels.				
		13) the vendor needs to use the appropriate communication				
		mechanism from GSM/Wi-Fi/Ethernet for establishing				
		connectivity between feeder panel controller & CSLSM.				
		14) Group control via feeder panel, but individual street light				
		fixture data should be available via CSLMS.				

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
13	FAIR ITEM	Supply of High power RGB LED Flood Lights, fashionable and beautiful appearance, Adopt isolated housing design could have the separate heat dissipation fully ensure the stability and long lifespan of LED Light, Secondary optical lens for proper light throw, Light body adopts high pressure die-casting aluminum, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, adopt high wattage LED light source, high flus output, excellent consistency of light color, Wattage: 120W, Ingress Protection: IP65, Beam Angle: 45-60 Degree, Input Voltage: DC24 (External Driver), Color: RGB, Controller: DMX System, Life Span: 50000 hours, Warranty: 5 years cat referance VIN -F120RGB VINLED	NOS	46.00	55114.00	2535244.00
14	FAIR ITEM	DMX CONTROL SYSTEM The DMX controller has following features.S.I.T.C. and programming of DMX Master Controller, with specifications. • Graphical color display to show selected environment • Color/dimmer/speed palette • Color temperature mixing • Touch sensitive buttons. No mechanical parts • Multi-zone microSD memory • Multi-room control with 500 scenes, 10 zones • 1024 DMX channels. Control 340 RGB fixtures • USB & Ethernet connectivity for programming and control • Network communication. Control lighting remotely • Windows/Mac software to set dynamic colors/effects • iPhone/iPad/Android remote and programming apps The DMX has a provision of controlling and programming through a USB cable via a computer as well as	NOS	1.00	172695.00	172695.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		remotely through internet. IT SYSTEM SHOULD INCLUDE THE SIGNAL ENHANCERS/ BOOSTERS & REPEATERS ETC WHEREVER REQUAIRED IN ORDER TO TAKE CARE OF SMOOTH & PROPER FUNCTIONING OF THE ENTAIR SYSTEMS . SUGESTED MAKES PHAROS , NICOLAIDUE , LUTRON .				
15	FAIR ITEM	DMX Decoder	NOS	23.00	14697.00	338031.00
16	FAIR ITEM	RGB Data Repeaters	NOS	23.00	9798.00	225354.00
17	FAIR ITEM	DC24V 350W LED Driver	NOS	23.00	11752.00	270296.00
18	FAIR ITEM	HIGH PROTECTION WATERPROOF MINICONNECTOR. 2-3-4 POLES., IP68, Housing made of PA66, with co-molded TPA seals making it totally waterproof. UL94 V0/V2 (f1) materials are suitable for underground installation and guarantee reliability over time.UV radiation resistance test according to EN60079-0. Light ageing method (ISO 4892-2). Duration 1000 hours. Electrical insulation test up to 3.75KV, Resistance to external agents (EN60529). In addition: ageing test in air with ozone concentration (ISO1431-1).Resistance in saline environment - Corrosion test (EN60068-2-11:2000). Resistance to impact (NEMKO - EN62262:2002)., Resistance to ame. Use of materials reinforced with berglass UL94 V0/V2 (f1). Glow-wire 850°C/960°C. Realized with materials compliant with the most rigorous Reach/RoHs regulations. Suitable for cable types max. 4G1.5 FG7OR max. 4G1.5 - 3G2.5 - 2G4 H07RN-F max.	NOS	46.00	782.00	35972.00

4G2.5 FG7OR max.4G4 H07RN-F, . Suitable for conductor sizes .5 to 4sqmm. Cable OD from 7 -12mm, Tested for 30mtrs. Similar to Techno THP.391.A4A	Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
19	FAIR ITEM	Radial closing gel pre-filled joint for extruded insulation cables up to 1 kV. Primary insulation, consisting of a cross-linked polymer gel, and the exceptionally robust insulating plastic casing render Class 2 joints in accordance with the definitions contained in standard CEI 64-8. The joint has been tested in accordance with the main international specifications, with repeated flexing and torsion tests and immersion in water, and has been declared as conforming to the mechanical, electrical and sealing specifications required for plastic cable accessories. The joint and its components have an unlimited shelf life, are chemically inert and therefore completely safe. Conductor connections are re-enterable even after long periods of operation. Packaged with self-extinguishing material, flame retardant, for cables at 90°C working temperature. The radial closing system facilitates joint application, making them reenterable only by means of a tool. Electrical performance: CEI EN 50393 • CEI 20-33 (with testing under water head and water between the cable cores) Class 2 in accordance with CEI 64-8. No flame propagation: CEI 20-35 • IEC 60332-1 • HD405-1 (as applicable) Low smoke and toxic and corrosiand corrosive gas emissions. Gel: UL 94-HB, Casing mix: UL 94-V2, Degree of protection: IPX8, Installation temperature: -40°C / +50°C, Operating temperature: 90°, Similar to Raytech make Rapid Joint L 10-ARM supplied with supplied with armour continuity device,	NOS	46.00	3038.00	139748.00
		Total of Non SSR Items				3764007.00
		Total of SSR & Non SSR Items				3921551.00

B. Street Lighting.

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
20	8.3.24	Providing & erecting 7 m high galvanised CONICAL pole with foundation bolts having bottom dia. 145 to 175 mm, top di a. 65 to 75 mm on provided foundation as per specification No. OH-PL/CPL	NOS	63.00	17678.00	1113714.00
21	16.3.9	Providing & casting of M- 20 grade reinforced cement concrete (RCC) foundationsuitable for 6m to 8m high octagonal /conical G.I. poleconsidering the safe soil bearing capacity at site as 10 T/sq m at 1.5 m depth including supply of steel, concrete, excavation and fixing provided nut bolts with the help of template as per design in an approved manner.	NOS	63.00	3269.00	205947.00
22	9.1.4	Providing pipe type earthing with 40mm. dia. G.l. pipe or 20 mm dia. G.l. Rod compl et e with all materials as per specification No. EA-EP	NOS	73.00	1249.00	91177.00
23	8.3.30	Providingt and erecti ngGalvanised 1000mm single arm sword type bracket with FRP dome and ball as per specification No. OH-PL/PBKT	NOS	38.00	2257.00	85766.00
24	8.3.31	Providing and erecting Galvanised 1000mm double arm sword type bracket with FRP dome and ball as per specification No.OH-PL/PBKT	NOS	25.00	3707.00	92675.00
25	1.3.26	Suppl yi ng PVC insulated PVC round sheat hed 1 sq.mm (32 no. x 0. 20mm dia.) 3 core fl exible multi stranded copper Industrial cable for voltage grade up to 1.1 kV	MTR.	2250.00	39.00	87750.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
26	7.1.28	Suppl yi ng, erecting & terminating PVC armoured cable 4 core 10 sq mmaluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pole or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR.	2100.00	153.00	321300.00
27	7.1.29	Suppl yi ng, erecting & terminating PVC armoured cable 4 core 16 sq mmaluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR.	1100.00	179.00	196900.00
28	7.6.9	Suppl yi ng and laying (including excavation) 50 mm outside dia. double wall corrugated pipes (DWC)of HDPE for encl osing cable below ground/road surface, to required depth complete.	MTR.	1750.00	179.00	313250.00
29	5.3.2	Suppl yi ng, erecting & marking SPMCB 6A to 32A, C-series (for motor/power) in provided distribution board as per specification No. SW-SWR/MCB	NOS	126.00	153.00	19278.00
30	8.8.1	Dismantling the existing pole up to 6 m height with brackets, clamps, insulators, stay from the cement concret e foundation and making the site clear by refilling the pits with excavated materials and bringing it to the ground level.	NOS	21.00	435.00	9135.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
31	8.8.2	Dismantling the existing pole above 6 m height with brackets, clamps, insulators, stay from the cement concrete foundation and making the site clear by refilling the pits with excavated materials and bringing it to the ground level.	NOS	42.00	705.00	29610.00
32	16.1.2	Making the trench in Hard murum/Tar roadof suitable width and depth as per IS for laying provi ded L.T cable up to 10 sq.mm. complete. As per specification No. CW-EXN-CTR	MTR.	250.00	170.00	42500.00
33	16.1.5	Excavating hard Rock or bituminous road (B.T.) by chiseling for preparing pit for poles stay or earth plates or for laying cables, pipes& clearing the site by removi ng debris & making the site good.	CUB E MTR	50.00	903.00	45150.00
34	7.10.1	Suppl yi ng & erecting cri mping type aluminium lugs for cable upto 16 sq mmcomplete as per specification No. CB-CL/AL	NOS	540.00	7.00	3780.00
		Total Of SSR Items				2657932.00
	Non SSR Items					
35	FAIR ITEM	Supplying and erecting OF SMART LED street light fitting suitable for 75-85 W, including lamp, with PF > 0.95 class IP 66, impact resistance of IK07 and above Housing of pressure die cast alluminium alloy and heat sink extruded alluminium complete (Above Pathway) WITH 5 YEARS COMPREHENCIVE MAINTAINENCE CAT REFERANCE BRTFG75W ADIM MAKE BAJAJ	NOS	88.00	10085.00	887480.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
36	FAIR ITEM	Smart Street Light Control Panel (SLCP) Supply, installation, testing and commissioning of SLCP Shall be conforming following IS standards – IS: 2147 – 1962 Degree of protection Floor / wall/ structure mounted, free standing, suitable for cable entry from bottom side, dust proof, vermin proof, 3 phase and neutral, bus bar, aluminium, neutral bus shall be of same size as phase bus bars, Short circuit capacity for the bus bars and switches shall be 10 kAThe smart light control pannel shall contain the following features 1) The feeder panel functionalities shall consist of class 1 energy, meter, feeder panel control unit & wireless communication unit 2) The feeder panel controller shall be capable of switching on/off all the luminaries of a particular switching point based on the lighting schedule set by the central management server (CSLMS) 3) It shall communicate to the CSLMS through the wireless communication unit over GSM/Wi-Fi//Ethernet. 4) once the lighting schedule is set, it shall operate the luminaries according to that schedule till the lighting schedule is changed by the CSLMS. 5) it shall operate the luminaries according to the lighting schedule even if there is a communication fault between CSLMS 6) in the absence of any lighting schedule it shall operate (On/OFF) the luminaries according to time of the day. 7) It shall communicate the real time status (on/Off / fault) of the luminaries to CSLMS. 8) if it is not able to communicate with CSLMS, it shall store all the luminary's data internally and relay that data to CSLMS once the communication is established.	NOS	5.00	46667.00	233335.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		9) it shall be able to store luminary's log /data for up to 7 days. 10) it shall have IP55 protection. 11) MSEDCL meter space in feeder panel controller. 12) Uniform rating for all the panels. 13) the vendor needs to use the appropriate communication mechanism from GSM/Wi-Fi/Ethernet for establishing connectivity between feeder panel controller & CSLSM. 14) Group control via feeder panel, but individual street light fixture data should be available via CSLMS.				
		Total Of Non SSR Items				1120815.00
		Total of SSR & Non SSR items				3778747.00

C. High Mast.

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
37	8.3.5	Suppl yi ng and erecting 20 m (clear height) High Mast (Top150mm, Bottom- 460mm) with lowering and raising motorized unit, lantern carriage assembly suitable for max. 12 nos. luminaries and its control gear box, lightning finial, arrangement for fixing avi ation light and foundation bolts on provided foundation as per specification No. OH-PL/HM (excluding luminaries and CG Boxes). VALMONT, TRANSRAIL, BAJAJ.	NOS	5.00	323945.00	1619725.00
38	2.9.18	SITC OF SMART LED Flood light fitting of 200W, including lamp, wit h PF > 0.95, class IP 65 and above Housing of pressure die cast alluminium all oy and heat sink extruded alluminium complete with Smart LED with addressable/dimmable drivers, and 5 years comprehencive maintainence	NOS	132.00	21469.00	2833908.00
39	2.11.1	Suppl yi ng & erecti ng aviation obstruction lightconsisting of yellow pai nted die-cast alumi nium alloy housing with Integral LED aviation light comprising of aluminium housing with pol yearbonate enclosur e complete.	NOS	11.00	4536.00	49896.00
40	16.3.13	Providing & castingM- 20 cement concrete foundation suitable for 20 m raising lowering high mast considering the safe soil bearing capacit y at site as 10 T/sq m at 2 m dept h including excavation and fixing provided nut bolts with the help of template as per design in an approved manner.	NOS	5.00	32772.00	163860.00

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
41	PWD SSR 25.33	Providing and laying Cast in situ/Ready Mix cement concrete M 25 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawings or as directed including centering, formwork, cover blocks compacting and roughening if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I.quality Artificial Sand	M3	8.00	11643.80	93150.40
42	PWD SSR 26.33	Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	Tonne s	0.80	67193.70	53754.96

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
43	7.1.15	Suppl yi ng, erecting & terminating PVC armoured cable 4 core 10 sq mmaluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pole or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR	1500.00	153.00	229500.00
44	7.1.16	Suppl yi ng, erecting & terminating PVC armoured cable 4 core 16 sq mmaluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR	1500.00	179.00	268500.00
45	9.1.1	Providing earthing with Galvanized cast iron earth plate size 60 x 60 x 0.6 cm complete with all mat erials, testing & recording the results as per specification No. EA-EP		36.00	3931.00	141516.00
46	7.6.11	Suppl yi ng and laying (including excavation) 50 mm outside dia. double wall corrugated pipes (DWC)of HDPE for encl osing cable below ground/road surface, to required depth complete.	MTR	1000.00	179.00	179000.00
47	7.6.13	Suppl yi ng and laying (including excavation)90 mm outside dia. double wall corrugated pipes (DWC) of HDPE for encl osing cable below ground/road surface, to required dept h complete.	MTR	30.00	301.00	9030.00
48	7.10.1	Suppl yi ng & erecting cri mping type aluminium lugs for cable upto 16 sq mmcomplete as per specification No. CB-CL/AL	NOS	132.00	7.00	924.00
		Total of SSR items				5642764.36

Nashik Municipal Smart City Development Corporation Limited 204 | P a g e

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
51	Fair item	Dismentalling 30 mtr Highmast, Oralling of winch and Changing of wire rope and EPR cable and Reinstallation of 30 MTR HIGH MAST with Crain	NOS	6.00	75000.00	450000.00
52	Fair item	SITC of 6mm diameter SS wire rope for 30 MTR HIGHMAST - 70 mtr each x 2 wire rope = 140 mtr required for two wire rope system	sets	6.00	35000.00	210000.00
53	Fair item	SITC of Trailing cable Copper 5 pair, 4 sq.mm 35 mtr long	sets	6.00	14875.00	89250.00
54	Fair item	SITC of Double Drum winch - for 30 mtr Highmast	NOS	UR	35500.00	
55	Fair item	SITC connector, junction box, MCB glands for incoming /outgoing cable depending upon size of cable, 1.5ltr OIL for winch to complete work in all respect.	NOS	1.00	2000.00	2000.00
56	Fair item	SITC of bolts manufactured from special steel along with nuts, washers (set of 1 bolt with 2 washers & 3 Nuts)	NOS	12.00	103.00	1236.00
57	Fair item	SITC power tool motor, manual handle,	NOS	1.00	25800.00	25800.00
58	Fair item	Smart Street Light Control Panel (SLCP) Supply, installation, testing and commissioning of SLCP Shall be conforming following IS standards – IS: 2147 – 1962 Degree of protection Floor / wall/ structure mounted, free standing, suitable for cable entry from bottom side, dust proof, vermin proof, 3 phase and neutral, bus bar, aluminium, neutral bus shall be of same size as phase bus bars, Short circuit capacity for the bus bars and switches shall be 10 kAThe smart light control pannel shall contain the following features 1) The feeder panel functionalities shall consist of class 1 energy, meter, feeder panel control unit & wireless communication unit	NOS	11.00	46667.00	513337.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		2) The feeder panel controller shall be capable of switching on/off all the luminaries of a particular switching point based on the lighting schedule set by the central management server (CSLMS) 3) It shall communicate to the CSLMS through the wireless communication unit over GSM/Wi-Fi//Ethernet. 4) once the lighting schedule is set, it shall operate the luminaries according to that schedule till the lighting schedule is changed by the CSLMS. 5) it shall operate the luminaries according to the lighting schedule even if there is a communication fault between CSLMS itself. 6) in the absence of any lighting schedule it shall operate (On/OFF) the luminaries according to time of the day. 7) It shall communicate the real time status (on/Off / fault) of the luminaries to CSLMS. 8) if it is not able to communicate with CSLMS, it shall store all the luminary's data internally and relay that data to CSLMS once the communication is established. 9) it shall be able to store luminary's log /data for up to 7 days. 10) it shall have IP55 protection. 11) MSEDCL meter space in feeder panel controller. 12) Uniform rating for all the panels. 13) the vendor needs to use the appropriate communication mechanism from GSM/Wi-Fi/Ethernet for establishing connectivity between feeder panel controller & CSLSM. 14) Group control via feeder panel, but individual street light fixture data should be available via CSLMS.				
		Total of Non SSR items Total of SSR & Non SSR items				1291623.00 6934387.36

D. Goda Park

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
59	8.3.24	Providing & erecting 7 m high galvanised CONICAL pole with foundation bolts having bottom dia. 145 to 175 mm, top di a. 65 to 75 mm on provided foundation as per specification No. OH-PL/CPL	NOS	10.00	17678.00	176780.00
60	2.9.15	Suppl yi ng and erecting LED Flood light fitting of 90-100W,including lamp, with PF > 0.95, class IP 65 and above Housing of pressure die cast alluminium all oy and heat sink extruded alluminium complete per specification No FG-ODF/FLS-2	NOS	20.00	9504.00	190080.00
61	16.3.7	Providing & casting of M- 20 grade reinforced cement concrete (RCC) foundation suitable for 3m to 5m high octagonal / conical G.I. poleconsideri ng the safe soil bearing capacit y at site as 10 T/sq m at 1.5 m depth including supply of steel, concrete, excavation and fixing provided nut bolts with the help of template as per design in an approved manner.	NOS	32.00	2727.00	87264.00
62	16.3.8	Providing & casting of M- 20 grade reinforced cement concrete (RCC) foundationsuitable e for 6m to 8m high octagonal /conical G.I. poleconsidering the safe soil bearing capacity at site as 10 T/sq m at 1.5 m depth including supply of steel, concrete, excavation and fixing provided nut bolts with the help of template as per design in an approved manner.	NOS	10.00	3269.00	32690.00
63	9.1.4	Providing pipe type earthing with 40mm. dia. G.l. pipe or 20 mm dia. G.l. Rod compl et e with all materials as per specification No. EA-EP	NOS	15.00	1249.00	18735.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
64	9.1.1	Providing earthing with Galvanized cast iron earth plate size 60 x 60 x 0.6 cm complete with all mat erials, testing & recording the results as per specification No. EA-EP	NOS	10.00	3931.00	39310.00
65	7.6.11	Suppl yi ng and laying (including excavation) 50 mm outside dia. double wall corrugated pipes (DWC)of HDPE for encl osing cable below ground/road surface, to required dept h complete.	MTR	1500.00	179.00	268500.00
66	7.6.13	Suppl yi ng and laying (including excavation)90 mm outside dia. double wall corrugated pipes (DWC) of HDPE for encl osing cable below ground/road surface, to required dept h complete.	MTR	100.00	301.00	30100.00
67	7.6.15	Suppl yi ng and laying (incl uding excavation) 146 mm outside dia. double wall corrugated pipes (DWC)of HDPE for encl osing cable below ground/road surface, to required dept h complete.	mtr	100.00	426.00	42600.00
68	16.1.2	Making the trench in Hard murum/Tar roadof suitable width and depth as per IS for laying provi ded L.T cable up to 10 sq.mm. complete. As per specification No. CW-EXN-CTR	MTR	50.00	170.00	8500.00
69	16.1.5	Excavating hard Rock or bituminous road (B.T.) by chiseling for preparing pit for poles	MTR	50.00	903.00	45150.00
70	1.3.6	Supplying & erecting mains with 2x2.5 sq.mm F.R.L.S copper PVC insulated wirelaid in provided conduit/trunking/inside pole/Bus bars or any other places. As per specification No: WG-MA/BW	NOS	50.00	57.00	2850.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
71	1.3.8	Supplying & erecting mains with2x4 sq.mm F.R copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	NOS	15.00	73.00	1095.00
72	1.3.11	Supplying & erecting mains with 2x10 sq.mm F.R copper PVC insulated wirelaid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG-MA/BW	NOS	15.00	170.00	2550.00
73	1.6.15	Supplying & erecting mains with 3x10 sq.mm.and earth wire 6 sq.mm FR PVC copper wire, in rigid PVC conduit min. 25mm dia.as per specification No: WG-MA/PC, para no. 1.4.1	NOS	10.00	354.00	3540.00
74	1.6.22	Supplying & erecting mains with 4x10 sq.mm.and earth wire 6 sq.mm FRLS PVC copper wire, in rigid PVC conduit 32mm dia,as per specification No: WG-MA/PC, para no. 1.4.1	NOS	10.00	462.00	4620.00
75	1.7.1	Supplying and erecting shockproof 6AISI mark porcelain base T.Switch / bell pusherected on Filled polypropylene ISI marked (IS:14772-2000) board or polished double Wooden block / 3 mm thick hylam sheet / 4mm thick plywood pasted with 1.5 mm thick Laminate with S M screws and duly connected	NOS	30.00	29.00	870.00

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
76	1.7.7	Supplying and erecting ISI mark Ceiling rose / Batten holder/ Slanting holder /hanging cord switch / hanging bell push /pendent holder bakelite base 6A.erected on Filledpolypropylene ISI marked (IS:14772-2000) board or polished double wooden block/ ISI mark PVC junction box	NOS	21.00	32.00	672.00
77	1.7.13	Supplying and erecting flush type shockproof plug socket 6A.& 16A (6 pin) with 16A switch combined with indicator lamp and fuse with gang box on wooden board.	NOS	9.00	167.00	1503.00
78	1.9.2	Point wiring in for light/fan/bell in 20 mm metal conduit with 1.5 sq.mm (2+1E) FRLS grade copper wire,flush type switch, earthing and required accessories as per specification No: WG-PW/SW	NOS	30.00	684.00	20520.00
79	1.9.4	Point wiring for independent plug in 20 mm metal conduit with 1.5 sq.mm (2+1E) FRLS grade copper wire,flush type switch, earthing and required accessories as per specification o: WG-PW/SW	NOS	20.00	753.00	15060.00
80	2.1.30	Supplying & erecting ready to use Retrofit T8 LED 18 / 20 tube light with polycarbonate body, heat sink, integrated HF electronic driver complete & compatible to T8 / T12 LED luminaire by disconnecting starter & ballast if necessary.	NOS	4.00	594.00	2376.00
81	5.3.2	Supplying, erecting & marking SPMCB 6A to 32A, C-series (for motor/power) in provided distribution board as per specification No. SW-SWR/MCB	NOS	60.00	153.00	9180.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
82	5.3.5	Supplying, erecting & marking SPMCB 40A to 63A, B-series (for lighting) in provided distribution board as per specification No. SW-SWR/MCB	NOS	10.00	304.00	3040.00
83	5.3.19	Supplying, erecting & marking TPN MCB 40A to 63A, Cseries in provided distribution board as per specification No. SW-SWR/MCB	NOS	10.00	304.00	3040.00
84	5.3.26	Supplying erecting and marking Four pole isolatorsonly switch version of miniature circuit breakers of 80/100A in provided distribution board.	NOS	4.00	776.00	3104.00
85	5.4.6	Supplying & erecting triple pole and neutral distribution board (TPNDB)surface/ flush mounted SP / TP MCB of total 36 ways on iron / G.I. frame/wooden board (Vertical Busbar type) as per specification No. SW-SWR/MCBDB	NOS	2.00	6230.00	12460.00
86	5.6.5	Providing, erecting & commissioning RCCB only of electro magnetic type with 30/100/300 mA sensitivity and having capacity of 40A. 4 pole complete as per specification No. SW-RCCB/RCCB	NOS	5.00	2373.00	11865.00
87	1.3.28	Suppl yi ng PVC insulated PVC round sheat hed 1 sq.mm (32 no. x 0. 20mm dia.) 3 core fl exible multi stranded copper Industrial cable for voltage grade up to 1.1 kV	MTR	1500.00	39.00	58500.00
88	7.1.13	Suppl yi ng, erecting & terminati ng PVC armoured cable 4 core 4 sq mmaluminium conductor with conti nuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR	2000.00	114.00	228000.00

211 | Page

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
89	7.1.14	Suppl yi ng, erecting & terminating PVC armoured cable4 core 6 sq mmaluminium conductor with conti nuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR	500.00	128.00	64000.00
90	7.1.15	Supplying, erecting & terminating PVC armoured cable 4 core 10 sq mmaluminium conductor with continuous 5.48 sq mm (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/pipe as per specification no. CB-LT/AL	MTR	700.00	153.00	107100.00
91	7.1.17	Suppl yi ng, erecting & terminating PVC armouredcable 3½ core 25 sq mm aluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/ pipe as per specification no. CB-LT/AL	MTR	500.00	206.00	103000.00
92	7.1.18	Suppl yi ng, erecting & t ermi nating PVC armoured cable 3½ core 35 sq mmaluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR	100.00	249.00	24900.00
93	7.1.27	Suppl yi ng, erecting & terminating PVC armouredcable 3½ core 120 sq mm aluminium conductor with continuous 12.97 sq mm (8 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR	100.00	640.00	64000.00

212 | P a g e

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
94	7.10.7	Suppl yi ng & erecting cri mping type aluminium lugs for cabl e 120 sq mmcompl et e as per specification No. CB-CL/AL	no	12.00	32.00	384.00
95	7.3.2	Suppl yi ng, erecti ng & terminating 3 x 95 sq mm 11 kV, XLPE(E) armoured cable on wall/ceiling or laid in provided trench / pipe in an approved manner as per specification No.CB-HT	MTR	250.00	1144.00	286000.00
96	7.5.35	Providing and erecting Heat shrinkable Straight through joint kit for 11 kV (E) XLPE HT cable 3x70 to 95 sq.mm.with necessary mat erial as per specification No.CBJT/HT	sets	2.00	19070.00	38140.00
97	7.10.1	Supplying & erecting crimping type aluminium lugs for cable upto 16 sq mmcomplete as per specification No. CB-CL/AL	NOS	550.00	7.00	3850.00
98	7.10.2	Suppl yi ng & erecting cri mping type aluminium lugs for cabl e 25 sq mm complete as per specification No. CB-CL/AL	NOS	50.00	8.00	400.00
99	7.10.3	Suppl yi ng & erecting cri mping type aluminium lugs for cabl e 35 sq mm complete as per specification No. CB-CL/AL	NOS	20.00	14.00	280.00
100	7.10.6	Suppl yi ng & erecting cri mping type aluminium lugs for cabl e 95 sq mm complete as per specification No.CB-CL/AL	NOS	24.00	22.00	528.00
		P A System (FF-PAS)				
101	13.11.1	Supplying, erecting, testing and commissioning amplifier 120 W for Public address system suitable to operate on 230 Volts A.C. / 12 Volts D.C. supply as per specification No. FF-PA/AFR	NOS	1.00	16298.00	16298.00

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
102	13.11.4	Suppl yi ng & erecting, stand for microphone.(Similar to AHUJA make model DGN)	nos	2.00	1674.00	3348.00
103	13.11.6	Suppl yi ng erecting, testing to 2 core shielded Microphone cable as per speci fication No. FF-PA/MCC	mtr	20.00	128.00	2560.00
104	13.11.2	Supplying, erecting, testing and commissioning sound column 15 Watts complete as per specification No. FFPA/SOC	NOS	8.00	2475.00	19800.00
105	13.11.3	Suppl yi ng, erecting, testing and commissi oningmicrophone as per specification No. FF-PA/MIC	NOS	2.00	4725.00	9450.00
106	11.1.7	Suppl yi ng, Erecti ng and Commissioni ng of Diesel generating set with alternator of 30 kVA output continuous rating, 3 Phase, 415 V, 50c/s 0.8 p. f. A.C a totall y encl osed air cooled /liquid cooled multi-cyli nder di esel engi ne developi ng suitabl e BHP at 1500 rpm with 10% overload for 1 hour in 12 hours, alongwith standard accessories, self-excited, self-regulat ed, screen protected alternator with static excitation system running at 1500 RPM as per IS 4722-2001 with voltage regulation +/- 5 %. Both the engine and alternator direct coupled on a common fabricated steel base frame and mounted on anti-vibrating pads with standard control panel comprising meters, switchgears, indicators connected with suitabl e wires/cables, the complete set enclosed i n composite Acousti c encl osure as fully assembled integral unit made of 16 SWG CRCA Sheet, sound absorbing mat erial to restrict sound level upto 75 dB at 1.0 m, provided with first filling of oil, di esel etc. as per specification no. GEN-DG	Nos.	1.00	380188.00	380188.00
107	5.1.26	Suppl yi ng & erectingFour pole Iron clad/metal clad ON LOAD change over switch 63A, 415/500V erected on angle iron / G.I. frame approved make.	nos	1.00	3902.00	3902.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
108	11.2.5	Suppl yi ng, erecting, t esting and commissioning of Microprocessor based AMF panel suitable for Diesel Generati ng Set of above 25 kVA upto 35 kVAcapacit y Single/Three phase, 230/415 Volts, 50Hz A. C. with all standard features, safeties et c as per specification no. GEN-AMF.	nos	1.00	62200.00	62200.00
109	10.1.2	Supplying and Erecting approved make 100 kVA,3 phase, 50 c/s Oil immersed and naturally cooled outdoor type,Copper wound transformer with Energy Efficiency Level -2, BIS Standard with delta connected. on HV side & star connection on LV side with additional neutral brought out on load side,Temp rise should not Exceeding 400 C by thermometer in oil and 450 0 C by the resistance in winding at full load rating, voltage rating 11/ 0.433 kVwith HV tapping(with off load tap changer) Tappings on Transformer For Off Load +5 to -10 in Steps of 2.5% ,with standard accessori es complete with Test Certificate withlosses below 475 watts at 50% load, 1650 watts at 100% load as per IS:1180 - 2014 Level II as per specification No SS- TR.with necessar y permission of Electrical Inspector 0	nos	1.00	319155.00	319155.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
110	8.4.19	Suppl yi ng & erecting inline D. P. Structure for 11/0.415 kV, 100 kVA Transformer with R.S.J. Pole 2 Nos. of size 100 x 116 mm x 11 Mtr. Long with suitable Distribution Box of C.R.C.A. Sheet 16 SWG (size 4 SqMtr.) wit h 4 Pole MCCB 200 Amps as incomer & 6 Nos. 100 Amps Kitkat for outing circuits. Transformer D.P. Structure i ncludes the A. B. Switch 200 Amps, D.O. fuse Set & L.A. Set. 2 Nos.Top channel of size 100 mmx 50 mm for erection of A.B. Switch & 2 Nos. Base channel of size 100 mm x 50 x mm for erecting Transformer. Channel of size 75 x40 mm for erecting D.O. Fuse Set, L.A., A.B. Swit ch handle etc. Angle of size 50 x 50 x6 mm for erecting Distribution Box, Transformer Belt etc.as per drawing (min. 124 Kg. iron work) with neccessary clamps, Nut-bolts. Vee cross arm, top clip, insulat ors etc. compl et e with caution board & barbed wire.D.P. Structure shall be erected in c.c. foundation complete.	sets	1.00	116833.00	116833.00
111	16.3.3	Providing cement concrete foundation including excavation for the poles 60 cm x 60 cm x deep 1/6 of pol e length in 1:3:6n cement concrete (20 x 25 mm stone metal) and 45 cm x 45 cmx 45 cm /45 cm dia. x 45 cm. height plinth duly plastered and with necessary curing and finishing in an approved manner.(for above 9 m poles) E	nos	2.00	1957.00	3914.00
112	5.2.14	Suppl yi ng and erecting mini feeder pillar triple pole with 200A FPMCCB as incomer and 2 outgoing circuits with HRC Fuse base and Cartridge of 100Aconsists of aluminium bus bar 500 V 200 A. complete erected in 14 gauge CRCA sheet box with supporting angles, self locks, gasket and slanting top to be erect ed on provided foundation as er specification No. SW-SWR/MFP	NOS	1.00	33728.00	33728.00

Nashik Municipal Smart City Development Corporation Limited

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
113	6.3.15	Suppl yi ng and erecting Intelligent flush mounted Maximum Demand Controller panel meter three phase four wi re 50-550 V Phase to phase Aux Supply 90300VAC/DC CT secondary site selectable 1A/5A, CT /PT site programmable, class 1 Flush mounted 96 x 96 mm meter, Datalog 8MB, 4 realy output Ti me of Day (TOD) 6 slots available, bl ock / sliding window site selectable with V, A, F,kW, kVA, kVAr, kWh, kVAh,kVArh, PF, run hr, Onhr, Intr,Phase angle, THD, events, neutral current, Max Demand (wit h RTC) viewing in LCD multi function meter with LCD display complete class -1 accuracy with RS 485 communication protocol with wriri ng connections and mounting hardware on provi ded panels complete with hcalibration certificate from manufacturer.	NOS	1.00	19795.00	19795.00
	5-4-1	Supplying and erecting triple pole and neutral distribution board (TPNDB) surface/ flush mounted suitable for SPMCB of 12 ways on iron / GI frame (horizontal busbar type) as per specification no. SW-SWR/MCBDB	Each	2	1,663.00	3326.00
	8-7-2	Supplying and erecting G.I. stay set for poles, including loop insulators at inaccessible height complete with anchor plate 300 x 300 x 6 mm., straining screws, G.I. stay wire 7/8 SWG, G.I. stay rod 20 mm x 1.8 m length and pole clamps duly erected in provided cement concrete foundation.	Each	2	1,511.00	3022.00
	16-3-3	Making cement concrete foundation including excavation (60 x 60 x 150) cm deep in 1:3:6 cement concrete 20 x 25 mm stone metal, (45 x 45 x 45) cm /45 cm dia. x 45 cm height plinth duly plastered, with necessary curing and finishing complete.	Each	2	1,825.00	3650.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
	7-5-5	Providing and erecting Heat shrinkable out door termination kit for 11 kV (E) XLPE HT cable 3 x up to 95 sq. mm. with necessary material as per specification No. CB-JT/HT	Each	2	12,805.00	25610.00
	16-5-9	Supplying and erecting ISI mark GI pipe 100 mm dia. 'B' class at position with accessories complete. Specification no. CW-PLB/GP.	mtr	6	1,440.00	8640.00
	9-2-5	Supplying and erecting GI earth wire of high purity of different sizes used for earthing or any other purposes on wall with necessary G. I. Clamps fixed on wall/cable/ conduit with screws in an approved manner.	kg	50	136.00	6800.00
	9-2-3	Supplying and erecting GI strip of required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joints required. As per specification no EA-EP. (25*3mm strip size)	kg	20	191.00	3820.00
	9-1-3	Providing earthing with galvanized iron earth plate size 60 x 60 x 0.6 cm with funnel with a wire mesh for watering and brick masonry block C.l. cover complete with all materials, testing & recording the results as per specification no. EA-EP	Each	4	5,110.00	20440.00
	10-2-18	Supplying and erecting fencing of section having size 2450 mm in height from ground level and 1200 mm width with angle iron frame work erected in CC foundation and painted complete as per specification no SS-AS/FSG	Each	1	5,357.00	5357.00

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
	10-2-19	Supplying and erecting 50 x 50 x 6 mm angle iron as corner support 2m long fixed at the middle of the fencing frame and the other side inclined at 30 degree angle, in cement concrete foundation of 15 x 15 x 40 cm complete duly painted with one coat of red oxide and two coats aluminum paint complete.	Each	4	1,067.00	4268.00
	10-2-20	Supplying and erecting double leaf hinged door each 1500 mm in width x 1850 mm in height using B class, GI pipe with angle iron supports, chain link wire mesh (jali) complete supported on channel iron, erected in foundation, and painted complete as per specification no SS-AS/DLD	Each	1	15,360.00	15360.00
		Total of SSR items				31,08,600.00
		Non CSR Items				
114	Fair Items	SITC of 1X3W IP68 LED Step Light, Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 1.5W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree, Color: Warm White (3000K), IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years MAKE KLITE CAT REF 6762	NOS	130.00	7390.00	960700.00
115	Fair Items	SITC of 12W/m IP65 & IP20 3000 CCT LED Linear Light, Completely enclosed in transparent optical grade PVC material, UV resistant grade : Class 4, Fire retardant grade : V-0, Profile Size : Length 1000MM, Pixel Size (mm) : Dia 40, Wattage : 10W per meter, Input Voltage : DC12V (External Driver), Color : RGB, Light Angle : 120-180°, Electrical Grade : Class III, Protection Grade : IP68, Flame	MTR	429.00	900.00	386100.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		Retardant Grade V-0, Warranty : 5 years KLITE CAT REF 3082				
116	Fair Items	SITC of 12W/m IP65 & IP20 RGB LED Linear Light, Completely enclosed in transparent optical grade PVC material, UV resistant grade: Class 4, Fire retardant grade: V-0, Profile Size: Length 1000MM, Pixel Size (mm): Dia 40, Wattage: 10W per meter, Input Voltage: DC12V (External Driver), Color: RGB, Light Angle: 120-180°, Electrical Grade: Class III, Protection Grade: IP68, Flame Retardant Grade V-0, Warranty: 5 years KLITE CAT REF 7287	MTR	345.00	1150.00	396750.00
117	Fair Items	SITC of 9W IP68 LED Underwater Light, Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 9W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree, Color: RGB including DMX System, IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years Approoved Makes VINLED CAT REF VIN-UL-RGB9G	NOS	47.00	26063.00	1224961.00
118	Fair Items	DC24V 100W LED Driver	NOS	5.00	3796.00	18980.00
119	Fair Items	SITC of 8W (4X2W) IP 68 LED Underwater Light, Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 9W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree, Color Temperature: 3000K (Warm White), IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years KLITE CAT REF 4105	NOS	15.00	13990.00	209850.00

220 | P a g e

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
120	Fair Items	SITC of 12W (6X2W) IP68 LED Underwater Light, Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 12W, Input Voltage: DC24V (External Driver), Beam Angle: 15-25 Degree, Color: Warm White (3000K), IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years KLITE CAT REF 6700	NOS	43.00	16990.00	730570.00
121	Fair Items	SITC of 20 W under gabian IP 68 lights for lighting up the gabian from inside color temperature 2200 k CCT extruded al body with borosilicate glass lence make merrylight Warranty: 5 years approved makes merrylight /bajaja/vinled COUSTEMISED TO FIT UNDER THE GABION	NOS	123.00	8500.00	1045500.00
122	Fair Items	SITC of 18W (6X3W) IP68 LED Spot Light, Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 20W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree, Color: Warm White (3000K), IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years K LITE CAT REF 7060	NOS	47.00	17640.00	829080.00
123	Fair Items	SITC of 12W IP65 Linear Recessed LED Light, Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 16W, Input Voltage: DC24V (External Driver), Beam Angle: 15-25 Degree, Color: Warm White (3000K), IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years, Size (mm): L350	NOS	326.00	3770.00	1229020.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
124	Fair Items	SITC of 16W IP40 LED Surface Light, Injection for PC housing and PC cover offering IP65 protection against moisture and dust and an impact rating of Ik08, Aluminium based LED module for better heat dissipating, Easy installation by ceiling through two holes at the frame of the housing, LED based provides energy efficient solution and reduces maintenance costs, uniform light, IP65 ingress protection, Wattage: 12W, Input Voltage: AC 220-240V, Frequency Range: 50/60 Hz, Color Temperature: 3000K, LED Type: SMD LED, Ingress Protection: IP65, Beam Angle: 120°, Life Span: >50000 hours, Warranty: 5 years K LITE CAT REF 7325	NOS	17.00	1310.00	22270.00
125	Fair Items	SITC of 60W Single Arm IP67 Pole Light, modular technology, robust design and cooling technology, highly efficient heat dissipation, IP68 LED Optical Engine, Highest Waterproof rating, MS Body with Anti-corrosion treatment and UV-proof powder coating, Wattage: 60W, Input Voltage: AC 100-240V, LED Lumen: 120-140 lm/W, Color Temperature: 3000K, IP Rating: IP67, Beam Angle: 85x145 Degree, Life Span: 50000 hours, Power Factor: >0.95, Warranty: 5 years, Pole Height: 3 Meters CAT REF K LITE 4761	NOS	33.00	28430.00	938190.00
126	Fair Items	SITC of 60Wx2 Double Arm IP67 Pole Light, modular technology, robust design and cooling technology, highly efficient heat dissipation, IP68 LED Optical Engine, Highest Waterproof rating, MS Body with Anti-corrosion treatment and UV-proof powder coating, Wattage: 60Wx2, Input Voltage: AC 100-240V, LED Lumen: 120-140 lm/W, Color Temperature: 3000K, IP Rating: IP67, Beam Angle: 85x145 Degree, Life Span: 50000 hours, Power Factor: >0.95, Warranty: 5 years, Pole Height: 4 Meters KLITE CAT REF KP4765	NOS	1.00	51030.00	51030.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
127	Fair Items	SITC OF HIGH PROTECTION WATERPROOF MINI-CONNECTOR. 2-3-4 POLES., IP68, Housing made of PA66, with co-molded TPA seals making it totally waterproof. UL94 V0/V2 (f1) materials are suitable for underground installation and guarantee reliability over time.UV radiation resistance test according to EN60079-0. Light ageing method (ISO 4892-2). Duration 1000 hours. Electrical insulation test up to 3.75KV, Resistance to external agents (EN60529). In addition: ageing test in air with ozone concentration (ISO1431-1).Resistance in saline environment - Corrosion test (EN60068-2-11:2000). Resistance to impact (NEMKO - EN62262:2002)., Resistance to ame. Use of materials reinforced with berglass UL94 V0/V2 (f1). Glow-wire 850°C/960°C. Realized with materials compliant with the most rigorous Reach/RoHs regulations. Suitable for cable types max. 4G1.5 FG7OR max. 4G1.5 - 3G2.5 - 2G4 H07RN-F max. 4G2.5 FG7OR max. 4G4 H07RN-F, . Suitable for conductor sizes .5 to 4sqmm. Cable OD from 7 -12mm, Tested for 30mtrs. Similar to Techno THP.391.A4A	NOS	60.00	782.00	46920.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
128	Fair Items	SITC OF Radial closing gel pre-filled joint for extruded insulation cables up to 1 kV. Primary insulation, consisting of a cross-linked polymer gel, and the exceptionally robust insulating plastic casing render Class 2 joints in accordance with the definitions contained in standard CEI 64-8. The joint has been tested in accordance with the main international specifications, with repeated flexing and torsion tests and immersion in water, and has been declared as conforming to the mechanical, electrical and sealing specifications required for plastic cable accessories. The joint and its components have an unlimited shelf life, are chemically inert and therefore completely safe. Conductor connections are re-enterable even after long periods of operation. Packaged with self-extinguishing material, flame retardant, for cables at 90°C working temperature. The radial closing system facilitates joint application, making them re-enterable only by means of a tool. Electrical performance: CEI EN 50393 • CEI 20-33 (with testing under water head and water between the cable cores) Class 2 in accordance with CEI 64-8. No flame propagation: CEI 20-35 • IEC 60332-1 • HD405-1 (as applicable) Low smoke and toxic and corrosiand corrosive gas emissions. Gel: UL 94-HB, Casing mix: UL 94-V2, Degree of protection: IPX8, Installation temperature: -40°C / +50°C, Operating temperature: 90°, Similar to Raytech make Rapid Joint L 10-ARM supplied with supplied with armour continuity device,	NOS	90.00	3038.00	273420.00

Nashik Municipal Smart City Development Corporation Limited

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
129	Fair Items	SITC OFDahua/Axis/Pelco/ Bosch/ Mobotix make Dome camera 1/2.8" 2Megapixel progressive scan CMOS, H.265+/H.265/H.264+/H.264 Streaming Capability:-3 Streams Electronic Shutter Speed:- Auto/Manual, 1/3(4)~1/100000s Minimum Illumination:- 0.007Lux/F1.6 (Color,1/3s,30IRE) 0.06Lux/F1.6(Color,1/30s,30IRE) 0Lux/F1.6(IR on) 50/60fps@1080P(1920×1080), Smart Detection supported, BLC / HLC / WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC, 2.8mm fixed lens (3.6mm, 6mm optional), Intelligent function:-intelligent video systems & Tripwire, Intrusion,Abandoned/Missing, Face detection Micro SD memory:- 128GB, IP67, IK10, PoE, IR LEDs Length 30m, 1/1 Alarm in/out, 1/1 audio in/out, Ram:256MB/32MB Protocols: HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMP, Certificate:- UL CE FCC IP67,IK10 Pole mount	NOS	8.00	15400.00	123200.00
130	Fair Items	SITC OF Dahua/Axis/Pelco/ Bosch /Mobotix make 64channel NVR Main Processor :- Quad-core embedded processor Compression:- Smart H.265+/H.265/Smart H.264+/H.264/MJPEG	NOS	1.00	94650.00	94650.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		Resolution:- 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P,				
		1.3MP, 720P, D1 etc.				
		720P, D1 etc. Internal HDD:- 8 SATA III Ports, Up to 10 TB capacity for				
		each HDD				
		eSATA:- 1 eSATA				
		USB:- 4 USB Ports (2 Rear USB 3.0, 2 Front USB 2.0)				
		Alarm input:- 16 Channel Relay Output:- 6 Channel				
		Bit Rate:- 16Kbps ~ 20Mbps Per Channel				
		RS232, RS485 support				
		Sync Playback:- 16 playback				
121	T : I	Certificate:- UL,FCC,CE				
131	Fair Items	SITC OF SAMSUNG/LG/SONY 41 -42" TV for view camera 42" Dual core Smart Full HD LED TV ,3 HDMI				
		Ports, Max resolution: 1920 x 1080, Operating Power	NOS	1.00	66000.00	66000.00
		consumption 58W				
132	Fair Items	supply and laying 16 Core Single Mode Fiber Make Molex	MTR	450.00	400.00	180000.00
133	Fair Items	SC Pigtail & splicing Of SC Pigtail	NOS	8.00	2200.00	17600.00
134	Fair Items	SITC OF SC-LC Duplex Fiber Patch Cord 3 Meter	NOS	15.00	4480.00	67200.00
135	Fair Items	SITC Of Cat 6 Patch Cord 3 Meters	NOS	10.00	860.00	8600.00
136	Fair Items	SITC Of Rack Side 24 Port LIU	NOS	1.00	10500.00	10500.00
137	Fair Items	6 Pak Adapter Plate	NOS	8.00	4480.00	35840.00
138	Fair Items	Blank Plate	NOS	8.00	580.00	4640.00
139	Fair Items	24U rack	NOS	1.00	79800.00	79800.00
140	Fair Items	Power Source 2 socket for switch	NOS	2.00	1790.00	3580.00
141	Fair Items	Splicing of OFC	NOS	16.00	1450.00	23200.00

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
142	Fair Items	Smart Street Light Control Panel (SLCP) Supply, installation, testing and commissioning of SLCP Shall be conforming following IS standards – IS: 2147 – 1962 Degree of protection Floor / wall/ structure mounted, free standing, suitable for cable entry from bottom side, dust proof, vermin proof, 3 phase and neutral, bus bar, aluminium, neutral bus shall be of same size as phase bus bars, Short circuit capacity for the bus bars and switches shall be 10 kA. The smart light control pannel shall contain the following features 1) The feeder panel functionalities shall consist of class 1 energy, meter, feeder panel control unit & wireless communication unit 2) The feeder panel controller shall be capable of switching on/off all the luminaries of a particular switching point based on the lighting schedule set by the central management server (CSLMS) 3) It shall communicate to the CSLMS through the wireless communication unit over GSM/Wi-Fi//Ethernet. 4) once the lighting schedule is set, it shall operate the luminaries according to that schedule till the lighting schedule is changed by the CSLMS. 5) it shall operate the luminaries according to the lighting schedule even if there is a communication fault between CSLMS 6) in the absence of any lighting schedule it shall operate (On/OFF) the luminaries according to time of the day. 7) It shall communicate the real time status (on/Off / fault) of the luminaries to CSLMS. 8) if it is not able to communicate with CSLMS, it shall store all the luminary's data internally and relay that data to CSLMS once the communication is established.	NOS	4.00	46667.00	186668.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		9) it shall be able to store luminary's log /data for up to 7 days. 10) it shall have IP55 protection. 11) MSEDCL meter space in feeder panel controller. 12) Uniform rating for all the panels. 13) the vendor needs to use the appropriate communication mechanism from GSM/Wi-Fi/Ethernet for establishing connectivity between feeder panel controller & CSLSM. 14) Group control via feeder panel, but individual street light fixture data should be available via CSLMS.				
143		8) if it is not able to communicate with CSLMS, it shall store all the luminary's data internally and relay that data to CSLMS once the communication is established. 9) it shall be able to store luminary's log /data for up to 7 days. 10) it shall have IP55 protection. 11) MSEDCL meter space in feeder panel controller. 12) Uniform rating for all the panels. 13) the vendor needs to use the appropriate communication mechanism from GSM/Wi-Fi/Ethernet for establishing connectivity between feeder panel controller & CSLSM. 14) Group control via feeder panel, but individual street light fixture data should be available via CSLMS.				

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
	MR	Kwh meter Testing and Sanctioning, Laisoning work with MSEDCL and Electrical Inspector office	Each	1	50,000.00	50000.00
		Total of Non CSR items				9314819.00
		Total of CSR & Non CSR items				12423419.00

Goda Walk

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
144	16.3.8	Providing & casting of M- 20 grade reinforced cement concrete (RCC) foundation suitable for 3m to 5m high octagonal / conical G.I. poleconsideri ng the safe soil bearing capacit y at site as 10 T/sq m at 1.5 m depth including supply of steel, concrete, excavation and fixing provided nut bolts with the help of template as per design in an aproved manner.	Nos	18.00	2727.00	49086.00
145	5.3.2	Suppl yi ng, erecting & marking SPMCB 6A to 32A, C-series (for motor/power) in provided distribution board as per specification No. SW-SWR/MCB	Nos	40.00	153.00	6120.00
146	5.3.19	Supplying, erecting & marking TPN MCB 40A to 63A, Cseries in provided distribution board as per specification No. SW-SWR/MCB	Nos	2.00	1140.00	2280.00
147	5.6.5	Providing, erecting & commissioning RCCB only of electro magnetic type with 30/100/300 mA sensitivity and having capacity of 40A. 4 pole complete as per specification No. SW-RCCB/RCCB	Nos	2.00	2373.00	4746.00
148	5.4.6	Supplying & erecting triple pole and neutral distribution board (TPNDB)surface/ flush mounted SP / TP MCB of total 36 ways on iron / G.I. frame/wooden board (Vertical Busbar type) as per specification No. SW-SWR/MCBDB	Nos	1.00	6230.00	6230.00
149	1.3.26	Supplying PVC insulated PVC round sheat hed 1 sq.mm (32 no. x 0. 20mm dia.) 3 core fl exible multi stranded copper Industrial cable for voltage grade up to 1.1 kV	mtr	1000.00	39.00	39000.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
150	7.1.26	Supplying, erecting & terminating PVC armoured cable 4 core 4 sq mm aluminium conductor with continuous 5.48 sq mm (12 SWG) G. I. earth wire complete erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/ pipe as per specification no. CB-LT/AL	mtr	700.00	114.00	79800.00
151	7.1.28	Supplying, erecting & terminating PVC armoured cable 4 core 10 sq mm aluminium conductor with continuous 5.48 sq mm (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/pipe as per specification no. CB-LT/AL	Mtr.	300.00	153.00	45900.00
152	7.1.15	Supplying, erecting & terminating PVC armouredcable 3½ core 25 sq mm aluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/ pipe as per specification no. CB-LT/AL	Mtr.	150.00	206.00	30900.00
153	7.6.9	Supplying and laying (including excavation) 50 mm outside dia. double wall corrugated pipes (DWC)of HDPE for enclosing cable below ground/road surface, to required depth complete.	MTR	700.00	179.00	125300.00
154	7.6.11	Supplying and laying (including excavation)90 mm outside dia. double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground/road surface, to required depth complete	MTR	350.00	301.00	105350.00
155	7.10.1	Supplying & erecting crimping type aluminium lugs for cable upto 16 sq mmcomplete as per specification No. CB-CL/AL	Nos.	400.00	7.00	2800.00

Nashik Municipal Smart City Development Corporation Limited

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
156	7.10.2	Suppl yi ng & erecting cri mping type aluminium lugs for cabl e 25 sq mm complete as per specification No. CB-CL/AL	Nos.	20.00	8.00	160.00
157	9.1.4	Providing pipe type earthing with 40mm. dia. G.l. pipe or 20 mm dia. G.l. Rod compl et e with all materials as perspecification No. EA-EP	Nos.	6.00	1249.00	7494.00
158	16.1.2	Making the trench in Hard murum/Tar roadof suitable width and depth as per IS for laying provided L.T cable up to 10 sq.mm.complete. As per specification No. CW-EXN-CTR	MTR	300.00	170.00	51000.00
159	16.1.5	Excavating hard Rock or bituminous road (B.T.) by chiseling for preparing pit for poles stay or earth plates or for laying cables, pipes& clearing the site by removing debris & making the site good.	MTR cube	100.00	903.00	90300.00
	9-1-4	Providing pipe type earthing with 40mm. dia. G.l. pipe or 20 mm dia. G.l. Rod complete with all materials as per specification no. EAEP	Each	14	1,249	17486
	5-4-2	Supplying and erecting triple pole and neutral distribution board (TPNDB) surface/ flush mounted suitable for SPMCB of 24 ways on iron / GI frame (horizontal busbar type) as per specification no. SW-SWR/MCBDB	Each	3	2,372	7116
		Total of SSR Items				671,068.00
	Non CSR Items					

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
160	Fair Items	SITC of 60W Single Arm IP67 Pole Light, modular technology, robust design and cooling technology, highly efficient heat dissipation, IP68 LED Optical Engine, Highest Waterproof rating, MS Body with Anti-corrosion treatment and UV-proof powder coating, Wattage: 60W, Input Voltage: AC 100-240V, LED Lumen: 120-140 lm/W, Color Temperature: 3000K, IP Rating: IP67, Beam Angle: 85x145 Degree, Life Span: 50000 hours, Power Factor: >0.95, Warranty: 5 years, Pole Height: 3 Meters CAT REF K LITE 4761	Nos.	18.00	28430.00	511740.00
161	Fair Items	SITC of 8W (4X2W) IP 68 LED Underwater Light, Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 9W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree, Color Temperature: 3000K (Warm White), IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years KLITE CAT REF 4105	Nos.	50.00	13990.00	699500.00
163	Fair Items	under gabian 20 W IP 68 lights for lighting up the gabian from inside color temperature 2200 k CCT extruded al body with borosilicate glass lence make merrylight Warranty: 5 years approoved makes merrylight /bajaja/ vinled COUSTEMISED TO FIT UNDER GABION	NOS	57.00	8500.00	484500.00

233 | P a g e

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
164	Fair Items	SITC of 12W (6X2W) IP68 LED Underwater Light, Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 12W, Input Voltage: DC24V (External Driver), Beam Angle: 15-25 Degree, Color: Warm White (3000K), IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years KLITE CAT REF 6700	Nos	76.00	3770.00	286520.00
165	Fair Items	Supply of 48W RGB LED Linear Wall Washer, fashionable and beautiful appearance, Adopt isolated housing design could have the separate heat dissipation fully ensure the stability and long lifespan of LED Light, Secondary optical lens for proper light throw, Light body adopts high pressure die-casting aluminum, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, adopt high wattage LED light source, high flus output, excellent consistency of light color, Wattage: 48W, Ingress Protection: IP65, Beam Angle: 45-60 Degree, Input Voltage: DC24 (External Driver), Color: RGB, Controller: DMX System, Life Span: 50000 hours, Size (mm): Length 1000mm, Warranty: 5 years VINLED CAT REF VIN-LG-48RGB	Nos	56.00	24496.00	1371776.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
166	Fair Items	DMX CONTROL SYSTEM The DMX controller has following features.S.I.T.C. and programming of DMX Master Controller, with specifications. Graphical color display to show selected environment Color/dimmer/speed palette Color temperature mixing Touch sensitive buttons. No mechanical parts Multi-zone microSD memory Multi-room control with 500 scenes, 10 zones 1024 DMX channels. Control 340 RGB fixtures USB & Ethernet connectivity for programming and control Network communication. Control lighting remotely Windows/Mac software to set dynamic colors/effects iPhone/iPad/Android remote and programming apps The DMX has a provision of controlling and programming through a USB cable via a computer as well as remotely through internet. IT SYSTEM SHOULD INCLUDE THE SIGNAL ENHANCERS/ BOOSTERS & REPEATERS ETC WHEREVER REQUAIRED IN ORDER TO TAKE CARE OF SMOOTH & PROPER FUNCTIONING OF THE ENTAIR SYSTEMS SUGESTED MAKES PHAROS , NICOLAIDUE , LUTRON .	set	1.00	172695.00	172695.00
167	Fair Items	DMX Decoder	no	10.00	14697.00	146970.00
168	Fair Items	RGB Data Repeaters	no	30.00	9798.00	293940.00
169	Fair Items	DC24V 100W LED Driver	no	15.00	3796.00	56940.00

Nashik Municipal Smart City Development Corporation Limited

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
170	Fair Items	HIGH PROTECTION WATERPROOF MINI-CONNECTOR. 2-3-4 POLES., IP68, Housing made of PA66, with co-molded TPA seals making it totally waterproof. UL94 V0/V2 (f1) materials are suitable for underground installation and guarantee reliability over time.UV radiation resistance test according to EN60079-0. Light ageing method (ISO 4892-2). Duration 1000 hours. Electrical insulation test up to 3.75KV, Resistance to external agents (EN60529). In addition: ageing test in air with ozone concentration (ISO1431-1).Resistance in saline environment - Corrosion test (EN60068-2-11:2000). Resistance to impact (NEMKO - EN62262:2002)., Resistance to ame. Use of materials reinforced with berglass UL94 V0/V2 (f1). Glow-wire 850°C/960°C. Realized with materials compliant with the most rigorous Reach/RoHs regulations. Suitable for cable types max. 4G1.5 FG7OR max. 4G1.5 - 3G2.5 - 2G4 H07RN-F max. 4G2.5 FG7OR max. 4G4 H07RN-F, . Suitable for conductor sizes .5 to 4sqmm. Cable OD from 7 -12mm, Tested for 30mtrs. Similar to Techno THP.391.A4A	nos	56.00	782.00	43792.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
171	Fair Items	Radial closing gel pre-filled joint for extruded insulation cables up to 1 kV. Primary insulation, consisting of a cross-linked polymer gel, and the exceptionally robust insulating plastic casing render Class 2 joints in accordance with the definitions contained in standard CEI 64-8. The joint has been tested in accordance with the main international specifications, with repeated flexing and torsion tests and immersion in water, and has been declared as conforming to the mechanical, electrical and sealing specifications required for plastic cable accessories. The joint and its components have an unlimited shelf life, are chemically inert and therefore completely safe. Conductor connections are re-enterable even after long periods of operation. Packaged with self-extinguishing material, flame retardant, for cables at 90°C working temperature. The radial closing system facilitates joint application, making them reenterable only by means of a tool. Electrical performance: CEI EN 50393 • CEI 20-33 (with testing under water head and water between the cable cores) Class 2 in accordance with CEI 64-8. No flame propagation: CEI 20-35 • IEC 60332-1 • HD405-1 (as applicable) Low smoke and toxic and corrosiand corrosive gas emissions. Gel: UL 94-HB, Casing mix: UL 94-V2, Degree of protection: IPX8, Installation temperature: -40°C / +50°C, Operating temperature: 90°, Similar to Raytech make Rapid Joint L 10-ARM supplied with supplied with armour continuity device,	nos	56.00	3038.00	170128.00
172	Fair Items	Smart Street Light Control Panel (SLCP) Supply, installation, testing and commissioning of SLCP Shall be conforming following IS standards – IS: 2147 – 1962 Degree of protection Floor / wall/ structure mounted, free standing, suitable for cable entry from bottom side, dust	Nos.	2.00	46667.00	93334.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		proof, vermin proof, 3 phase and neutral, bus bar,				
		aluminium, neutral bus shall be of same size as phase bus				
		bars, Short circuit capacity for the bus bars and switches				
		shall be 10 kAThe smart light control pannel shall contain the following features				
		the following features 1) The feeder panel functionalities shall consist of class 1				
		energy, meter, feeder panel control unit & wireless				
		communication unit				
		2) The feeder panel controller shall be capable of switching				
		on/off all the luminaries of a particular switching point based				
		on the lighting schedule set by the central management				
		server (CSLMS)				
		3)It shall communicate to the CSLMS through the wireless				
		communication unit over GSM/Wi-Fi//Ethernet.				
		4) once the lighting schedule is set, it shall operate the				
		luminaries according to that schedule till the lighting schedule is changed by the CSLMS.				
		5) it shall operate the luminaries according to the lighting				
		schedule even if there is a communication fault between				
		CSLMS itself.				
		6) in the absence of any lighting schedule it shall operate				
		(On/OFF) the luminaries according to time of the day.				
		7) It shall communicate the real time status (on/Off / fault)				
		of the luminaries to CSLMS.				
		8) if it is not able to communicate with CSLMS, it shall store				
		all the luminary's data internally and relay that data to				
		CSLMS once the communication is established. 9) it shall be able to store luminary's log /data for up to 7				
		days.				
		10) it shall have IP55 protection.				
		11) MSEDCL meter space in feeder panel controller.				
		12) Uniform rating for all the panels.				

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		13) the vendor needs to use the appropriate communication mechanism from GSM/Wi-Fi/Ethernet for establishing connectivity between feeder panel controller & CSLSM. 14) Group control via feeder panel, but individual street light fixture data should be available via CSLMS.				
	MR	Kwh meter Testing and Sanctioning work with MSEDCL office	Each	1.00	20,000.00	20000.00
		Total of Non SSR Items				4351835.00
		Total of SSR & Non SSR items				5022903.00

E. Sundernarayan Temple & Historical Park

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
173	16.3.8	Providing & casting of M- 20 grade reinforced cement concrete (RCC) foundation suitable for 3m to 5m high octagonal / conical G.I. poleconsideri ng the safe soil bearing capacit y at site as 10 T/sq m at 1.5 m depth including supply of steel, concrete, excavation and fixing provided nut bolts with the help of template as per design in an approved manner.	Nos	21.00	2727.00	57267.00
174	5.3.2	Suppl yi ng, erecting & marking SPMCB 6A to 32A, C-series (for motor/power) in provided distribution board as per specification No. SW-SWR/MCB	Nos	10.00	153.00	1530.00
175	5.3.9	Supplying, erecting & marking SPMCB 40A to 63A, B-series (for lighting) in provided distribution board as per specification No. SW-SWR/MCB	Nos	2.00	588.00	1176.00
176	5.3.8	Supplying, erecting & marking TPN MCB 40A to 63A, Cseries in provided distribution board as per specification No. SW-SWR/MCB	Nos	2.00	628.00	1256.00
177	5.3.26	Supplying erecting and marking Four pole isolatorsonly switch version of miniature circuit breakers of 80/100A in provided distribution board.	Nos	2.00	776.00	1552.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
178	5.6.5	Providing, erecting & commissioning RCCB only of electro magnetic type with 30/100/300 mA sensitivity and having capacity of 40A. 4 pole complete as per specification No. SW-RCCB/RCCB	Nos	2.00	2373.00	4746.00
179	5.4.6	Supplying & erecting triple pole and neutral distribution board (TPNDB)surface/ flush mounted SP / TP MCB of total 36 ways on iron / G.I. frame/wooden board (Vertical Busbar type) as per specification No. SW-SWR/MCBDB	Nos	2.00	6230.00	12460.00
180	1.3.26	Suppl yi ng PVC insulated PVC round sheat hed 1 sq.mm (32 no. x 0. 20mm dia.) 3 core fl exible multi stranded copper Industrial cable for voltage grade up to 1.1 kV	mtr	300.00	39.00	11700.00
181	7.1.26	Suppl yi ng, erecting & terminati ng PVC armoured cable 4 core 4 sq mmaluminium conductor with conti nuous 5.48 sq mm (12 SWG) G. I. eart h wire compl et e erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	Mtr	600.00	114.00	68400.00
182	7.1.29	Supplying, erecting & terminating PVC armoured cable 4 core 16 sq mmaluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire complete erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	Mtr	350.00	179.00	62650.00
183	7.6.9	Supplying and laying (including excavation) 50 mm outside dia. double wall corrugated pipes (DWC)of HDPE for enclosing cable below ground/road surface, to required depth complete.	Mtr	200.00	179.00	35800.00

Nashik Municipal Smart City Development Corporation Limited

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
184	7.6.11	Supplying and laying (including excavation)90 mm outside dia. double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground/road surface, to required depth complete	Mtr	50.00	301.00	15050.00
185	7.10.1	Supplying & erecting crimping type aluminium lugs for cable upto 16 sq mmcomplete as per specification No. CB-CL/AL	Nos	20.00	7.00	140.00
186	9.1.4	Providing pipe type earthing with 40mm. dia. G.l. pipe or 20 mm dia. G.l. Rod compl et e with all materials as perspecification No. EA-EP	Nos	4.00	1249.00	4996.00
187	16.1.2	Making the trench in Hard murum/Tar roadof suitable width and depth as per IS for laying provided L.T cable up to 10 sq.mm.complete. As per specification No. CW-EXN-CTR	MTR	25.00	170.00	4250.00
188	16.1.5	Excavating hard Rock or bituminous road (B.T.) by chiseling for preparing pit for poles stay or earth plates or for laying cables, pipes& clearing the site by removing debris & making the site good.	cum	30.00	903.00	27090.00
	9-1-4	Providing pipe type earthing with 40mm. dia. G.l. pipe or 20 mm dia. G.l. Rod complete with all materials as per specification no. EAEP	Each	14.00	1,249.00	17486.00
		Total of SSR Items				345035.00
	Non CSR Items					

Nashik Municipal Smart City Development Corporation Limited 242 | P a g e

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
187	Fair Items	SITC of 18W (6X3W) IP68 LED Spot Light, Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 20W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree, Color: Warm White (3000K), IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years KLITE CAT REF 7060	Nos	36.00	17640.00	635040.00
188	Fair Items	SITC of 60W Single Arm IP67 Pole Light, modular technology, robust design and cooling technology, highly efficient heat dissipation, IP68 LED Optical Engine, Highest Waterproof rating, MS Body with Anti-corrosion treatment and UV-proof powder coating, Wattage: 60W, Input Voltage: AC 100-240V, LED Lumen: 120-140 lm/W, Color Temperature: 3000K, IP Rating: IP67, Beam Angle: 85x145 Degree, Life Span: 50000 hours, Power Factor: >0.95, Warranty: 5 years, Pole Height: 3 Meters CAT REF K LITE 4761	Nos	22.00	28430.00	625460.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
189	Fair Items	SITC of 60Wx2 Double Arm IP67 Pole Light, modular technology, robust design and cooling technology, highly efficient heat dissipation, IP68 LED Optical Engine, Highest Waterproof rating, MS Body with Anti-corrosion treatment and UV-proof powder coating, Wattage: 60Wx2, Input Voltage: AC 100-240V, LED Lumen: 120-140 lm/W, Color Temperature: 3000K, IP Rating: IP67, Beam Angle: 85x145 Degree, Life Span: 50000 hours, Power Factor: >0.95, Warranty: 5 years, Pole Height: 4 Meters KLITE CAT REF KP4765	Nos	1.00	51030.00	51030.00
190	Fair Items	SITC of 1X3W IP68 LED Step Light , Stainless steel faceplate, high pressure die casting light body, surface with electrostatic plastic coating, Lampshade adopts high strength toughened glass, resist the impact and friction, Housing: Molding shaped stainless steel SUS 316, Wattage: 1.5W, Input Voltage: DC24V (External Driver), Beam Angle: 30-60 Degree, Color: Warm White (3000K), IP Rating: IP68, Life Span: 50000 hours, Warranty: 5 years MAKE KLITE CAT REF 6762	Nos	41.00	7390.00	302990.00
191	Fair Items	Smart Street Light Control Panel (SLCP) Supply, installation, testing and commissioning of SLCP Shall be conforming following IS standards – IS: 2147 – 1962 Degree of protection Floor / wall/ structure mounted, free standing, suitable for cable entry from bottom side, dust proof, vermin proof, 3 phase and neutral, bus bar, aluminium, neutral bus shall be of same size as phase bus bars, Short circuit capacity for the bus bars and switches shall be 10 kAThe smart light control pannel shall contain the following features 1) The feeder panel functionalities shall consist of class 1	Nos	2.00	46667.00	93334.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
		energy, meter, feeder panel control unit & wireless				
		communication unit				
		2) The feeder panel controller shall be capable of switching				
		on/off all the luminaries of a particular switching point based				
		on the lighting schedule set by the central management				
		server (CSLMS)				
		3)It shall communicate to the CSLMS through the wireless				
		communication unit over GSM/Wi-Fi//Ethernet.				
		4) once the lighting schedule is set, it shall operate the				
		luminaries according to that schedule till the lighting schedule is changed by the CSLMS.				
		5) it shall operate the luminaries according to the lighting				
		schedule even if there is a communication fault between				
		CSLMS itself.				
		6) in the absence of any lighting schedule it shall operate				
		(On/OFF) the luminaries according to time of the day.				
		7) It shall communicate the real time status (on/Off / fault)				
		of the luminaries to CSLMS.				
		8) if it is not able to communicate with CSLMS, it shall store				
		all the luminary's data internally and relay that data to				
		CSLMS once the communication is established.				
		9) it shall be able to store luminary's log /data for up to 7				
		days.				
		10) it shall have IP55 protection.				
		11) MSEDCL meter space in feeder panel controller.				
		12) Uniform rating for all the panels.				
		13) the vendor needs to use the appropriate communication mechanism from GSM/Wi-Fi/Ethernet for establishing				
		connectivity between feeder panel controller & CSLSM.				
		14) Group control via feeder panel, but individual street light				
		fixture data should be available via CSLMS.				

Nashik Municipal Smart City Development Corporation Limited

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
	MR	Kwh meter Testing and Sanctioning work with MSEDCL office	Each	1.00	20,000.00	20000.00
		Total of Non SSR Items				172854.00
		Total of SSR & Non SSR items				2072889.00

F. Deepmala

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
192	1.3.26	Suppl yi ng PVC insulated PVC round sheat hed 1 sq.mm (32 no. x 0. 20mm dia.) 3 core fl exible multi stranded copper Industrial cable for voltage grade up to 1.1 kV make vin LED	MTR	5000.00	39.00	195000.00
193	7.1.4	Suppl yi ng, erecting & terminating PVC armoured cable 2 core 4 sq mmaluminium conductor with continuous 5.48 sq mm (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specifi cati on no. CB-LT/AL	MTR	2600.00	95.00	247000.00
194	7.129	Supplying, erecting & terminating PVC armoured cable 4 core 16 sq mmaluminium conduct or with continuous 5.48 sq mm (12 SWG) G. I. eart h wire complete erected with glands & lugs, on wall/ trusses/pol e or lai d in provided trench/pipe as per specification no. CB-LT/AL	MTR	600.00	179.00	107400.00
195	9.1.4	Providing pipe type earthing with 40mm. dia. G.l. pipe or 20 mm dia. G.l. Rod compl et e with all materials as per specification No. EA-EP	NOS	30.00	1249.00	37470.00
196	1.1.4	Suppl yi ng & layi ng ISI mark Rigid Steel conduit 16 SWG - 25 mm. dia. with necessary accessories in RCC work/false ceiling/false flooring as per specifi cati on No: WG-MA/CC, para no. 1.2.3	MTR	550.00	176.00	96800.00
197	1.1.5	Suppl yi ng & erecting ISI mark Rigid Steel conduit 16 SWG 25 mm dia. with necessary accessories in wall/floor with chiselling appropriately as per specification No:WG-MA/CC, para no. 1.2.3	MTR	550.00	262.00	144100.00

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
198	5.4.19	Suppl yi ng and erecting single pole and neutral distributionboard (SPNDB) with doorsurface/flush mounted with 2 ways for incoming and 10 ways for outgoing SP MCB's oniron/ G.I. frame/wooden board as per specification No. SWSWR/MCBDB	NOS	76.00	1270.00	96520.00
199	5.3.6	Suppl yi ng, erecting & marking DPMCB 6A to 32A, C-series (for motor /power) in provided distribution board as per specification No. SW-SWR/MCB	NOS	76.00	461.00	35036.00
200	5.3.8	Suppl yi ng, erecting & marking DPMCB 40A to 63A, C-series (for motor/power) in provided distribution board as per specification No.SW-SWR/MCB	NOS	76.00	628.00	47728.00
201	5.2.18	Suppl yi ng & erecting street light control panel in powder coated CRCA 14/16 SWG sheet, outdoor t ype, three phase, 415 Volts consisted of suitable rating contactor, 24 Hrs Digital / Astronomical time switch, TPN MCB 40 Amp, Auto/manual select or switch, ON/OFF push buttons, indicat or lamps, control wiring, metering device, etc for automatic operation & overcurrent, short circuit, earth fault protection of street lights upto the max load of 6 Kw on provided iron frame / CC foundation.	NOS	6.00	20466.00	122796.00
202	7.10.1	Supplying & erecting crimping type aluminium lugs for cable upto 16 sq mmcomplete as per specification No. CB-CL/AL	NOS	882.00	7.00	6174.00
	5-2-3	Supplying and erecting metal clad distribution board 240V, 4 way, 16A per way & neutral bar connector complete erected on iron /GI frame as per specification No. SW-SWR/MDB	Each	1.00	704.00	704.00
		Total of SSR Items				1136728.00

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
	Non SSR Items					
203	FAIR ITEM	SITC of 5W LED Flame/Candle Lamp with IP65 Transparent Glass Encloser, Wattage: 5W, Input Voltage: AC 220V, Color Temperature: 3000K, Color: Warm White, Life Span: 50000 hours, Beam Angle: 120 Degree, Warranty: 5 years approoved Makes Syska/ VIN LED / Bajaj /Philips. VINLED CAT REF VINDEEPSHIKHA LEDLAMP VIN5G	NOS	2432.00	1766.00	0.00
		Total of Non SSR Items				0.00
		Total of SSR & Non SSR items				1136024.00
	Non SSR Items					
204	FAIR ITEM	SITC of 5W LED Flame/Candle Lamp with IP65 Transparent Glass Encloser, Wattage: 5W, Input Voltage: AC 220V, Color Temperature: 3000K, Color: Warm White, Life Span: 50000 hours, Beam Angle: 120 Degree, Warranty: 5 years approoved Makes Syska/ VIN LED / Bajaj /Philips. VINLED CAT REF VINDEEPSHIKHA LEDLAMP VIN5G	NOS	2432	1766	4294912.00
		Total of Non SSR Items				4294912.00
		Total of SSR & Non SSR items				5431640.00

G. O and M

Sr.no.	CSR 2018-19 Item No	Description	Unit	Quantity	Rate	Amount
205		Operation & maintenance				
		Operation & maintenance for 1st Year	Months	12	52,416.27	628995.276
		Operation & maintenance for 2nd Year	Months	12	53,685.91	644230.9402
		Operation & maintenance for 3rd Year	Months	12	54,787.87	657454.471
		Total of O & M				1930680.68

Part :D
Estimate for the work "Goda Riverfront Development including beautification in ABD area under Nashik Smart City Mission, Nashik".

Sr. no.	Description	Basic Amount
1	SITC of fog and Mirror effect	2406928.90
2	SITC of Bubbler with Cascade effect	312614.25
3	SITC OF Water Screen for laser show	880877.51
4	SITC of Irrigation	483228.71
5	Operation & maintenance (Three Years)	2547264.04
	Say Rs.	6,630,914.00

1. Design and SITC of Fog and Mirror effect Godavari River Front, Nashik

251 | Page

Sr. No.	DSR item No	Description	Units	Qty.	Rate (Rs.)	Amount (Rs.)
	A	Water body: FOG Effect with 1" overflow				
		PUMPS				
1	PM 1-5-1, MJP E /M CSR 18-19, PAGE 4	Supply, Installation & Commissioning of Recirculation pump, Openwell pumps, designed for underwater applications, Water Lubricated, no need for priming. With 2900 RPM Pump, Cap Approx. 8.8 LPS at 12 Mtrs Head. Submersible Horizontal Pumpset, Single Stage (3 working + 1 standby). 3HP. Price include GST	No	4.00	16,370.00	65,480.00
	MJP NASHIK SECTION 1 P.V.C PIPES PAGES - 88 & 95. CSR 18-19	Plumbing and Regulation fittings in Upvc 10kg/sq.cm Pipe and Solvent + laying and joining				-
2	2.1	200mm pipe header for pump discharge, filter	m	18.00	1,234.00	22,212.00
3	2.2	110mm pipe Drain to balancing tank, Header for Fog nozzles	m	325.00	363.00	117,975.00
4	2.3	63mm pipe for Pump discharge, filter discharge and fog jet nozzles circuiit	m	360.00	135.00	48,600.00
		Cabling for pumps				-
5	CB 7- 2 - 16, PWD ELECTRICAL, CSR 18-19, PAGE 133	Supplying, erecting & terminating PVC armouredcable 3 core 6 sq mm copper conductorcontinuous 5.48 sq mm (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/CU	m	60.00	267.00	16,020.00

Sr. No.	DSR item No	Description	Units	Qty.	Rate (Rs.)	Amount (Rs.)
		Earthing Cable				-
6	CB 9 - 1 - 1, PWD ELECTRICAL, CSR 18-19, PAGE 166	Providing earthing with Galvanized cast iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification No. EA-EP	lot	8.00	3,931.00	31,448.00
7	CB-7-4-1, CB-JT/LT, PWD ELECTRICAL, CSR 18-19, PAGE 137	Cable Joints & End Termination Kits (LT Cables) (CBJT/LT): Providing & erecting epoxy straight through joint outdoor/indoor for LTPVC armoured cable2.5 to 16 sq mm. cable, with necessary material as per specification No. CB-JT/LT	no	4.00	1,914.00	7,656.00
		Excavation (CW-EXN)				-
8	CW 16-1-1, CW-EXN- CTR,PWD ELECTRICAL, CSR 18-19, PAGE 261	Making trench in soft soilof suitable width and depth as per IS for laying provided L.T cable up to 25 sq mm complete. As per specification No. CW-EXN-CTR	m	60.00	138.00	8,280.00
		Control Panel				-
9	CB 5 - 7 - 1, PWD ELECTRICAL, CSR 18-19, PAGE 101	Providing & erecting Floor / Wall mounting, MCCB Panel board suitable for Four Pole Incoming 250A,2 ways Four pole outgoing on provided iron frame, as per Specification No SW-SWR / MCCBPB. (Excluding MCCB'S)	Each	1.00	29,555.00	29,555.00
10	CB 5 - 5 - 1, PWD ELECTRICAL, CSR 18-19, PAGE 99	Providing & erecting 3 Pole MCCB upto 100A, 415V capacity with S.C. rating 25 kA (Ics=100% of Icu), thermal setting with provided leads on iron /G.I. frame as per specification No. SW SWR/MCCB	Each	1.00	4,507.00	4,507.00

Sr. No.	DSR item No	Description	Units	Qty.	Rate (Rs.)	Amount (Rs.)
11	CB 5 - 11 - 11, PWD ELECTRICAL, CSR 18-19, PAGE 110	Supplying and erecting earth fault module for MCCB with adjustable earth fault sensitivity selection 10% to 50% of nominal current (In)and adjustable time delay 100/200 millisecond suitable for upto 200A MCCB with inbuilt CT's. capacity with S.C. rating 25 kA (Ics=100% of Icu), thermal setting with provided leads on iron /G.I. frame as per specification No. SW-SWR/MCCB	Each	1.00	4,696.00	4,696.00
12	CB 12 - 4 - 21, PWD ELECTRICAL, CSR 18-19, PAGE 238	Supplying & erecting automatic control panel for 3 Ph, 415 volt, A.c. Submersible /centrifugal pump set upto 20 HP consisting of Star Delta starter having relay range 13- 21Amp,S.P.P., Combined ammeter/voltmeter, phase indicating lamp enclosed in CRCA powder coated Vibration proof encloser with IP 54 protection. Control Panel should offer single phasing, phase reversal, phase inbalence etc (Similar to LT model no.MU G20 / CAT NO. SS 95984)	Each	4.00	12,342.00	49,368.00
13	CB 18 - 3 - 20, PWD ELECTRICAL, CSR 18-19, PAGE 273	Supplying & erecting L&T make Timer with Combination Coil for ML-2 motor starter suitable from 15 H.P to 30 H.P	Each	4.00	1,789.00	7,156.00
	5 - 3 - 16 ELECTRICAL CSR 18-19	Supplying, erecting & marking FPMCB 6A to 32A in provided distribution board as per specification no. SW-SWR/MCB	Each	4.00	905.00	3,620.00
	12 - 4 - 17 ELECTRICAL CSR 18-19	Supplying & erecting automatic control panel for 3 Ph, 415 volt, A.c. Submersible/centrifugal pump set upto 7.5 HP consisting of DOL starter having relay range 9-14 AMP,S.P.P., Combined ammeter/voltmeter, phase indicating lamp enclosed in CRCA powder coated Vibration proof enclosure with IP 54 protection. Control Panel should offer single phasing, phase reversal, phase imbalance etc	Each	1.00	4,944.00	4,944.00

Sr. No.	DSR item No	Description	Units	Qty.	Rate (Rs.)	Amount (Rs.)
	9 - 2 - 3 ELECTRICAL CSR 18-19	Supplying and erecting GI strip of required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joints required. As per specification no EA-EP.	Kg	30.00	191.00	5,730.00
	1 - 2 - 7 ELECTRICAL CSR 18-19	Supplying and erecting HMS PVC conduit 25 mm dia. with PVC accessories on wall /ceiling as per specification No: WG-MA/CON.	m	20.00	76.00	1,520.00
		Total of DSR Items				428,767.00

		NON DSR						
	Sr. No	Description	Unit	Qty.	Basic Rate	Packing & Transport 5%	Installation Supervision & Administrative Charges 25%	Amount
	1	Plumbing and Regulation fittings in PVC 10kg/sq.cm for Pipe and Solvent + laying and joining						-
		As per Annexure A						-
14	1.1	200mm pipe fittings	m	18.00	968.00	48.40	242.00	22,651.20
15	1.2	110mm pipe fittings	m	325.00	312.00	15.60	78.00	131,820.00

16	1.3	63mm pipe fittings	m	360.00	80.00	4.00	20.00	37,440.00
	1.4	4" Double Union PVC Ball valve	no	3.00	4,500.00	225.00	1,125.00	17,550.00
17	1.5	2" Double Union PVC Ball valve	no	7.00	631.00	31.55	157.75	5,742.10
18	1.6	2" Non Return Valve made in Cast Iron, on pump discharge, flange type with nut, bolt, gasket complete	no	4.00	2,243.00	112.15	560.75	11,663.60
		Make: Prince / Astral / Finolex						
19	2	FRP Filters with Flow rate of 33cum per hour. Dia of filter 900mm with Multi port valve of 2" dia complete with unions, pressure gauge, O rings, nut bolt complete. Filter to have a Velocity of 2.5 Cum/m2/m3 Make - Emaux / Astral / Aqva Star	no	3.00	58,500.00	2,925.00	14,625.00	228,150.00
20	3	Filter Media - Quartz Sand for filter. Filter sand is composed of sub-angular, hard, durable, and dense grains of predominately siliceous material. Extracted from a clean glacial sand deposit.	kg	1200.00	22.00	1.10	5.50	34,320.00
	4	FOG JETS:						

21		Fog jets of 1/2" Dia to create foggy spray water in tiny mist drops. MOC - casting copper with chrome plating. PF-0105 + PF-805 Make - Aquascapes / Water Techniques / Perfect Fountain	no	150.00	2,175.00	108.75	543.75	424,125.00
22	5	Circular Main Drain - Frame in ABS & Grille in SS Make - Emaux / Astral / Aqva Star	no	182.00	4,500.00	225.00	1,125.00	1,064,700.00
		Total of Non DSR items						1,978,161.90
		Total Amount DSR + NON DSR						24,06,928.90

2.Design and SITC of Bubbler with Cascade effect Godavari River Front, Nashik

Sr. No.	DSR Item No	Description	Unit	Qty.	Rate	Amount
		Water body: Bubbler with Cascade effect				

Sr. No.	DSR Item No	Description	Unit	Qty.	Rate	Amount
	A	Plant Room Equipments				
1	PM 1-5-2, MJP E /M CSR 18-19, PAGE 4	Supply, Installation & Commissioning of Recirculation pump, Openwell pumps, designed for underwater applicationsno need for priming. With 2900 RPM Pump, Cap Approx. 25 LPS at 8 Mtrs Head. Submersible Horizontal Pumpset, Single Stage(1 working + 1 standby). 5HP	no	2.00	18,330.00	36,660.00
		Cabling for pumps				-
2	CB 7- 2 - 16, PWD ELECTRICAL, CSR 18-19, PAGE 133	Supplying, erecting & terminating PVC armouredcable 3core 6 sq mm copper conductorcontinuous 5.48 sq mm (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/CU	m	40.00	267.00	10,680.00
3	CB-7-4-1, CB-JT/LT, PWD ELECTRICAL, CSR 18-19, PAGE 137	Cable Joints & End Termination Kits (LT Cables) (CBJT/LT) Providing & erecting epoxy straight through joint outdoor/indoor for LTPVC armoured cable2.5 to 16 sqmm. cable, with necessary material as per specification No CB-JT/LT	no	2.00	1,914.00	3,828.00
		Excavation (CW-EXN)				-

Nashik Municipal Smart City Development Corporation Limited Document No.: MAH-NAS-032-053-RFP-V02-01

Sr. No.	DSR Item No	Description	Unit	Qty.	Rate	Amount
4	CW 16-1-1, CW-EXN- CTR,PWD ELECTRICAL, CSR 18-19, PAGE 261	Making trench in soft soilof suitable width and depth as per IS for laying provided L.T cable up to 25 sq mm complete. As per specification No. CW-EXN-CTR	m	40.00	138.00	5,520.00
5	CB 9 - 1 - 1, PWD ELECTRICAL, CSR 18-19, PAGE 166	Providing earthing with Galvanized cast iron earth plate size $60 \times 60 \times 0.6$ cm complete with all materials, testing & recording the results as per specification No. EA-EP	lot	5.00	3931.00	19,655.00
		CONTROL PANEL				-
6	CB 5 - 7 - 1, PWD ELECTRICAL, CSR 18-19, PAGE 101	Providing & erecting Floor / Wall mounting, MCCB Panel board suitable for Four Pole Incoming 250A,2 ways Four pole outgoing on provided iron frame, as per Specification No SW-SWR/MCCBPB.(Excluding MCCB'S)	Each	1.00	29,555.00	29,555.00
7	CB 5 - 5 - 1, PWD ELECTRICAL, CSR 18-19, PAGE 99	Providing & erecting 3 Pole MCCB upto 100A, 415V capacity with S.C. rating 25 kA (Ics=100% of Icu), thermal setting with provided leads on iron /G.I. frame as per specification No. SW-SWR/MCCB	Each	1.00	4,507.00	4,507.00

Nashik Municipal Smart City Development Corporation Limited

9 CB 12 21, ELECT CSR 1 PAGE	SR Item No	Description	Unit	Qty.	Rate	Amount
21, ELECT CSR 1	3 5 - 11 - 11, PWD ECTRICAL, 5R 18-19, AGE 110	Supplying and erecting earth fault module for MCCB with adjustable earth fault sensitivity selection 10% to 50% of nominal current (In)and adjustable time delay 100/200 millisecond suitable for upto 200A MCCB with inbuilt CT's. capacity with S.C. rating 25 kA (Ics=100% of Icu), thermal setting with provided leads on iron /G.I. frame as per specification No. SW-SWR/MCCB	Each	1.00	4,696.00	4,696.00
	3 12 - 4 - 21, PWD ECTRICAL, SR 18-19, AGE 238	Supplying & erecting automatic control panel for 3 Ph, 415volt, A.c. Submersible/centrifugal pump set upto 20 HP consisting of Star Delta starter having relay range 13-21Amp,S.P.P., Combined ammeter/ voltmeter, phase indicating lamp enclosed in CRCA powder coated Vibration proof encloser with IP 54 protection. Control Panel should offer single phasing, phase reversal, phase inbalence etc (Similar to LT model no.MU G20 / CAT NO. SS 95984)	Each	2.00	12,342.00	24,684.00
20, ELECT CSR 1	3 18 - 3 - 20, PWD ECTRICAL, 5R 18-19, AGE 273	Supplying & erecting L&T make Timer withCombination Coil for ML-2 motor starter suitable from 15 H.P to 30 H.P	Each	2.00	1,789.00	3,578.00

Sr. No.	DSR Item No	Description	Unit	Qty.	Rate	Amount
	MJP NASHIK SECTION 1 P.V.C PIPES PAGES - 88 & 95. CSR 18-19	Plumbing and Regulation fittings in Upvc 10kg/sq.cm Pipe and Solvent + laying and joining				-
11		a) 90mm dia. Pump discharge	m	40.00	263.00	10,520.00
12		c) 110mm dia, over flow to tank and drain	m	60.00	363.00	21,780.00
	5 - 3 - 16 ELECTRICAL CSR 18-19	Supplying, erecting & marking FPMCB 6A to 32A in provided distribution board as per specification no. SW-SWR/MCB	Each	3.00	905.00	2,715.00
	9 - 2 - 3 ELECTRICAL CSR 18-19	Supplying and erecting GI strip of required size used for earthling on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joints required. As per specification no EA-EP.	Kg	20.00	191.00	3,820.00
	1 - 2 - 7 ELECTRICAL CSR 18-19	Supplying and erecting HMS PVC conduit 25 mm dia. with PVC accessories on wall /ceiling as per specification No: WG-MA/CON.	m	20.00	76.00	1,520.00
		Total of DSR items				183,718.00

	Sr.no	Description	Unit	Qty.	Basic Rate	Packing & Transport 5%	Installation Supervision & Administrative Charges 25%	Amount
		NON DSR						
	-	Bassin Equipments						
13	1	Main drain plates in SS 304 grade to cover the drain sump. Size 300 x 300mm Make - Emaux / Astral / Aqva Star		4.00	6,300.00	315.00	1,575.00	32,760.00

261 | P a g e

	Sr.no	Description	Unit	Qty.	Basic Rate	Packing & Transport 5%	Installation Supervision & Administrative Charges 25%	Amount
14	2	Bubbler nozzles in Cast Bronze natural finish of 1" size. The Cascade nozzles produce a graceful conical shaped white display of approx. 2'0" in height. These nozzles are water dependent nozzles to be immersed in water. Mode PF 3450 Make - Aquascapes / Water Techniques / Perfect Fountain	no	15.00	1,500.00	75.00	375.00	29,250.00
	3	Plumbing and Regulation fittings in PVC 10kg/sq.cm for Pipe and Solvent + laying and joining Make : Prince / Paras / Kissan						
		As per Annexure B						
15	3.1	a) 90mm dia. Pipe fittings	m.	40.00	239.00	11.95	59.75	12,428.00
16	3.2	b) 110mm dia, pipe fittings	m	60.00	348.00	17.40	87.00	27,144.00
17	3.3	c) 32mm dia. Pipe and fittings	m.	12.00	102.00	5.10	25.50	1,591.20
		VALVES				-	-	-
18	3.4	a) 1" dia. Double Union PVC Ball Valves	no	15.00	225.00	11.25	56.25	4,387.50
19	3.5	b) 4" dia. Double Union PVC Ball Valves	no	2.00	4,500.00	225.00	1,125.00	11,700.00

	Sr.no	Description	Unit	Qty.	Basic Rate	Packing & Transport 5%	Installation Supervision & Administrative Charges 25%	Amount
20	3.6	c) 3" Non Return Valve made in Cast Iron, on pump discharge, flange type with nut, bolt, gasket complete	no	2.00	3,705.98	185.30	926.50	9,635.55
		Total of Non DSR items						128,896.25
		Total Amount DSR + NON DSR						3,12,614.25

3. Design and SITC of Water Screen for laser show for Godavari River Front, Nashik

Sr. No.	DSR Item No	Description	Units	Qty.	Rate	Amount
		Water Screen for laser show				

263 | P a g e

Sr. No.	DSR Item No	Description	Units	Qty.	Rate	Amount
1	PM 1-5-3, MJP E /M CSR 18-19, PAGE 4	Supply, Installation & Commissioning of Recirculation pump, Openwell pumps, designed for underwater applications no need for priming. With 2900 RPM Pump, Cap Approx. 22 LPS at 16 Mtrs Head. Submersible Horizontal Pumpset, single stage (1 working + 1 standby). 7.5 HP Make: Kirloskar / Crompton / CRI	no	2.00	30,845.00	61,690.00
		Cabling for pumps				-
2	CB 7- 2 - 16, PWD ELECTRICAL, CSR 17-18, PAGE 133	Supplying, erecting & terminating PVC armouredcable 3core 6 sq mm copper conductorcontinuous 5.48 sq mm (12SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/CU Make: Polycab / RR / Finolex	m	60.00	267.00	16,020.00
		Cable Joints & End Termination Kits (LT Cables) (CBJT/LT)				-
3	CB-7-4-1, CB- JT/LT, PWD ELECTRICAL, CSR 17-18, PAGE 137	Providing & erecting epoxy straight through joint outdoor/indoor for LTPVC armoured cable2.5 to 16 sq mm. cable, with necessary material as per specification No. CB-JT/LT	no	2.00	1,914.00	3,828.00
		Excavation (CW-EXN)				-
4	CW 16-1-1, CW-EXN- CTR,PWD ELECTRICAL, CSR 17-18, PAGE 261	Making trench in soft soilof suitable width and depth as per IS for laying provided L.T cable up to 25 sq mm complete. As per specification No. CW-EXN-CTR	m	70.00	138.00	9,660.00

Sr. No.	DSR Item No	Description	Units	Qty.	Rate	Amount
		Earthing Cable				-
5	CB 9 - 1 - 1, PWD ELECTRICAL, CSR 17-18, PAGE 166	Providing earthing with Galvanized cast iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification No. EA-EP	lot	3.00	3,931.00	11,793.00
	MJP NASHIK SECTION 1 P.V.C PIPES PAGES - 88 & 95. CSR 18-19	Plumbing and Regulation fittings in Upvc 10kg/sq.cm Pipe and Solvent + laying and joining				-
6		a) 110mm dia. Pump discharge	m.	18.00	363.00	6,534.00
7		b) 160mm dia.	m.	6.00	736.00	4,416.00
		CONTROL PANEL				-
8	CB 5 - 7 - 1, PWD ELECTRICAL, CSR 17-18, PAGE 101	Providing & erecting Floor / Wall mounting, MCCB Panel board suitable for Four Pole Incoming 250A,2 ways Four pole outgoing on provided iron frame, as per Specification No SW-SWR/MCCBPB.(Excluding MCCB'S)	Each	1.00	29,555.00	29,555.00
9	CB 5 - 5 - 1, PWD ELECTRICAL, CSR 17-18, PAGE 99	Providing & erecting 3 Pole MCCB upto 100A, 415V capacity with S.C. rating 25 kA (Ics=100% of Icu), thermal setting with provided leads on iron /G.I. frame as per specification No. SW-SWR/MCCB	Each	1.00	4,507.00	4,507.00

Sr. No.	DSR Item No	Description	Units	Qty.	Rate	Amount
10	CB 5 - 11 - 11, PWD ELECTRICAL, CSR 17-18, PAGE 110	Supplying and erecting earth fault module for MCCB with adjustable earth fault sensitivity selection 10% to 50% of nominal current (In)and adjustable time delay 100/200 millisecond suitable for upto 200A MCCB with inbuilt CT's. capacity with S.C. rating 25 kA (Ics=100% of Icu), thermal setting with provided leads on iron /G.I. frame as per specification No. SW-SWR/MCCB	Each	1.00	4,696.00	4,696.00
11	CB 12 - 4 - 21, PWD ELECTRICAL, CSR 17-18, PAGE 238	Supplying & erecting automatic control panel for 3 Ph, 415 volt, A.c. Submersible/centrifugal pump set upto 20 HP consisting of Star Delta starter having relay range 13-21Amp,S.P.P., Combined ammeter/ voltmeter, phase indicating lamp enclosed in CRCA powder coated Vibration proof encloser with IP 54 protection. Control Panel should offer single phasing, phase reversal, phase inbalence etc (Similar to LT model no.MU G20 / CAT NO. SS 95984)	Each	2.00	12,342.00	24,684.00
12	CB 18 - 3 - 20, PWD ELECTRICAL, CSR 17-18, PAGE 273	Supplying & erecting L&T make Timer withCombination Coil for ML-2 motor starter suitable from 15 H.P to 30 H.P	Each	2.00	1,789.00	3,578.00

Sr. No.	DSR Item No	Description	Units	Qty.	Rate	Amount
	5 - 3 - 16 ELECTRICAL CSR 18-19	Supplying, erecting & marking FPMCB 6A to 32A in provided distribution board as per specification no. SW-SWR/MCB	Each	3.00	905.00	2,715.00
	9 - 2 - 3 ELECTRICAL CSR 18-19	Supplying and erecting GI strip of required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joints required. As per specification no EA-EP.	Kg	20.00	191.00	3,820.00
	1 - 2 - 7 ELECTRICAL CSR 18-19	Supplying and erecting HMS PVC conduit 25 mm dia. with PVC accessories on wall /ceiling as per specification No: WG-MA/CON.	m	20.00	76.00	1,520.00
		Total of DSR items				189,016.00

	=	NON DSR						
	Sr .No	Description			Basic Rate	Packing & Transport 5%	Installation Supervision & Administrative Charges 25%	Amount
	_	Bassin Equipments						
13	1	Main drain plates in SS 304 grade to cover the drain sump. Size 300 x 300mm Make - Emaux / Astral / Aqua Star	no	4.00	6,300.00	315.00	1,575.00	32,760.00

267 | P a g e

14	2	Single Jet nozzles in Cast Bronze natural finish of 1" size, with Orifice size of 16mm. The nozzles produce a straight jet of approx. 4m in height. These nozzles are water independent nozzles. MODEL - PF - 1013 Make - Aquascapes / Water Techniques / Perfect Fountain	no	600.00	570.00	28.50	142.50	444,600.00
15	3	Fabrication of Nozzle header in G. I pipe in C class Make Tata. Couplers to be welded in every 1" c/c to take the single jet nozzles. Dia of pipe 6"	m	15.00	6,800.00	340.00	1,700.00	132,600.00
	4	Plumbing and Regulation fittings in PVC 10kg/sq.cm for Pipe and Solvent + laying and joining Make : Prince / Paras / Kissan						
		As per Annexure C						
16	4.1	a) 110mm dia. Pump discharge	m.	18.00	431.00	21.55	107.75	10,085.40
17	4.2	b) 160mm dia.	m.	6.00	518.00	25.90	129.50	4,040.40
		VALVES						
18	4.3	a) 4" dia. Double Union PVC Ball Valves	no	4.00	4,500.00	225.00	1,125.00	23,400.00
19	4.4	b) 4" Non Return Valve made in Cast Iron, on pump discharge, flange type with nut, bolt, gasket complete	no	2.00	4,567.58	228.38	1,141.90	11,875.71

20	5	Cover for Nozzles Fabricated using 5mm 3" x 3" "C" channel in MS "C" class when the fountain is not on use	1	1.00	25,000.00	1,250.00	6,250.00	32,500.00
	_	Total of Non DSR Rates						691,861.51
		Total Amount DSR + NON DSR						8,80,877.51

4. Design and SITC of Irrigation Godavari River Front, Nashik

S. N.	MJP CSR 2018-19 Items	Description	Units	Qty.	Rate (Rs.)	Amount
	1	Plumbing and Regulation fittings in PVC 4kg/sq.cm Pipe and Solvent + laying and joining				
		MJP DSR 2016/17 PIPE SECTION 1-(iii)-B EXCAVATION BD-A-1/259				
1	1.1	Supplying lowering and jointing pvc pipe 63mm, 4kg pressure class iv all etc	m	210.00	115.44	24,242.40

269 | P a g e

S. N.	MJP CSR 2018-19 Items	Description	Units	Qty.	Rate (Rs.)	Amount
2	1.2	Supplying lowering and jointing pvc pipe 50mm, 4kg pressure class iv all etc	m	66.00	83.54	5,513.64
3	1.3	Supplying lowering and jointing pvc pipe 40mm, 4kg pressure class iv all etc	m	936.00	71.44	66,867.84
4	PM 1-5-2	Supply, Installation & Commissioning of Recirculation pump, Openwell pumps, designed for underwater applications, Water Lubricated, no need for priming. With 2900 RPM Pump, Cap Approx. 22.5 LPS at 8 Mtrs Head. Submersible Horizontal Pumpset, Single Stage (3 working + 1 standby). 5HP. Price include GST	No	1.00	18,330.00	18,330.00
		MAKE- KIRLOSKAR/KSB/CROMPTON				-
		Cabling for pumps				-
5	CB 7-2-7	Supplying ,erecting & terminating PVC armouredcable 3 Core 6 sq mm copper conductor continuous 5.48 sq mm (12SWG) G.I earth wire complete erected with glands & lugs on wall/ trusses/pole or laid in provided trench/ pipe as per specification	m	60.00	246.00	14,760.00
		Earthing Cable				-
6	CB 9-3-1	Providing earthing with galvanized cast iron earth plate size 60x60x0.6 cm complete with all materials, testing & recording the results as per specification No. EA-FP	lot	1.00	2,840.00	2,840.00
7	CB-JT/LT	Cable Joints & End Termination Kits (LT Cables) (CBJT/LT) Providing & erecting epoxy straight through joint outdoor/indoor for LTPVC armoured cable 2.5 to 16 sqmm. cable, with necessary material as per specification No.CB-JT/LT	NO	1.00	1,365.00	1,365.00
		Excavation (CW-EXN)				-

S. N.	MJP CSR 2018-19 Items	Description	Units	Qty.	Rate (Rs.)	Amount
8	CW-EXN- CTR	Making trench in soft soilof suitable width and depth as per IS for laying provided L.T cable up to 25 sq mm complete. As per specification No. CW-EXN-CTR	m	70.00	151.00	10,570.00
9	CB 5-11-11	Supplying and erecting earth fault module for MCCB with Adjustable earth fault sensitivity selection 10% to 50% of nominal current (in) and adjustable time delay 100/200 millisecond suitable for upto 200A MCCB with inbuilt CT's capacity with S.C rating 25 kA (lcs=100% lcu), thermal setting with provided leads on iron/G.I frame	Each	1.00	4,421.00	4,421.00
10	CB 12-5-21	Supplying and erecting automatic control pannel for 3Ph,415 volt, A.c. Submersible /centrifugal pump set upto 20 HP consisting of star delta starter having relay range 13-21Amp,S.P.P., Combined ammeter /voltmeter, phase indicating lamp enclosed in CRCA powder coated vibration proof encloser with IP 54 protection. Control panel should offer single phasing, phase reversal, phase inbalance etc (similar to LT model no. MU G20 / CAT NO. SS	Each	1.00	10,799.00	10,799.00
11	CB 17-3-2	Supplying and erecting L& T make Timer with combination coil for ML-2 motor starter from 3 to 5	Each	1.00	1,613.00	1,613.00
12	CB 9 - 1 - 1, PWD ELECTRICAL, CSR 18-19	Providing earthing with Galvanized cast iron earth plate size $60 \times 60 \times 0.6$ cm complete with all materials, testing & recording the results as per specification No. EA-EP	lot	1.00	3,931.00	3,931.00
13	9 - 2 - 3 ELECTRICAL CSR 18-19	Supplying and erecting GI strip of required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joints required. As per specification no EA-EP.	Kg	20.00	191.00	3,820.00

S. N.	MJP CSR 2018-19 Items	Description	Units	Qty.	Rate (Rs.)	Amount
14	1 - 3 - 3 ELECTRICAL CSR 18-19	Supplying & erecting mains with 2x2.5 sq.mm F.R copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG- MA/BW	m	15.00	53.00	795.00
15	1 - 9 - 8 ELECTRICAL CSR 18-19	Point wiring for independent plug in 20 mm ISI marked HMS PVC conduit with 1.5 sq.mm (2+1E) FRLSH grade copper wire, flush type switch, earthing and required accessories as per specification No: WG-PW/SW	point	4.00	451.00	1,804.00
16	1 - 9 - 5 ELECTRICAL CSR 18-19	Point wiring for light/fan/bell in 20 mm ISI marked HMS PVC conduit with 1.5 sq.mm (2+1E) FR grade copper wire, flush type switch, earthing and required accessories as per specification No: WG-PW/SW	point	4.00	390.00	1,560.00
		Total of DSR Items				173,231.88

Sr.No	Description	Unit	Qty.	Basic Rate	Packing & Transport 5%	Installation Supervision & Administrative Charges 25%	Amount
	NON-DSR Items						
(A)	System Head Unit						-
1.1	SAND FILTER 2"/20" ASSEMBLED [ISI]	no	1	11,230.00		2,807.50	14,599.00
	MAKE- FINOLEX/NETAFIM/JAIN				561.50		
1.2	BACK WASH ASSLY 2" SAND FILTER	no	1	4,150.00		1,037.50	5,395.00
					207.50		
1.3	PLASTIC DISC FILTER 2" 25M3/HR	no	1	5,210.00		1,302.50	6,773.00
	MAKE- AUTOMAT/AMIAD/KIMPLAS				260.50		
1.4	PP HEADER ASLY-2" WITH PVC BALL	no	1	2,020.00		505.00	2,626.00
					101.00		

272 | P a g e

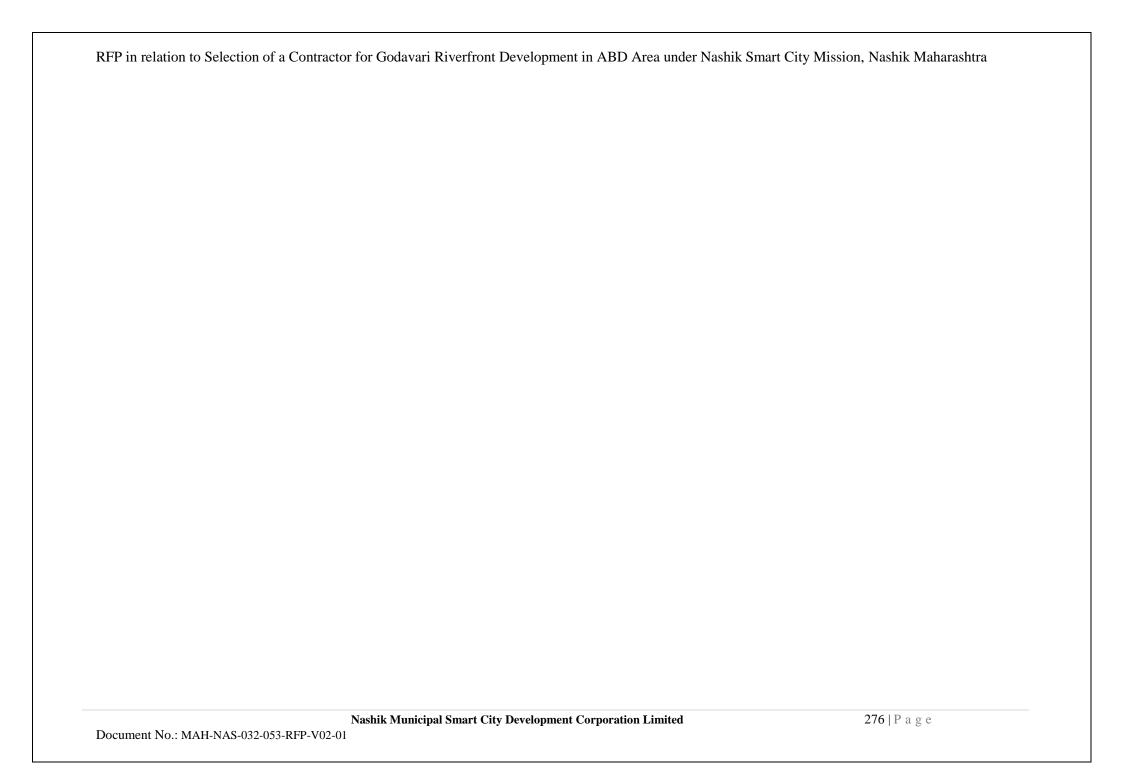
Sr.No	Description	Unit	Qty.	Basic Rate	Packing & Transport 5%	Installation Supervision & Administrative Charges 25%	Amount
1.5	GLYCERIN FILLED PRESSURE GAUGE	no	2	370.00	18.50	92.50	962.00
1.6	STOP COCK FOR PRESSURE GAUGE	no	2		-	-	-
1.7	PRESSURE GAUGE WITH PITOT TUBE	no	1	175.00	8.75	43.75	227.50
1.8	PRESSURE RELIEF VALVE 2"	no	1	4,600.00	230.00	1,150.00	5,980.00
1.9	NON RETURN VALVE	no	1	880.00	44.00	220.00	1,144.00
	Make: FINOLEX /NETAFIM / JAIN						
(B)	EMITTING FOR DRIP SYSTEM (FOR SHRUBS & LANDSCAPE)						
1	DRIP LATERAL 16 MM CL II	MTR.	1000	9.10	0.46	2.28	11,830.00
2	INLINE FINOGOL PCND 16MM-2.1LPH @30CM	MTR.	3000	15.81	0.79	3.95	61,659.00
3	ONLINE DRIPPER NO DRAIN (CORONA) 8 LPH	NOS	500	8.85	0.44	2.21	5,752.50
4	LINE END 16 MM	NOS	25	2.40	0.12	0.60	78.00
5	BARBED CONNECTOR 16 MM	NOS	250	3.00	0.15	0.75	975.00
6	RUBBER GROMET	NOS	250	1.55	0.08	0.39	503.75
7	HEAD CONNECTOR 16 MM	NOS	250	3.00	0.15	0.75	975.00
8	BARBRED TEE/ELBOW 16MM	NOS	250	5.60	0.28	1.40	1,820.00

Sr.No	Description	Unit	Qty.	Basic Rate	Packing & Transport 5%	Installation Supervision & Administrative Charges 25%	Amount
9	AIR/VAC. RELEASE VALVE 1"	NOS	47	1125.00	56.25	281.25	68,737.50
10	PVC BALL VALVE 63MM	NOS	1	431.00	21.55	107.75	560.30
11	PVC BALL VALVE 50MM	NOS	3	348.00	17.40	87.00	1,357.20
12	PVC BALL VALVE 40MM	NOS	52	250.00	12.50	62.50	16,900.00
13	QUICK COUPLING VALVE +KEY	NOS	2	1725.00	86.25	431.25	4,485.00
14	VALVE BOX 10"	NOS	58	1184.50	59.23	296.13	89,311.30
	Make: FINOLEX /NETAFIM / JAIN						
(D)	PVC FITTING FOR DRIP IRRIGATION						
1	PVC TEE 63MM 10KG/CM2	NOS	15	63.90	3.20	15.98	1,246.05
2	PVC TEE 50MM 10KG/CM2	NOS	5	33.80	1.69	8.45	219.70
3	PVC TEE 40MM 10KG/CM2	NOS	15	18.45	0.92	4.61	359.78
4	PVC ELBOW 63MM 10 KG/CM2	NOS	5	48.90	2.45	12.23	317.85
5	PVC ELBOW 50MM 10 KG/CM2	NOS	18	26.10	1.31	6.53	610.74
6	PVC ELBOW 40MM 10 KG/CM2	NOS	120	14.45	0.72	3.61	2,254.20
7	PVC FTA 63MM 10 KG/CM2	NOS	6	24.40	1.22	6.10	190.32

Sr.No	Description	Unit	Qty.	Basic Rate	Packing & Transport 5%	Installation Supervision & Administrative Charges 25%	Amount
8	PVC FTA 50MM 10 KG/CM2	NOS	6	15.00	0.75	3.75	117.00
9	PVC FTA 40MM 10 KG/CM2	NOS	47	11.45	0.57	2.86	699.60
10	PVC RDUCING BUSH 63X50 10KG/CM2	NOS	10	17.10	0.86	4.28	222.30
11	PVC REDUCING BUSH 50X40 10 KG/CM2	NOS	20	9.10	0.46	2.28	236.60
12	PVC REDUCING BUSH 63X40 10 KG/CM2	NOS	10	16.40	0.82	4.10	213.20
13	PVC BEND 63 MM * 90 DEG. 6 KGS	NOS	5	101.30	5.07	25.33	658.45
	Make: FINOLEX /NETAFIM / JAIN						
	Total of Non DSR items						3,09,996.83
	Total Amount DSR + NON DSR						4,83,228.71

5. Operation & Maintenance

Sr. No	Description	Unit	Quantity	Rate	Amount
1	Operation & maintenance				
	Operation & maintenance for 1st Year	Month	12	68,978.56	827,742.73
	Operation & maintenance for 2nd Year	Month	12	70,813.22	849,758.65
	Operation & maintenance for 3rd Year	Month	12	72,480.22	869,762.65
	Total of O & M				25,47,265.04



APPENDIX XIII: CONTRACT AGREEMENT

CONTRACT AGREEMENT

(To be executed on a non-judicial stamp paper of appropriate value)

THIS CONTRACT AGREEMENT ("Contract") is made on this $[\bullet]$ day of $[\bullet]$ 2018 at $[\bullet]$, India.

BETWEEN

Nashik Municipal Smart City Development Corporation Limited having its principal office at
 [•] India hereinafter referred to as "NMSCDCL", which expression shall, unless repugnant to
 the context or meaning thereof, include its permitted successors and assigns) of One Part;

AND

2. {[•], a [•] incorporated under the {•}¹, having its registered office at [•] (hereinafter referred to as {"Contractor"}² which expression shall, unless repugnant to the context otherwise requires, include its permitted successors and assigns) of Second Part.

OR

A consortium consisting of {Insert name of the Lead Memer}, a [●] incorporated under the [●] ("Lead Member"), [●], {Insert name of the consortium member} a incorporated under the [●]("Consortium Member ") (hereinafter collectively referred to as " Contractor")³ which expression shall repugnant to, unless the context otherwise requires, include its permitted successors and assigns) of Second Part.}

Each of the parties mentioned above are collectively referred to as the 'Parties' and individually as a 'Party'.

A. WHEREAS:

A. NMSCDCL has selected the Contractor through a competitive bidding process pursuant to a Request for Proposal dated [●] for implementing the Project (**RFP**).

_

¹ Notes:

⁽i) The provisions in curly brackets are to be retained in the Agreement and shall be suitably modified after the issue of LOA to reflect bid specific particulars in relation to the Selected Bidder

⁽ii) The provisions in square brackets and/or blank spaces shall be suitably filled after the issue of LOA in order to reflect bid specific particulars in the Agreement.

² Applicable in case of a single bidder

³ Applicable in case of a consortium

- After evaluation of the bids received from the bidders, NMSCDCL accepted the Bid of the Selected Bidder and issued its Letter of Award No. [●] dated [●] ("LOA") to the Selected Bidder, requiring the Selected Bidder, inter alia, to execute this Contract within the time period prescribed in the RFP.
- C. The Selected Bidder has requested the NMSCDCL to accept it as the Contractor which shall undertake and perform the obligations and exercise the rights of the Selected Bidder under the LOA, including the obligation to enter into this Contract Agreement pursuant to the LOA for implementing this Project in accordance with the terms and conditions as set out in this Contract.
- D. NMSCDCL is desirous that the Contractor execute (name and identification number of Contract) (hereinafter called "the Works") and NMSCDCL 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 INR. [•] (Rupees [•] Only).

NOW THEREFORE, in consideration of the mutual covenants, promises, assurances, representations and provisions set forth herein, the Parties hereto agree as follows:

- 1. In this Contract Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract as set out in Annexure A of Appendix XIII which shall be deemed to form an integral part of this Contract Agreement and is to be read as a part and parcel of this Contract Agreement.
- 2. In consideration of the payments to be made by NMSCDCL to the Contractor as hereinafter mentioned, the Contractor hereby covenants with NMSCDCL to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
- 3. NMSCDCL 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 Contract Agreement viz.
 - 1. Conditions of Contract as set out in Appendix XIII of this RFP:
 - A. General Conditions of Contract
 - B. Special Conditions of Contract.
 - 2. Scope of work for the Contractor as set out in Appendix X of the RFP;
 - 3. Technical Specifications as set out in Appendix XI of the RFP;
 - 4. Bill of Quantities of the Contractor as set out in Appendix XII of the RFP;

- 5. Drawings as set out in Appendix XV of the RFP.
- 6. Any other document (s), as specified.

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS CONTRACT AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED SIGNED, SEALED AND DELIVERED

For and on behalf of NMSCDCL by: For and on behalf of the Contractor⁴ by:

(Signature) (Signature)

(Name) (Name)

(Designation) (Designation)

(Address) (Address)

(Fax No.) (Fax No.)

OR

SIGNED, SEALED AND DELIVERED

SIGNED, SEALED AND DELIVERED For and on behalf of the Lead Member⁵ by:

For and on behalf of NMSCDCL by: (Signature)

(Signature) (Name)

(Name) (Designation)

(Designation) (Address)
(Address) (Fax No.)

(Fax No.) SIGNED, SEALED AND DELIVERED

For and on behalf of the Consortium Member

1 by:

(Signature)

(Name)

(Designation)

(Address)

(Fax No.)

SIGNED, SEALED AND DELIVERED

For and on behalf of the Consortium Member

2 by:

⁴ Applicable in case of a single bidder

⁵ Applicable in case of a consortium

(Signature)	
(Name)	
(Designation)	
(Address)	
(Fax No.)	

GENERAL CONDITIONS OF CONTRACT ANNEXURE A:

Security Deposit

Clause 1: - The Selected Bidder (herein-after called the Contractor, which expression shall unless excluded by or repugnant to the context include his hires, executors, administrators and assigns) shall:

- a) within 15 days of the receipt by him of the LOA deposit with the NMSCDCL an unconditional and irrevocable bank guarantee or a Demand Draft of an amount as set out in Clause 2.26.2 of the RFP ("Performance Security").
- b) Permit NMSCDCL at the time of making any payment to him for work done under the contract to retain 5% (five percent) of compensation payable as deductions to be held by NMSCDCL by way of security deposit under Clause 2.26.3 of the RFP.

The Contractor acknowledges and agrees that Performance Security shall be held by NMSCDCL as security for the satisfactory completion of the obligations of the Contractor in accordance with this Contract, including recovery of any amounts due to NMSCDCL from the Contractor till the issuance of the Take Over Certificate. NMSCDCL shall have the unconditional option under the Performance Security to invoke the same and shall be entitled to recover from Performance Security, liquidated damages and any other amounts which may become due to NMSCDCL from the Contractor.

The Contractor acknowledges and agrees that the Performance Security shall be held by NMSCDCL as security for the satisfactory completion of the obligations of the Contractor in accordance with this Contract, including recovery of any amounts due to NMSCDCL from the Contractor. NMSCDCL shall have the unconditional option under the Performance Security to invoke the same and shall be entitled to recover from the Performance Security, liquidated damages and any other amounts which may become due to NMSCDCL from the Contractor.

In the event of invocation of Performance Security by NMSCDCL, on account of the Contractor's failure to discharge any of its contractual obligations, warranting the NMSCDCL, in its assessment to do so, the NMSCDCL would intimate the Contractor of the reasons/ circumstances for the invocation of Performance Security within 7 (seven) days after invocation of the same. In the event of any encashment and appropriation from the Performance Security, the Contractor shall, within 15 (fifteen) days thereof, replenish, in case of partial appropriation, to its original level, and in case of appropriation of the entire Performance Security, provide a fresh Performance Security within 30 (thirty) days, failing which NMSCDCL shall be entitled to terminate this Contract in accordance with clause 33 of the SCC.

Compensation of Delay

Clause 2: - The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be to reckoned from the date on which the order to commence work is given to the contractor. The work shall throughout the stipulated period of the contract be proceeded with all due diligence (time being deemed to be on the essence of the contract on the part of the contractor) and the contractor shall pay as compensation an amount equal to one percent or such small as the Commissioner, Nashik Municipal Corporation (whose decision in writing shall be final) may decide, of the amount of the estimated cost of the whole work as shown by the tender for every day of that the work remains uncommented or unfinished, after the proper date. And further to ensure good progress during the execution of the work, the contractor shall be bound in all cases in which the time allowed for any work exceeds one month to complete and abide by the program.

- 1/8 of the work in ½ of the time
- 3/8 of the work in $\frac{1}{2}$ of the time
- 3/4 of the work in 3/4 of the time

of detailed progress laid down by the Engineer-in-Chief.

The following proportions will usually be found suitable.

- In 1/10, ½, ¾, of the time reasonable progress of the earth work should be 1/6, ½, ¾ of the total value of the work should be done.
- In 1/10, ½, ¾ of the time reasonable progress of masonry work should be 1/6, ½, ¾ of the total value of the work should be done.

Similar procedure should be followed in other items also.

In the event of contractor failing to comply with this condition he shall be liable to pay as compensation an amount equal to one percent or such small amount as the Commissioner, Nashik Municipal Corporation (whose decision in writing shall be final) may decide of the said estimated cost of the whole work or for incomplete work provided that the total amount of compensation to be paid under the provision of this clause shall not exceed 10 percent of the estimated cost of the work as shown in the tender

Action when whole Security Deposit is Forfeited

Clause 3: - In any case in which under any clause of this Contract the Contractor shall have rendered himself liable to pay compensation in accordance with Clause 2 above; or in the case of abandonment of the work owing to serious illness or death of the Contractor or any other cause, the CEO, NMSCDCL shall have power to adopt any of following course, as he may deem best suited to the interests of the NMSCDCL.

- a) To rescind the contract (of which rescission notice in writing to the Contractor under the hand of the Engineer shall be conclusive evidence and in that case the security deposit of the Contractor shall stand forfeited and be absolutely at the disposal of NMSCDCL.
- b) To carry out the work or any part of the work departmentally debiting the Contractor with the cost of work expenditure incurred on tools and plant and charges on additional supervisory staff including the cost of work charged establishment employed for getting the unexecuted part of work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates if it had been carried out by the Contractor

> under the terms & conditions of his contract the certificate of the Engineer as to the costs and other allied expenses, so incurred and as the value of the work so done departmentally shall be final and concessive evidence against the Contractor.

c) To order that work of the Contractor be measured up and to take such part there of as shall be unexecuted out of his hands and to give it to another Contractor to be completed, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of Work Charged Establishment and cost of the work charge Agency will be debited to the Contractor and the value of the work done or executed through the new Contractor shall be credited to the Contractor in all respects and in the same manner and at the same rates as if it has been carried out by the Contractor under the terms of his contract. The certificate of the Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work so done shall be final and conclusive against Contractor.

In case the contract shall be rescinded under clause (a) above the Contractor shall not be entitled to recover or be paid any sum for work therefore actually performed by him under this contract unless and until the Engineer shall have certified in writing the performance of the works and the amounts payable to him in respect and he shall only be entitled to be paid the amounts so certified. In the event of either of the course referred to in clauses (b) or (c) being adopted and the cost of the work executed departmentally or through the new Contractor and other allied expenses exceeding the value if such work credited to the Contractors the amount to excess shall be deducted from balance due to the Contractor by NMSCDCL under the contract or otherwise howsoever or from the Security Deposit or the Sale Proceeds thereof provided, however, that the work/ contract shall have no claim against NMSCDCL even if the certified value of the work done departmentally or through a new Contractor exceeds the certified cost of such work and allied expenses provided always the whichever of the three course mentioned in clause (a), (b) or (c) is adopted by the Engineer, the Contractor shall have no claim to compensation for any loss sustained by him reason of him having purchased & produced materials or entered into any engagements, or made any advances on account of or with a view to the execution of the work or the performance of the contract.

Action when the progress of any particular portions of the work is unsatisfactory

Clause 4: - If the progress of any particular portion of the work is unsatisfactory, the Engineer shall not withstanding that the general progress of the work is in accordance with the conditions mentioned in clause 2, be entitled to take action under clause 3 (b) of this GCC after giving the Contractor 10 days' notice in writing. The Contractor will have no claim for compensation, or any loss sustained by him owing to such action.

Contractor remains liable to pay compensation if action not taken under Clause 3 and 4 Clause 5: - In any case in which any of the powers conferred upon the Engineer by clauses 3 and 4 hereof shall have become exercisable and the same shall not have been exercised, the non-exercisable thereof shall not constitute a waiver of any of the conditions hereof and such powers shall not withstanding be exercisable in the event of any future case of default by the Contractor for which under any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the Contractor for past and future compensation shall remain unaffected.

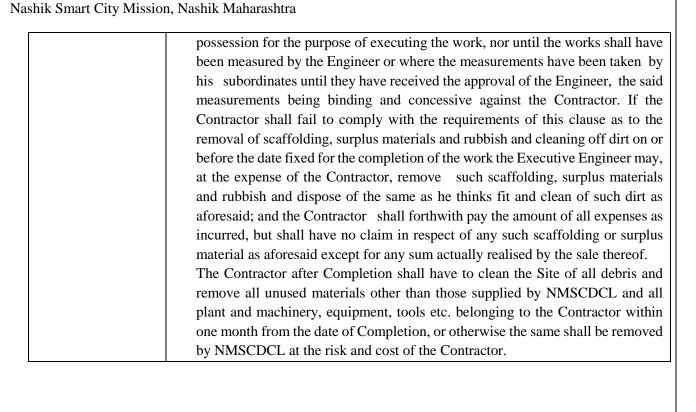
Power to take possession of or require removal of/or sell Contractor's plant. In the event of Engineer taking action under sub-clause (a) or (c) of clause 3 of this Agreement he may if he so desires, take possession of all or any tools, plant, materials and stores, in or upon the works or the site thereof or belonging to the Contractor or procured by him and intended 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 contract rates not being applicable at current market rates, to be certified by the Engineer whose certificate thereof shall be final. In the alternative the Engineer may, after giving notice in writing to the Contractor, clerk of the works, foreman or other authorised agent require him to remove such tools, plant, materials or stores from the premises within a time to be specified in such notice, and in the event of the Contractor failing to comply with any such requisition, the Engineer 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 respect, and the certificate of the Engineer as to the expense of any such sale shall be final and conclusive against the Contractor.

Extension of time

Clause 6: - If the Contractor shall desire an extension of the time for completion of work on account of his having been unavoidably hindered in its execution or on any other ground, he shall apply in writing to the Engineer before the expiration of the period stipulated in the tender or before the expiration of 30 days from the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred, which is earlier ever and the Engineer may, if in his opinion there are reasonable grounds for granting an extension as he thinks necessary or proper. The decision of the Engineer in this matter shall be final. The time limit for the Completion shall be extended in the proportion that the increase in its cost occasioned by alterations, or additions bears to the cost of the original contract work, and the certificate of the Engineer as to such proportion shall be conclusive.

Final Certificate/ Completion Certificate

Clause 7: - On completion of the work, the Contractor shall be furnished with a certificate by the Engineer of such completion, but no such certificate shall be given nor shall the work be considered to be completed until the Contractor shall have removed from the premises on which the work shall have been executed all scaffolding, surplus materials and rubbish and shall have cleaned of the dirt from all wood work, doors, windows, walls, floor or other parts of any building in or upon which the work has been executed or of which he may have been



RFP in relation to Selection of a Contractor for Godavari Riverfront Development in ABD Area under

Payment on intermediate certificate to be regarded as advances.

Clause 8: - No payment shall be made for any work estimated to cost less than Rupees one thousand till after the whole of work shall have been completed and a certificate of completion given. Payment of intermediate amount shall be regarded as payments by way of advance against the final payment and not as payments for Work actually done and completed.

Intermediate payment shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or be considered as an admission of the due performance of the Contractor any part thereof, in any respect or the occurring of any claim.

No payment shall be made for any Works, estimated to cost less than INR 1000/-(Rupees One Thousand only) till such Work has been approved by the Engineer. But in the case of Works estimated to cost more than INR 1000/- (Rupees One Thousand only) the Contractor shall on submitting a monthly bill therefore be entitled to receive payment proportionate to the part of the Work then approved and passed by the Engineer-in-Charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the Contractor. All such intermediate payments shall be regarded as payment by way of advance against the final payment only and not as payment for Work actually done and completed and shall not preclude the Engineer-in-Charge from requiring any bad, unsound imperfect or unskillful work to be removed or taken away and reconstructed, or re-erected nor shall any such payment be considered as an admission of the due performance of the Contract or any part thereof in any respect or the occurring of any claim nor shall it conclude, determine or effect in any other way powers of the Engineer-in-Charge as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or effect the Contract. The final bill shall be submitted by the Contractor within one month of the date fixed for the completion of the Work, otherwise the Engineer-in-Charge's certificate of the measurements and of the total amount payable for the Work shall be final and binding on all Parties.

Clause 8A: - In the event of delay in intermediate payment, the Contractor/ agency shall not delay /stop work; and the work shall be completed in the stipulated time period.

Payment of
Reduced Raates on
account of items of
work not accepted
as completed to be
at the discretion of
EIC.

Clause 9: - The rates for several items of work estimated to cost more than Rs. 1000 agreed to within shall be valid only when the item concerned is accepted as having been completed fully in accordance with the sanctioned specifications. In case where the items of work are not accepted as so completed, the Engineer may make payment on account of such items at reduced rates as he may consider reasonable in the preparation of final or on account bills.

Bills to be submitted monthly.	Clause 10: - A bill shall be submitted by the Contractor each month on or before the date fixed by the Engineer for all work executed in the previous month, and the Engineer shall take or cause to be taken the requisite measurement for the purpose of having the same verified, & the claim, so far as it is admissible, shall be adjusted, if the Contractor does not submit the bill within the time fixed as aforesaid, the Engineer may depute a sub-ordinate to measure up the said work in the presence of the Contractor or his duly authorised agent whose counter signature to the measurement list shall be sufficient warrant and the Engineer may prepare a bill from such list which shall be binding on the Contractor in all respect.
Bills to be on printed form.	Clause 11: - The Contractor shall submit his bills on his own the printed form. The manner of preparation of bills should be according to the routine official procedure.
	Clause 12: - If the specification or estimate of the works provides for the use of any special description of materials to be supplied from the stores of the NMSCDCL or if it is required that, the Contractor shall use certain stores to be provided by the Engineer (such materials) and stores, and the prices to be charged therefor, being so far as practicable for convenience of the Contractor but not so as in any way to control the meaning or effect of this Contractor, the Contractor shall be supplied with such materials and stores as may be required from time to time to be used by him for the purpose of the contract only, and the value of the full quantity of the materials and stores so supplied shall be set off or deducted from any sums then due or thereafter to become due to the Contractor under the contract, or otherwise, from the Security Deposit. All materials supplied to the Contractor shall remain the absolute property of NMSCDCL and shall on no account be removed from the site of the work, and shall at all time be open to inspection by the Engineer. Any such materials unused and in perfectly good condition at time of completion or determination of the contract shall be returned to the NMSCDCL store. If the Engineer requires by a notice in writing given under his hand by, the Contractor shall not be entitled to return any such materials except with consent of the Engineer and he shall have no claim for compensation on account of any such material supplied to him as aforesaid but remaining unused by him or for any wastage in or damage to any such materials.
Works to be executed in accordance with specification drawings orders etc.	Clause 13: - The Contractor shall execute the whole and every part of the work in the most substantial and workman like manner, and both as regards materials and in every other respect in strict accordance with specifications. The Contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instruction in writing relating to the work signed by the Engineer and lodged in his office and to which the Contractor shall be entitled to have access for the purpose of inspection at such office, or on the site of works during office hours.

Clause 13(a): - The Contractor will be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of accepted tender alongwith work orders free of cost. Further copies of contract drawings and working drawings if required by him shall be supplied at the rate of Rs. 25 per contract drawings and Rs. 5/- per working drawing except where otherwise specified.

Alteration in specifications and designs not to invalidate contract.

Clause 14: - The Engineer shall have power to make any alterations in or additions to the original specifications, drawings, designs and instructions that may appear to him to be a necessary or advisable during the progress of the work, and the Contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing signed by Engineer and such alterations should not invalidate the contract and any additional work which the Contractor may be directed to do in the manner above specified as part of the work shall be carried out by the Contractor on the same condition in all respects on which he agreed to do the main work and at the same rates as are specified in the tender of main work. And if the additional and altered work includes any class of work for which no rate is specified in this contract, such class of work shall be carried out at the sanctioned rates of the D.S.R.

Rates for works not entered for schedule of rates of the district.

If the additional or altered work for which no rate is entered in the schedule of rates the Division, is ordered to be carried out before the rates are agreed upon, then the Contractor shall, within 7 days of the date of receipt by him of the order to carry out the work, inform the Engineer of the rate which his intention to charge for such class of work and if the Engineer does not agree to this rate, he shall by notice in writing be at liberty to cancel his order to carry out such class of work, and arrange to carry out in such manner as he may consider advisable, provided always that the Contractor shall commence work or incur any expenditure in regard thereto before the rates shall have been mentioned as lastly herein before mentioned, then in such case he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination of the rate as aforesaid according to such rates or rate as shall be fixed by the Engineer. In the event of dispute, the decision of CEO, NMSCDCL will be final.

Extensions of time in consequence of additions or alterations.

Where, however the work is to be executed according to the designs, drawings and specification recommended by the Contractor and accepted by the competent authority the alterations above referred to shall be within the scope of such designs, drawings and specifications appended to the tender.

The time limit for the completion of the work shall be extended in the proportion that the increase in its cost occasioned by alteration or condition bears to the cost of the original contract work and the certificate of the Engineer as to such proportion shall be conclusive.

No Claim to any payments or compensation for alteration In/or restriction of work.	Clause 15: 1)- If at any time after the execution of the contract documents the Engineer shall for any reason whatsoever (about default on the part of the Contractor for which he is entitled to rescind the contract) desire that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out at all, he shall give to the Contractor a notice in writing of such desire and upon the receipt of such notice the Contractor shall forthwith, suspend or stop the work wholly or in part as required after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof provided that the decision of the Engineer as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the Contractor. The Contractor shall have no claim or any payment or compensation what so ever by reason of or in pursuance of any notice as aforesaid on account of any suspension stoppage or curtailment expect to the extent specified hereinafter.
	2) Where the total suspension of work ordered as aforesaid for a continuous period exceeding 90 days the Contractor shall be at liberty to withdraw from the contractual obligations under the contract so far it pertains to the unexecuted part of the work by giving a 90 days prior notice in writing to Engineer, within 30 days of the expire of the said period of 90 days of such intention and requiring the Engineer to record the final measurements of the work already done and requiring the Engineer to record the final bill. Upon giving such notice the Contractor shall be deemed to have been discharged from his obligation to complete the remaining unexecuted work under this contract. On receipt of such notice the Engineer shall proceed to complete the measurement and such payment as may be finally due to the Contractor within a period of 90 days from the receipt of such notice in respect of the work already done by the Contractor, such payment shall not in any manner prejudice the right of the Contractor to any further compensation under the remaining provisions of this clause.
	3) Where the Engineer required the Contractor to suspend the work for a period in excess of 30 days at any time or 60 days in the aggregate, the Contractor shall be entitled to apply to Engineer within 30 days of the resumption of work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him, in respect of working machinery rendered idle on the site or on the account of his having had to pay the salary to wages of or labour engaged by him during the said period of suspension, provided always that the Contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages for the first 30 days whether consecutive or in the aggregate of such suspension or in whatever in the aggregate of such suspension or in respect of any suspension whatever occasioned by unsatisfactory work or any other default on his part. The decision of the Engineer in this regard shall be final and conclusive against the Contractor.

No claim to compensation on account of loss due to delay in a) supply of b) materials by c) **NMSCDCL** d) Time limit for unforeseen claim. Action and

Clause 15: 4) - The Contractor shall not be entitled to claim any compensation from NMSCDCL for the loss suffered by him on account of delay by NMSCDCL in the supply of materials by NMSCDCL or from its stores, where such delay is caused by-

- Difficulties relating to the supply of railway wagons.
- Force majeure.
- Act of God.
- Act of enemies of the State or any other reasonable cause beyond the control of NMSCDCL.

In case of such delay in the supply of materials NMSCDCL shall grant such extension of time for the completion of the works as shall appear to the Engineer to be reasonable in accordance with the circumstances of the case. The decision of the Engineer as to the extension of time shall be accepted as final by the Contractor.

Clause 16: - Under no circumstances whatever shall the Contractor be entitled to any compensation from NMSCDCL on any account unless the Contractor shall have submitted a claim in writing to the Engineer within one month of the cause of such claim occurring.

compensation payable in case of bad work.

Clause 17: - If any time before security deposit or any part thereof is refunded to the Contractor it shall appear to the Engineer or his subordinate in charge of the work, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of inferior quality, or that any materials or article provided by him for the execution of the work are unsound, or of a quality inferior to that contracted for, or are otherwise not in accordance with the contract, it shall be lawful for the Engineer to intimate this fact in writing to the Contractor and then notwithstanding the fact that the work, materials or articles complained or may have been inadvertently passed, certified and paid for, the Contractor shall be bound forthwith to rectify, or remove any reconstruct the work so specified in whole or in part, as the case may require or if so required, shall remove the materials or articles so specified and provided other proper and suitable materials or articles at his own charges and cost. In the event of his failing to do so within a period to be specified by the Engineer - in - charge in the written intimation aforesaid, the Contractor shall be liable to pay compensation at the rate of one per cent on the amount of the estimate for everyday not exceeding 10 days, during which the failure so continues and in the case of any such failure the Engineer - in - charge may rectify or remove and re-execute the work or remove and replace the materials or articles complained of as the case may be at the risk and expense in all respects of the Contractor, should the Engineer- in- charge consider that any such inferior work or materials as described above may be accepted or made use of, it shall be within his desecration to accept the same at such reduced rates as he may fix therefore.

Nashik Municipal Smart City Development Corporation Limited

Document No.: MAH-NAS-032-053-RFP-V02-01

Work to be open to inspection.

Clause 18: - All works under or in course of execution in pursuance of the contract shall at all time be open to the inspection and supervision of NMSCDL, the Engineer and/or their appointed persons, and the Contractor shall at all times during the usual working hours, and at all other times at which responsible notice of the intention of the Engineer or his subordinate to visit the work shall have been given to the

Contractor or responsible agent to be present.

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

Notice to be given before works is covered up.

Clause 19: - The Contractor shall give not less than 5 (five) days' notice in writing to the Engineer or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Engineer or his subordinate in charge of the work and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or consent obtained, the same shall be uncovered at the Contractor's expense and default thereof payments or allowance shall be made for such work or for the materials with which the same was executed.

Contractor liable for damage done and for imperfections

Clause 20: - If during the period of Defect Liability of 60 (sixty) months from the date of completion as certified by the Engineer pursuant to Clause - 7 of the GCC, the said work is defective in any manner, whatsoever, the Contractor shall forthwith on receipt of notice in that behalf from the Engineer, duly commence execution and completely carry out at his costs in every respect all the work that may be necessary for rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portions strictly in accordance with and in the manner prescribed and under the supervision of the Engineer. In the event of the Contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefore in the said notice, and/ or to complete the same as aforesaid as required by the said notice, the Engineer, shall get the same executed and carried out departmentally or by any other agency at the risk on account and at the cost of the Contractor shall forthwith on demand pay to the NMSCDCL the amount of such costs, charges and expenses sustained or incurred by the NMSCDCL of which the certificate of the Engineer shall be final and binding on the Contractor. Such costs, charges and expenses shall be deemed to be arrears of property Tax, and in the event of the Contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of the NMSCDCL, the same may be recovered from the Contractor as arrears of Property Tax. The NMSCDCL shall also be entitled to deduct the same form any amount which may then be payable or which may thereafter become payable by the NMSCDCL to the Contractor either in respect

of the said work or any other work whatsoever or from the amount of security deposit retained by the NMSCDCL. Clause 21: - The Contractor shall supply at his own cost all materials, (except such Contractor to special material, if any as may in accordance with the contract, supplied from the supply plant, NMSCDCL Stores), plant, tools, appliances, implements, ladders, cordage, tackle, ladders, scaffolding and temporary work, requisite or proper for the proper execution of the scaffolding etc. work, whether in the original, altered or substituted form and whether included in the specifications or other documents forming part of the contract or referred or in these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer 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. And is liable for 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 damages arising counting, weighting and assisting in the measurement or examination at any time from and from time to time of the work or the materials. Failing this the same may be nonprovisions of provided by the Engineer at the expense of the Contractor and the expenses may be lights fencing etc. deducted from any money due to the Contractor under the contract or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The Contractor shall provide all necessary fencing and lights required to protect the public from accident, and shall also be bound to bear the expenses or defense of every suit action or other legal proceedings that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay any damages and costs which may be awarded in and such suit, action or proceeding by any such person, or which may with the consent of the Contractor be paid for compromising any claim by any such person. Clause 21 A: - The Contractor shall provide suitable scaffolds and working platforms, gangways and stairways and shall comply with the following regulations in connection therewith. 1. Suitable scaffolds shall be provided for workmen for all works that can not be safely done from a ladder or by other means. 2. A scaffold shall not be taken down or substantially altered except 2.1. Under the supervision of a competent and responsible person And 2.2. As far as possible by competent worker possessing adequate experience in this kind of work. 3. All scaffolds and appliances connected there with and all ladders shall -

- 3.1. be of sound material;
- 3.2. be of adequate strength having to the loads and strains to
- 3.3. which they will be subjected, and
- 3.4. be maintained in proper condition.
- **4.** Scaffolds shall be so installed that no part thereof can be displaced in consequence of normal use.
- **5.** Scaffolds shall not be overloaded and so far as practicable shall be taken on ensure the strength and stability of the scaffolds.
- **6.** Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.
- 7. Scaffolds shall be periodically inspected by a competent person.
- **8.** Before allowing a scaffold to be used by his workmen the Contractor shall, whether the scaffold has been erected by his workmen or not, take steps to ensure that it complies fully with the regulation herein specified.
- 9. Working platforms, gangways and stairways shall
 - 9.1. be so constructed that no part thereof can sag unduly or unequally;

be so constructed maintained, having regard to the prevailing conditions as to reduce as far as practicable risks of persons tripping or slipping; and 9.3.be kept free from any unnecessary obstruction.

- **10.** In the case of working platforms, gangways, working places and stairways at a height exceeding 4 meters (to be specified);
 - 10.1. every working platforms and every gangway shall be closely boarded unless other adequate measures are taken to ensure safety;
 - 10.2. every working platform and gangway shall have adequate width; and
 - 10.3. every working platform, gangway, working place & stairway shall suitably fenced.
- 11. Every opening in the floor of a building or in working platform shall, except for the time and to the extent required to allow the access or persons or the transport or shifting of materials be provided with suitable means to prevent the persons or materials.
- **12.** When persons are employed on a roof where there is a danger of falling from a height exceeding 4 meters suitable, precautions shall be taken to prevent the fall of persons or material.

Nashik Municipal Smart City Development Corporation Limited 293 \mid P a g e

RFP in relation to Selection of a Contractor for Godavari Riverfront Development in ABD Area under Nashik Smart City Mission, Nashik Maharashtra 13. Suitable precautions shall be taken to prevent persons being struck by articles, which might fall from scaffolds or other working places. 14. Safe means of access shall be provided to all working platforms and other working places. Clause 21 B: The Contractor shall comply with the following regulations as regards the Hoisting Appliances to be used by him. (a) Hoisting machines and tackle, including their attachments, anchorages and supports shall. a be of good mechanical construction, sound materials and adequate strength and free patent defect; and **b** be kept in good repair and in good working order. (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patent defect. (c) Hosting machines and tackle shall be examined and adequately tested after erection on the site and before use and be re-examined in position at intervals to be prescribed by the Engineer-in-charge. (d) Every chain ring, hook, shackle, swivel and pulley block used in hoisting or as a means of suspension shall be periodically examined. (e) Every crane driver or hoisting appliance operator shall be properly qualified. (f) No person who is below the age of Eighteen years shall be in control of any hoisting machine including any scaffold which or give signal to the operator. (g) In the case of every hoisting machine and of every chain ring, hook, shackle, swivel and pulley block used in hoisting or lowering or as a means of suspension, the safe working load shall be ascertained by adequate means. (h) Every hoisting machine and all gear referred to in preceding regulation shall be plainly marked with the safe working load. (i) In the case of a hoisting machine having variable safe working and each safe working load and the conditions under which it is applicable shall be clearly indicated. (j) No part of any hoisting machine or any gear referred to in regulation (7) above shall be loaded beyond the safe working load except for the purpose of testing.

	(k) Motors, gearing, transmissions, electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safe guards.(l) Hoisting appliance shall be provided with such means as will reduce to a						
	minimum the risk of the accidental descent of the load.						
	(m) Adequate precaution shall be taken in reduce to a minimum the risk of any part of a suspended load becoming accidentally displaced.						
Measures for	Clause 22: - The Contractor shall not set fire to any standing jungle trees, brushwood						
prevention of fire	or grass without a written permit from the Engineer.						
	When such permit is given and also in all cases when destroying cut or dug up						
	trees, brushwood, grass, etc. by fire, the Contractor shall take necessary measure						
	to prevent such fire spreading to or otherwise damaging surrounding property.						
	The Contractor shall make his own arrangements for drinking water for the labour employed by him						
Liability of	Clause 23: - Compensation for all damage done intentionally or unintentionally						
Contractor for	by Contractor's labour whether in or beyond the limits of Government property						
any damage done	including any damage caused by the spreading of fire mentioned in clause 22 shall						
in or out side	be estimated by the Engineer or such other officer as he may appoint and the						
work area.	estimate of the Engineer subject to the decision of the CEO, NMSCDCL on appeal						
	shall be final and the Contractor shall be bound to pay the amount of the assessed						
	compensation on demand failing which the same will be recovered from the						
	Contractor as damage in the manner prescribed in clause for reduced by the Engineer from any sums that may be due or become due in Government to the						
	Contractor under his contract court in or otherwise.						
	The Contractor shall bear the expenses of defending any action or other legal proceedings that may be brought by any person for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequence.						
Employment of	Clause 24: - The employment of female labourers on works in the neighbourhood						
female labour	of soldier's barracks should avoided as far as possible.						

Document No.: MAH-NAS-032-053-RFP-V02-01

Work not to be sublet.						
	The Contractor may however, sub-contract a portion of the Scope of Project to any third party or entity, with the prior written permission of the Engineer, which permission may be granted at the sole discretion of the Engineer and subject to such terms and conditions as it deems fit. Notwithstanding any such subcontracting by the Contractor, the Contractor shall, at all times, be responsible and liable for all its obligations under this Contract notwithstanding anything contained in any other agreement that it enters into with any third party or entity, and no default under any agreement shall excuse the Contractor from its obligations or liability hereunder.					
Contract may be rescinded and security deposit forfeited for subletting it without approval of for bribing a public officer or if Contractor becomes insolvent.	If the Contractor shall assign or sublet his contract or attempt to do so or become insolvent or commence any proceeding to get himself adjudicated and insolvent of make & composition with his creditors, or attempts so to do or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise shall either directly or indirectly be given, promised, offered by the Contractor or any of his servants or agents or agent to any public officer or person in the employment of NMSCDCL in any way for 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 may thereupon by notice in writing rescind the contract and the security deposit of the Contractor shall there upon stand forfeited and be absolutely at the disposal of NMSCDCL and the same consequences shall ensure as if the contract had been rescinded under clause 3 hereof and in addition the Contractor shall not be entitled to recover or be paid for any work there for actually performed under the contract.					
Sum payable by way of compensation to be considered as reasonable compensation without reference to actual loss.	Clause 26: - All sum payable by a Contractor by way of compensation under any of these conditions shall be considered as a reasonable compensation to be applied to the use of NMSCDCL without reference to the actual loss or damage sustained and whether any damage has or not been sustained.					
Charges in the constitution of firm to be notified.	Clause 27: - In the case of tender by partners any changes in the constitution of a firm shall be forthwith notified by the Contractor to the Engineer for his information. The power of attorney shall vest in the name of the same person until the work is completed.					

Works to under direction of the CEO, NMSCDCL	Clause 28: - All work to the executed under the contract shall be executed under the direction and subject to the approval in all respects of the CEO, NMSCDCL for the time being, who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.
Decision of the CEO, NMSCDCL	Clause 29: - Except where otherwise specified in the contract and subject to the powers delegated to him by NMSCDCL under the code rules have in force, the decision of the CEO, NMSCDCL for the time being shall be final, conclusive, and binding on all parties to the contract upon all question relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work, or as to any other question, claim, right matter or thing whatsoever, if any way arising out of, or relating to the contract, designs drawings, specifications estimates, instructions, orders or these conditions, or otherwise concerning the work or the execution, or failure to execute the same whether arising, during the progress of the work, or after the completion or abandonment thereof.
Stores of European or American manufacture not to be obtained from NMSCDCL	Clause 30: - The Contractor shall not obtain from the NMSCDCL stores and articles of European or American manufacture which may be required for the work, or any part thereof or in making up any article required therefore or in connection therewith, unless he has obtained permission in writing from the Engineer to obtain such stores and articles elsewhere. The value of such store and article as may be supplied to the Contractor by the Engineer will be debited to the Contractor in his account at the rates shown in the schedule, in Form A attached to the contract and if they are not entered in the said schedule they shall be debited to him at cost price which for the purpose of this contract shall include the cost of carriage and all other expenses, whatsoever, which shall have been incurred in obtaining delivery of the same at the stores aforesaid.
Lump sums in estimates.	Clause 31: - When the estimate on which a tender is made includes lump sums in respect of parts of the work, the Contractor shall be entitled to payment in respect of their items of works in evolved or the part of the work in question at the same rates as are payable under this contract for each items, or if the part of work in question is not in the opinion of the Engineer capable of measurement, the Engineer may at his discretion determine the lump sum amount entered in the estimate and the certificate in writing of the Engineer shall be final and conclusive against the Contractor with regard to any sum or sums payable to him under the provision of this clause.
Action where no specification.	Clause 32: - In the case of any work for which there is no such specification as is mentioned in Appendix X, such work shall be carried out in accordance with directions of the Engineer, authorised in writing by the CEO, NMSCDL

Definition of work.	Clause 33: - The expression "Work" or "Works" where used in these conditions shall unless there be something in the subject or context repugnant to such construction, be construed to mean the work or works contracted to be executed under or in virtue of the contract, whether temporary or permanent and whether original, altered, substituted or additional.
Contractor's percentage whether applied to net or gross amounts of bill.	Clause 34: - The percentage referred to in the tender shall be deducted from or added to the gross amount of the bill before deduction the value of any stock issued.
Quarry fees and royalties.	Clause 35: - All quarry fees, royalties and ground rent for stocking materials, if any, should be paid by the Contractor. No claim will be entertained by NMSCDCL.
Compensation under the workmen's Compensation Act.	Clause 36: - The Contractor shall be responsible for and shall pay any compensation to his workmen payable under the Workmen's Compensation Act, 1923 (VIII of 1923), (hereinafter called the said Act) for injuries caused to the Workmen. If compensation is payable/ paid by NMSCDCL as principal under subsection (1) of section 12 of the said Act on behalf of the Contractor, it shall be recoverable by NMSCDCL from the Contractor under sub section (2) of the said section. Such compensation shall be recovered in the manner laid down in Clause 1 above.
Safety and Medical Aid to workmen	Clause 37 A: - The Contractor shall be responsible for and shall pay the expenses of providing medical aid to any workman who may suffer a bodily injury as a result of an accident, if such expenses are incurred by NMSCDCL the same shall be recoverable from the Contractor forthwith and deducted without prejudice to any other remedy of NMSCDCL from any amount due or that may become due to the Contractor.
	Clause 37 B: - The Contractor shall provide all necessary personal safety equipment and first aid apparatus available for the use of the persons employed on the site shall maintain the same condition suitable for immediate use at any time and shall comply with the following regulations in connection therewith. The workers shall be required to use the equipment so provided by the Contractor and the Contractor shall take adequate steps to ensure proper use of the equipment by those concerned. When work is carried out in proximity to any place where there is a risk of drowning, all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of nay person in danger. Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

	Clause 38: Excess quantity of any items shall be executed by prior permissions of the Engineer. The quantities shall be payable at accepted tender rates only.				
Employment or famine labour etc.	Clause 39: - The Contractor shall employ any famine, convict or other labour of a particular kind or class if ordered in writing to do so by the Engineer in charge.				
Claims for compensation for delay in starting the work.	Clause 40: - No Compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance works, on account of any delay in according sanction to estimates.				
Claims for compensation for delay in execution of work.	Clause 41: - No compensation shall be all owed for any delay in the execution of the work on account of water standing in borrow pits or compartments. The rates are inclusive of hard or cracked soil, excavation in mud, sub-soil water or water standing in borrow pits and no claim for an extra rate shall be entertained unless otherwise expressly specified.				
Entering upon or commencing any portion of work.	Clause 42: - The Contractor shall not enter upon or commence any portion of work except with the written authority and instructions of the Engineer or his subordinate in charge of the works. Failing such authority the Contractor shall have no claim to ask for measurements of work or payment of work.				
Minimum age of person employed the employment of donkey and/ or other animals and the payment of fair wages.	 Clause 43: a) The contractor shall provide supply of pure and wholesome water for the use of labour. This provision shall be at the rate of not less than 50 liters per head. No provision may be made where there is suitable flowing nalla, river or well within 500 meters of the camp. b) The contractor shall construct trench of semi-permanent latrines for the use of the labours. Such latrines shall be on the scale of not less than five per hundred persons in the camp. Separate latrines shall be provided for men and women. c) The Contractor shall not employ any person who is under age of 12 years. d) The Contractor shall not employ donkey or other animals with breaching or string or thin rope. The breaching must be of least three inches wide and should be tape (Nawar) e) No animal suffering from stores, lameness or emaciation or which is immature shall be employed on the work. f) The Engineer or his authorised person may remove from work any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by NMSCDCL for any delay caused in the work by such removal. 				

g) The Contractor shall pay fair and reasonable wages to the workmen employed by him in the contract undertaken by him. h) In the event of any dispute arising between the Contractor and his workmen on the grounds that the wages paid are not fair and reasonable the dispute shall be referred without delay to the Engineer who shall decide the same. The decision of the Engineer shall be conclusive and binding on the Contractor but such decision shall not in any way affect the condition of the contract regarding the payments to be made by NMSCDCL at the sanctioned tender rates. Clause 44: - Payment to Contractors shall be made by electronic payments or cheque Method of drawn on any treasury provided the amount exceeds INR 10/payment. Clause 45: - Any Contractor who does not accept these conditions shall not be Acceptance of granted the Works under this RFP. conditions compulsory before tendering for work. Clause 46: - The price quoted by the Contractor shall not in any case exceed the control price if any fixed by Government or reasonable price which is permissible for him to charge a private purchaser for the same class and description, the controlled price or the price permissible under Hoarding and Profiteering Ordinance, 1943 as amended from time to time. If the price quoted exceeds the controlled price or the price permissible under Hoarding and Profiteering Prevention Ordinance, the Contractor will specifically mention this fact in his tender along with the reason for quoting such higher prices. NMSCDCL at its discretion will in such case exercise the right of revising the price at any stage so as to confirm with the controlled price on the permissible under the Hoarding and Profiteering Prevention Ordinance. This discretion will be exercised without prejudice to any other action that may be taken against the Contractor. Clause 47: - The rates to be quoted by the Contractor must be exclusive of GST. Payment of GST GST, as per prevalent Government regulations will be paid extra and at actual at the time of payment Responsibility of payment of GST lies with the Contractor at its sole cost and expense. Clause 48: - In case of materials that may remain surplus with the Contractor, from those issued for the work contracted for, the date of ascertainment of the materials being surplus will be taken as the date of sale for the purpose of GST and the GST be recovered on such sale. Clause 49: - In view of the difficult position regarding the availability of the Foreign exchanges, on foreign exchange will be released by the Dept. for the purpose of the Plant and Machinery required for the execution of the work Contractor.

RFP in relation to Selection of a Contractor for Godavari Riverfront Development in ABD Area under

Nashik Smart City Mission, Nashik Maharashtra

Clause 50: - "Out of the skilled and unskilled labour to be employed				
	Contractor on the work, at least eight per cent of labour shall consist of persons			
	ordinarily residing in the district in which the site of the work is located. In case			
	sufficient labour from the district as aforesaid is not available, the Contractor shall			
	obtain written consent of the Engineer and the Collector of the District before			
	employing any person or persons ordinarily residing outside the district."			
	Clause 51: - The Contractors are bound to pay the labours according to the			
	Minimum Wages Act. 1948, applicable to their zone in accordance to the order			
	issued in Government P.W.D. Circular No. NW 4-10, dated December 5, 1958.			
	Any differentiation in the types of zone shall not entitle the Contractor any claims.			
	Clause 52: - Where the workers are required to work near machinery and are liable			
	to such accident they should not be allowed to wear loose clothes like Dhoti, Zabba			
	etc.			
	Clause 53: - "A Contractor shall comply with the provisions of the Apprentices			
	Act, 1961 and the rules and orders issued the reminder from time to time. If he fails			
	to do so his failure will be a breach of the contract and the Executive Engineer (P)			
	may in his discretion, Cancel the contract. The Contractor shall also be liable for			
	any pecuniary liability arising on account of any violation by him of the provisions			
	of the Act."			

ANNEXURE B: SPECIAL CONDITIONS OF CONTRACT

1. **DEFINITIONS**:

The following terms is used in this Contract shall have the meanings hereunder unless the context otherwise requires:

"Contract" shall mean the Contract Agreement executed between NMSCDCL and the Contractor for execution of the Works.

"Construction Period" means, as the case may be, with respect to:

- i. Part A, a period of 1 (one) year for beautification projects including civil works for cycle track, cobblestone paving, stone benches, signage's etc. and related works at Nashik, Maharashtra, as set out in Appendix X of the RFP; and/or
- ii. Part B, a period of 1 (one) year for beautification projects including landscaping and all related works at Nashik, Maharashtra, as set out in Appendix X of the RFP and/or
- iii. Part C, a period of 1 (one) year for beautification projects including electrical works and related works at Nashik, Maharashtra, as set out in Appendix X of the RFP.
- iv. Part D, a period of 1 (one) year for construction of Irrigation works and Mechanical woeks at Nashik, Maharashtra, as set out in Appendix X of the RFP.

"**Completion**" means that the completion of the execution of Part A, Part B, Part C and Part D by the Contractor pursuant to the issuance of the Completion Certificate by NMSCDCL in accordance with Clause 7 of the GCC.

"Completion Certificate" means the certificate issued by NMSCDCL to the Contractor certifying the completion of the execution of Part A, Part B, Part C and Part D by the Contractor under Clause 7 of the GCC.

"Completion Date" means with respect to:

i. Project (includes Part A, Part B, Part C and Part D), 1 (one) year inclusive of monsoon from the date of issuance of Work Order:

"Contract Price" shall mean the total amount payable to the Contractor for the Project as set out in Clause 3 of the SCC along with Clause 3 quoted by the Bidder in the RFP.

"Contract Period" means with respect to:

i. 6 (Six) year from the date of issuance of Work Order including the 1 (Year) Construction Period for Part A, Part B, Part C and Part D and 3 (three) years of O&M Period for Part B, Part C and Part D and DLP for Part A, Part C and Part D.

"**Defect Liability Period**" means the period of 5 (Five) years with respect to Part A, Part C and Part D- of the warranties provided by the Contractor, during which the Contractor is responsible for rectification of the defects.

"Disputed Invoice" shall have the meaning as set forth in Clause 3.4 of this SCC.

"**Drawing**" means the engineering data, drawings and the likes thereof provided to the Contractor for executing Works duly approved by NMSCDCL (with the stamp "Good for Construction") and includes any modifications of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by NMSCDCL (with the stamp "Good for Construction").

"Engineer-in-Charge"/ "Engineer" means the engineer appointed by NMSCDCL for the supervision and management of the Project.

Force Majeure Event" shall have the meaning as set forth in clause 35 of the SCC.

"GCC" means the General Conditions of the Contract entered upon between NMSCDCL and the Contractor in accordance with the PWD Manual in order to carry out the Works detailed under Appendix X of the RFP"

"Implementation Plan" means the implementation plan, prepared by the Contractor, consisting of quality assurance plant, safety plan, traffic management plan and such other plan(s) as may be required by the Contractor for undertaking this Project and duly approved by NMSCDCL in accordance with Clause 2.20 of the RFP read alongwith Clause 13 of the SCC. Implementation Plan shall form an integral part of this Contract.

"NMSCDCL" mean the Nashik Municipal Smart City Development Corporation Limited.

"NMC" means Nashik Municipal Corporation.

"O&M Manual" shall have the meaning as set out in Clause 21.2(d) of the SCC

"O&M Period" shall have the meaning as set out in Clause 21.1 of the SCC.

"Part A" shall have the meaning as set forth in clause 4.1 (a).

"**Part B**" shall have the meaning as set forth in clause 4.1 (b).

"Part C" shall have the meaning as set forth in clause 4.1 (c).

"**Part D**" shall have the meaning as set forth in clause 4.1 (d).

"Performance Security/Additional Performance Security" shall have the meaning as set forth in Clause 2.26 of the RFP read alongwith Clause 1 of the GCC.

"**Programme**" shall have the meaning as set forth in clause 36.1.

"Progress Report" shall have the meaning as set forth in clause 36.2.

"Project" means the infrastructure works and beautification works required for the integrated development of Project Goda comprising of Part A, Part B, Part C and Part D.:

"SCC" means the Special Conditions of Contract entered upon between NMSCDCL and the Contractor in order to carry out the Works detailed under Appendix X of the RFP"

"Scope of the Project" shall have the meaning as set forth in Appendix X of this RFP and collectively includes Part A, Part B, Part C and Part D.

"Site" means with respect to:

- Part A, Part B, Part C and Part D. a stretch of 2.5 km in retrofit area from Ramwadi Bridge to Talkuteshwar Bridge at Nashik, Maharashtra;
 - a) Spiritual core: From Holkar Bridge to Gadge Maharaj Bridge (Area excluding river basin: 12.5 acres);
 - b) Green Recreational at upper stream near Goda Park: From Ramwadi Bridge to Holkar Bridge (Area excluding river basin: 6.70 acres);
 - c) Open Recreational from Gadge Maharaj Bridge up to Talkuteshwar (Area excluding river basin: 13.25 acres).

"Take Over" means with respect to Part A, Part B, Part C and Part D., the successful handing over of the Project by the Contractor to NMSCDCL after the expiry of the Defect Liability Period pursuant to the issuance of the Take Over Certificate in accordance with clause 22.5 of the SCC.

"Take Over Certificate" means the certificate issued by NMSCDCL to the Contractor pursuant to Clause 22.5 of the SCC.

"Technical Specification" means the specifications as set out in Appendix XI of the RFP.

"Total Station" means an electronic/optical instrument used for surveying construction.

"Variation Order" has the meaning described to such term under clause 39.4 of the SCC, the Variation Order shall form a part of this Contract and shall be provided by and is enforced in the terms thereof unless specifically provided otherwise in the Variation Order.

"Works" or "Work" means the scope of work as set out in Appendix X of the RFP, to be executed by the Contractor, in accordance with the Technical Specifications and the terms and conditions of this Contract.

"Work Order" shall mean the letter issued after 15 (fifteen) days from the execution of this Contract by NMSCDCL subject to the approval of the Implementation Plan for handover of the Site to the Contractor.

2. INTERPRETATIONS

Document No.: MAH-NAS-032-053-RFP-V02-01

In this Contract, unless the context requires otherwise:

- a) Words indicating one gender include all genders.
- b) Words indicating the singular also include the plural and vice versa.
- c) Provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing.
- d) "Written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.
- e) The damages payable by either Party to the other, as set forth in this Contract, 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 ("Damages").
- f) The rule of construction, if any, that a contract should be interpreted against the Party responsible for the drafting and preparation thereof, shall not apply.
- g) References to any legislation or any provision thereof shall include amendment or reenactment 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;
- h) 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;
- i) 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;

- j) Whenever provision is made for the giving of notice, approval or consent by any Person, unless otherwise specified, such notice, approval or consent shall be in writing and the words "notify" and "approve" shall be construed accordingly; and
- k) The obligations which are binding on the Contractor under the Contract, shall be binding mutatis mutandis on any sub-contractor engaged by the Contractor during the Contract Period.

3. CONTRACT PRICE AND PAYMENT

3.1 NMSCDCL hereby agrees to pay to the Contractor for satisfactory discharge of its obligations under this Contract, an amount of INR [●] ("Contract Price"). The Contract Price shall be the full and complete payment for the Contractor's performance of the obligations under this Contract and includes all costs necessary for execution of the Works. The Contract Price shall be paid in accordance with this Clause 8 of the GCC read alongwith the this Clause of the SCC and in the manner provided in

3.2 **Mobilization Advance**

- a. Mobilization Advance not exceeding 10% of the tendered value may be given, if requested by the contractor in writing within one month of the order to commence the work at an interest rate of 10%.
- b. The Contractor shall execute not more than 4 (four) unconditional Bank Guarantees, valid for full period of construction in accordance with Appendix VIII-B of the RFP. The Bank Guarantee furnished shall be from a Nashik branch of a Nationalised Bank.
- c. The Mobilization Advance shall be repaid with percentage deductions by NMSCDCL of 20% of the Running Account Bill amounts payable monthly to the Contractor. Such deductions shall commence from the next Running Account Bill which follows either the stage where total of all such payments to the Contractor has reached not less than 20% of the Contract Price or 6 (Six) months from the date of payment of first instalment of advance, whichever period concludes earlier and shall continue until such time as the loan has been repaid, always provided that the loan shall be completely repaid prior to the expiry of the original time for completion.
- d. If the Mobilization Advance is not recovered by means of Clause c above, NMSCDCL shall be authorised to encash the Bank Guarantee in order to recover such Mobilization Advance amount. The Bank shall be obligated to pay the amounts due and payable under the Bank Guarantee without any demur, merely on a demand from the NMSCDCL stating that the amount claimed is due.

3.3 Final Payment

a. The Contractor shall supply the Engineer-in-Charge with a detailed account of the total amount that the Contractor considers payable for works under the Contract within 21 (twenty-one) days of issue of the Completion Certificate. If the account is not correct or complete, the Engineer-in-Charge shall issue within 45 (forty-five) days a schedule that states the scope of the corrections or additions that are necessary. If the Account is still unsatisfactory after it has been

- resubmitted, the matter shall be referred to the CEO, NMSCDCL, who shall decide on the amount payable to the Contractor after hearing the Contractor and the Engineer in Charge.
- b. In case the account is not received within 21 (twenty-one) days of issue of Certificate of Completion as provided in Clause 3.3 (a) above, the Engineer shall proceed to finalize the account and issue a final payment certificate within 28 (twenty-eight) days of issue of Completion Certificate.
- c. It is clarified that the 5% (five percent) of each payment to be made to the Contractor retained by NMSCDCL as Performance Security payable by the Contractor shall be paid in accordance with Clause 1 of the GCC after the successful completion of Defect Liability Period.
- d. Invoices for payment shall be submitted in printed form according to the routine official procedure and accompanied by such supporting evidence and information as NMSCDCL may reasonably require. The Invoices shall be submitted by the contractor each month on or before the date fixed by the Engineer-in-charge for all work executed in the previous month, and the Engineer-in-charge shall take or cause to be taken the requisite measurement for the purpose of having the same verified, and the claim, so far as it is admissible, shall be adjusted, if the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge may depute a sub-ordinate to measure up the said work in the presence of the contractor or his duly authorised agent whose counter signature to the measurement list shall be sufficient warrant and the Engineer-in-charge may prepare a bill from such list which shall be binding on the contractor in all respect.
- 3.4 In the event there is any discrepancy in the invoice provided by the Contractor to NMSCDCL, NMSCDCL shall give a written notice to the Contractor of such discrepancy in the invoice within 7 (seven) days of the receipt of the invoice. Such invoices shall be treated as disputed invoice ("**Disputed Invoice**").
- 3.5 NMSCDCL shall not make payment of the amount set out in the Disputed Invoice, if the Contractor has notified any discrepancy with respect to certain entries in the Disputed Invoice till such time as the discrepancy is resolved by the Parties in accordance with Clause 3.4 above. In the event the discrepancy is resolved, NMSCDCL shall pay the outstanding disputed amounts without any interest being charged by the Contractor.
- 3.6 Upon receipt of a notice from the Contractor notifying any discrepancy in the Disputed Invoice, shall provide documentary evidence to NMSCDCL within 7 (seven) days if the Contractor wish to dispute the discrepancy. In the event that the discrepancy raised by NMSCDCL in relation to the Disputed Invoice is accepted by the Contractor, the Contractor shall provide a rectified invoice to NMSCDCL to the extent of such discrepancy. In the event that the Parties are unable to resolve the discrepancy arising out or in connection with the Disputed Invoice, the Parties shall use their best efforts to settle such dispute, amicably and in good faith within 15 (fifteen) days of occurrence of such dispute, failing which such dispute shall be settled in accordance with Clause 32 of this SCC.

3.7 **Right to Withhold**

NMSCDCL may refuse to approve any payment because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously approved

and paid to such extent as may be necessary in the opinion of the Engineer to protect NMSCDCL from loss because:

- (a) the Works are defective;
- third party claims have been filed or there is reasonable evidence indicating probable (b) filing of such claims;
- of the Contractor's failure to make payment properly to sub-contractor or for labour, (c) materials or equipment;
- of damage to another Contractor, or to the property of other caused by the Contractor; (d)
- of reasonable doubt that the Works cannot be completed for the unpaid balance of the (e) Contract Price:
- of reasonable indication that the Works will not be completed within the Completion (f)
- (g) of the Contractor's neglect or unsatisfactory execution of the Work including failure to clean up. Once the reasons that enable or require the Engineer to withhold such payments are removed, payment will be made for amounts withheld due to such reasons to the extent the Contractor is entitled to.

4. SCOPE OF THE PROJECT

- 4.1 Under this Contract, the scope of the Project ("Scope of the Project") shall mean and include:
 - (a) Beautification Projects including landscaping, cycle track, cobblestone paving, stone benches, signages etc. and related works including O&M Period at Nashik, Maharashtra as set out in Appendix X ("Part A, Part B, Part C and Part D.")
 - performance and fulfilment of all other obligations of the Contractor in accordance (b) with the provisions of this Contract and matters incidental thereto or necessary for the performance of any or all of the obligations of the Contractor under this Contract
- 4.2 The Engineer-in-charge may at any time give directions as to the order and manner in which the several parts of work shall be carried out and the contractor shall at all times subject to the approval of the Engineer, strictly observe such directions.

5. TIME FOR COMMENCEMENT AND TERM

5.1 This Contract shall become effective from the date of Work Order.

5.2 Commencement

The Contractor shall commence the execution of the Works immediately after the issuance of Work Order in accordance with the terms and conditions of this Contract.

6. **TERM**

- 6.1 Subject to provisions of the RFP, this Agreement shall be for a period of 6 (six) years [Construction plus O&M period)] years commencing on the date of issuance of the Work Order ("Term") consisting of:
 - (a) Part A, 1 (one) year from the date of issuance of Work Order; and 5 (five) years defect liability period after successful completion of work.
 - (b) Part B, 1 (one) year from the date of issuance of Work Order; and 3(three) years O&M period.
 - (c) Part C, 1 (one) year from the date of issuance of Work Order; and 3 (three) years O&M period and 5 (five) years defect liability period after successful completion of work.
 - (d) Part D, 1 (one) year from the date of issuance of Work Order; and 3 (three) years O&M period and 5 (five) years defect liability period after successful completion of work.
- z6.2 The time period for completion of work shall be strictly adhered to. No extension of time shall be considered unless specifically granted under Clause 6 of the GCC. The Contractor is free to deploy additional manpower/machinery jack up barges etc., at its own cost, to complete the work within stipulated time.

7. TAXES AND DUTIES

- 7.1 The rates shall be excluding of Goods and Service Tax. Income tax at prevailing rates and surcharge as applicable thereon shall be deducted at source by NMSCDCL in accordance with Income Tax Act, 1961.
- 7.2 The percentage referred to in the tender shall be deducted from or added to the gross amount of the bill before deduction the value of any stock issued.
- 7.3 All quarry fees, royalties and ground rent for stocking materials, if any, should be paid by the contractor. No claim will be entertained by NMSCDCL.

8. **CONTRACTOR'S OBLIGATIONS**

- 8.1 The Contractor will prepare and submit the Implementation Plan to NMSCDCL for its review and comments within 15 days from the Effective Date.
- 8.2 The Contractor shall construct, install, fix, test and commission the Works in accordance with the Implementation Plan duly approved by NMSCDCL.
- 8.3 The Contractor will have to obtain all clearances necessary for execution and completion of the work at its own expense. NMSCDCL will assist the Contractor in obtaining these clearances. However, NMSCDCL will not be responsible for any delays in obtaining such clearances. It shall be the responsibility of the Contractor to keep all the requisite clearances/permits/permissions necess by whatever name called, for operating the facility valid at all points of time during the Contract period.

- 8.4 The Contractor shall be deemed to have carefully studied the scope of work as set out in Appendix X and the Site conditions, Technical Specifications, various other data and shall be deemed to have visited the Site and to have fully informed itself regarding the local conditions. The Contractor shall be deemed to have carried out its own surveys and investigations and assessment of the Site conditions. For the avoidance of doubt, any data made available by NMSCDCL to the Contractor is for information only and NMSCDCL under no circumstances will entertain claims with respect to the authenticity and/or accuracy of the information provided.
- 8.5 The Contractor shall provide free of charge all labour and material required and equipment as may be required for lining out, surveying, inspection decided by the Engineer as considered necessary for the proper and systematic execution of the Work.
- 8.6 The Contractor shall at all times, be responsible for any damages, trespasses committed by his agent and works people in carrying out of work, unless such damage or trespasses is authorised by the Engineer-in-charge in writing.

8.7 **Supervision and Superintendence**

The Contractor shall at all times till the Completion Date supervise and direct the execution of Works efficiently and with its best skill and attention in accordance with the Drawings. The Contractor shall be solely responsible for means, methods, techniques, procedures and sequences of the execution of Works. The Contractor shall co-ordinate all parts of the Works and shall be responsible to ensure that the Works are executed in accordance with the terms and conditions of this Contract and such instructions as the Engineer-in-Charge may issue during the execution of the Works.

8.8 **Contractor's Verification**

The Contractor shall establish at the Site, temporary benchmarks as directed by the Engineer-in-Charge and connect such temporary benchmarks to a permanent benchmark available in the area with known value. The Contractor will then carry out necessary surveys and leveling, covering its Works, in verification of the survey data on the working drawings furnished by the Engineer-in-Charge. The Contractor shall be responsible for establishing the correct lines and levels and verification of the lines and level furnished on the Drawings, as the case may be. If any error has erupted in the Works due to non-observance of this clause, the Contractor will be responsible for the error and bear the cost of the corrective Work.

8.9 **Buried and Concealed Work**

The Contractor shall be responsible for recording the precise location of all piping, conduits, ducts cables and any other Work that is buried, embedded in earth or concrete or masonry, or concealed in wood or metal frame walls and structures at the time of the execution of the Works and prior to the concealment. If the Contractor covers or buries such Work before such recording takes place, it shall uncover the unrecorded Work to the extent required by the Engineer-in-Charge and shall satisfactorily restore and reconstruct the removed Work with no change in the Contract Price or the Contract Period without any extra cost to NMSCDCL.

8.10 Warnings and Barricade

The Contractor shall provide and maintain G.I. sheet, barricades, guards, guard rails, temporary bridges and walkways, watchmen, headlights and danger signals illuminated from sunset to sunrise and all other necessary appliances such as blinkers, signals, red light and safeguards to

protect the Works, life, property, the public, excavations, equipment and materials. For any accident arising out of the neglect of above instructions, the Contractor shall be bound to bear the expenses of defense of every suit, action or other legal proceedings, at law, that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay all damages and costs which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the Contractor be paid in compromising any claim by any such person.

8.11 **Overloading**

No part of the Scope of the Project or new and existing structures, scaffolding, shoring, sheeting, construction machinery and equipment, or other permanent and temporary facilities shall be loaded more than its capacity. The Contractor shall bear the cost of correcting damage caused by loading or abnormal stresses or pressures for the purpose of completing the Scope of the Project.

8.12 Manufacturer's Instruction

The Contractor shall compare the requirements of the various manufacturers' instructions with requirements of the Contract, shall promptly notify to the Engineer in writing of any difference between such requirements and shall not proceed with any of the Works affected by such difference until an interpretation or clarification is issued by the Engineer. The Contractor shall bear all costs for any error in the Work resulting from its failure to respond to the various requirements and notify NMSCDCL of any such difference.

8.13 **Supply for Project**

The Contractor shall procure and pay for, in its own name as an independent contractor and not as an agent of NMSCDCL, the equipment and machinery required during the Term for undertaking the Project.

8.14 **Transfer of Title**

Notwithstanding anything to the contrary in the Contract, it is agreed by the Parties that the risk, ownership and title to the equipment procured for undertaking the Project shall transfer to the NMSCDCL as follows:

- a. The risk and title in respect of such equipment shall pass to NMSCDCL when the Completion Certificate has been issued by NMSCDCL; and
- b. The Contractor shall continue to be responsible for the operation and maintenance of Part B, Part C, and Part D of the Project in accordance with this Agreement and the RFP.
- c. The Contractor shall be liable for liability during Defect Liability Period of 5 (five) years from completion date for Part A, Part C and Part D of the Project in accordance with this Agreement and the RFP.

8.15 **Permits**

Document No.: MAH-NAS-032-053-RFP-V02-01

The Contractor shall at its own cost, in a timely manner, so as not to delay the progress of the Project and in any event before the time required by applicable laws, obtain all applicable permits required for the completion of the Project within 90 days form the datre of the Work

Order. The Contractor shall not be entitled to any extension of time for any delay in obtaining such applicable permits.

8.16 Utilities and Sub-Structures

- a. The Contractor agrees and undertakes to carry out shifting of utilities and services as per the directions of the Engineer. If any utility of service is found not covered under the Bills of Quantities as set out in Appendix XII of the RFP, the Contractor shall carry out the Works as per the directions of the Engineer including necessary co-ordination with concerned services provider, payment for the same will be made as per provision in this Contract. NMSCDCL will assist it in the matter. Some of the utilities to be shifted are included in the Drawings. In case utilities are unknown, with the permission of NMSCDCL and user department, the Contractor may be asked to remove the services at accepted rate. The quantities of items pertaining to various known utilities may increase or decrease.
- b. It is also agreed that NMSCDCL shall not be liable in any manner on account of grant or otherwise, of any approval under this Contract and that such approval or denial thereof shall not in any manner absolve the Contractors from any liability or obligation under this Contract or under any Applicable Law

8.17 Change in constitution of Contractor

In case of change in the constitution of the Contractor, the Contractor agrees and undertakes to forthwith approval of NMSCDCL notify the Engineer within 30 days of such change.

- a) The Contractor shall not store any explosives on the Site and if the storage of explosives is required for the purpose of undertaking the Project, the Contractor shall only store explosives in accordance with the Applicable Laws.
- b) The contractor shall abide by all proper and legal orders and directions given from time to time by any local or public authorities and shall pay money, fees or charges to which he may be liable.

8.18 **Punch List Items**

- a. The Contractor shall, in conjunction with the Engineer, prepare and update on a continuing basis, up to the issuance of the Completion Certificate, lists of outstanding items of works, required to be supplied/executed under this Contract ("**Punch List**"). In the preparation and updating of such Punch List(s) and the schedules contained therein, the Parties shall use all reasonable endeavours to ensure and/or permit the rectification of Works and/or supply of outstanding items of works, without undue delay, while at all times ensuring safe operation.
- b. The Contractor shall rectify or supply in accordance with the, Drawings, Implementation Plan, Technical Specifications, the standards specified in this Contract and in accordance with the Punch List(s), any outstanding items/execute such other Works, noted as requiring rectification or as incomplete.

If the Contractor fails to complete the Punch List items within a period of 30 (thirty) days, c. NMSCDCL may, at its option, undertake, on its own, such outstanding Punch List items, at the risk and costs of the Contractor to be replaced/supplied.

9. REPRESENTATIONS AND WARRANTIES OF THE CONTRACTOR

The Contractor represents and warrants to NMSCDCL that:

- 9.1 {Selected Bidder/Each of the Consortium member} 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 Contract and other agreements and to carry out the transactions contemplated hereby;
- 9.2 {Selected Bidder/Each of the Consortium member} has taken all necessary corporate and other actions under laws applicable to its business to authorize the execution and delivery of this Contract and to validly exercise its rights and perform its obligations under this Contract;
- 9.3 {Selected Bidder/Each of the Consortium member} has the power and the authority that would be required to enter into this Contract and the requisite experience, the technical know-how and the financial wherewithal required to successfully execute the terms of this Contract and to provide services sought by NMSCDCL under this Contract.
- 9.4 {Selected Bidder/Each of the Consortium member} has the professional skills, personnel, infrastructure and resources/ authorizations that are necessary for providing all such services as are necessary to fulfil the scope of work stipulated in the Appendix X of this Contract;
- 9.5 this Contract has been duly executed by the {Selected Bidder/Each of the Consortium member} and constitutes a legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, and its obligations under this Contract shall be legally valid, binding and enforceable against the {Selected Bidder/Each of the Consortium member} in accordance with the terms hereof:
- 9.6 the information furnished in the tender documents and as updated on or before the date of this Contract is to the best of its knowledge and belief true and accurate in all material respects as at the date of this Contract;
- 9.7 the execution, delivery and performance of this Contract shall not conflict with, result in the breach of, constitute a default 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:
- 9.8 there are no material actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasijudicial or other authority, the outcome of which may result in the breach of this Contract or which individually or in the aggregate may result in any material impairment of its ability to perform any of its material obligations under this Contract;
- 9.9 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 adverse effect on its ability to perform its obligations under this Contract and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Contract;

- 9.10 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 an adverse effect on the {Selected Bidder/Each of the Consortium member} ability to perform its obligations under this Contract;
- 9.11 no representation or warranty by it contained herein or in any other document furnished by the {Selected Bidder/Each of the Consortium member} to NMSCDCL in relation to this Contract contains or shall contain any untrue or misleading statement of material fact or omits or shall omit to state a material fact necessary to make such representation or warranty not misleading;
- 9.12 no sums, in cash or kind, have been paid or shall be paid, by it or on its behalf, to any person by way of fees, commission or otherwise for entering into this Contract or for influencing or attempting to influence any officer or employee of Nodal Agency and/or Clients in connection therewith; and
- 9.13 {each of the Consortium members shall be jointly and severally liable throughout the Term of the Project.}

10. **SITE**

- 10.1 NMSCDCL shall only make the Site available to the Contractor on the date of issuance of the Work Order. Possession of the Site confers on the Contractor a right to only such use and control as is necessary to enable the Contractor to complete the Scope of the Project in accordance with this Contract and shall exclude any purpose not connected with the Scope of the Project. The Contractor acknowledges that it may not be given exclusive access to and possession of the Site and it must not create any encumbrances on the Site. The Contractor shall not demolish, remove or alter structures of other facilities on Site without the prior written approval of NMSCDCL.
- 10.2 The Contractor acknowledges and agree that no land is available with NMSCDCL to be given to Contractor for its establishment. The Contractor agrees and undertakes to make its own arrangements with regard to any land other than the Site. The Contractor shall obtain consent from property owners, make all arrangement and pay all costs for such land, areas of access and right of way without any liability to NMSCDCL. The Contractor will furnish and pay for the land, easements and right of way for the land required for completing the Scope of the Project.

10.3 **Discoveries**

The Contractor agree and undertakes that all fossils, coins, articles of value of antiquity and structures or other remains or things of geological or archaeological interest or anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of NMSCDCL. The Contractor shall take reasonable precautions to prevent its workmen or any other person from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal acquaint the Engineer of such discovery and carry out the Engineer's instructions for dealing with them.

- 13.1 DELETED
- 13.2 DELETED
- 11.3 Water required for Construction

Water required for drinking, construction and testing of pipe line and Reservoir like Sump, GSR, andESR etc.may be supplied by metered connection at the rate of INR 22 /- per 1000 lit. from Nashik Municipal Corporation if pipe line is available near site. However, all arrangement for carrying water from Nashik Municipal Corporation's pipeline will have to be done by the contractor at his cost. If Corporation pipeline is not available then contractor has to make its own arrangement for water at its sole cost and expense.

11.4 Power required for Construction

If the Contractor requires electric supply from existing electric point of NMSCDCL for domestic or construction purpose, meter must be provided to count the electric units and charges so far should be remitted according to the rule and regulations of the Maharashtra State Electricity Board towards NMSCDCL. M.C. Wiring and fitting from tapping point should be done by contractor at his own cost and risk. However, to give the electric supply to the Contractor is not binding on NMSCDCL, or Contractor may obtain electric supply directly from Maharashtra State Electricity Board at its sole cost and expense, the necessary letters only shall be issued by NMSCDCL, if required.

12. PLANT

- 12.1 The contractor must at his own expenses procure & install sound plant for the whole of the work to perform the work within the time agreed into the contract and keep it in working condition. He must also at his own expenses extend or improve it, when required by written request of the Engineer-in-charge.
- 12.2 All unused material and all tents and implements not removed by the contractor within two months of the completion date shall become the property of NMSCDCL and the contractor shall respect thereof.

13. **IMPLEMENTATION PLAN**

- 13.1 The Implementation Plan shall be backed with equipment planning and deployment, materials and manpower planning and deployment, duly supported with broad calculations and quality control system/assurance procedures proposed to be adopted, testing and inspection timelines by an NABL accredited laboratory, justifying their capability of execution and completion of the work in accordance with the Technical Specifications as set out in Appendix XI within the stipulated period of completion as per defined milestones.
- 13.2 The Contractor will also submit a brief labour influx and worker's camp management plan ("Labour Management Plan") including the process for mitigating construction related impacts on local community within 30 days of signing the contract. The plan shall be updated and a revised plan shall be submitted, along with monthly progress.

- 13.3 Within 15 (fifteen) days of submission of the Implementation Plan and the Labour Management Plan, NMSCDCL shall either approve the Implementation Plan and Labour Management Plan or provide to the Contractor, any comments or suggested changes that NMSCDCL may have on the Implementation Plan and Labour Management Plan. If NMSCDCL provides any comments and/or suggestions to the Implementation Plan and Labour Management Plan, then, the Contractor shall within 15 (fifteen) days of receipt thereof, submit to NMSCDCL a revised Implementation Plan and Labour Management Plan by suitably incorporating such comments and/or changes suggested by NMSCDCL. However, in the event, NMSCDCL does not approve the Implementation Plan and Labour Management Plan or provide its comment and/or suggestions to the Implementation Plan and Labour Management Plan within the prescribed period, the Implementation Plan and Labour Management Plan shall be deemed to be approved by NMSCDCL. The Implementation Plan and Labour Management Plan shall accordingly be finalised by the Contractor and shall regulate the execution of the Works as may be required for successfully undertaking the Project.
- 13.4 The contractor shall furnish for the approval of the Engineer-in-charge a schedule giving the programme of the works giving details of the method of execution proposed to be adopted. No work shall be carried out by any other method except that approved by the Engineer-in-charge. The Engineer-in-charge may suggest suitable modifications in the programme and method prepared by the Contractor. Additional any such changes will not be entitled the contractor for claiming any extra rate.

14. **DEPLOYMENT OF STAFF BY THE CONTRACTOR**

14.1 Subject to Clause 14.2 below, the Contractor, at its own cost and expense, shall deploy the following personnels ("Key Personnels") from the date of issuance of the Work Order up to the Completion at the Site for the purpose of execution of the Works:

Sr. No.	Staff Position	Minimum Qualification	Minimum Experience (in year)	Minimum No. of personnel's	Relevent Work Package/ Combined Experience (in year)
1	Project Manager	B.E. (Civil)	15	1	12
2	Resident Engineer	B.E. (Civil) /DCE	8-12	2	7
3	Planning Engineer	B.E. (Civil)	5-7	1	5
4	Quantity Surveyor	B.E. (Civil) / DCE	5-8	1	5
5	Quality Control Engineer	B.E. (Civil)	8-10	1	7
6	Lab Technician	B.E. (Civil) / DCE	3-6	1	3
7	Sr. Site Engineers	B.E. (Civil) / D.C.E.	5-7	2	3
8	Site Engineers	B.E. (Civil) / D.C.E.	3-5	5	2
9	Surveyors	Having Knowledge of Total Station	3-5	2	3
10	Supervisors	Min. 12 th	3-6	8	2

- 14.2 The Contractor shall provide NMSCDCL with the curriculum vitae of the Key Personnels for its approval within 5 (five) days from the execution of this Contract, failing which the Contractor agrees and undertakes to pay damages of INR [5000] per day per Key Personnel. NMSCDCL shall approve the curriculum vitae of the Key Personnel within [15 (fifteen) days] from the submission of the curriculum vitae of the Key Personnel.
- 14.3 Except as NMSCDCL may otherwise agree, no changes shall be made in the Key Personnel by the Contractor. If, for any reason beyond the reasonable control of the Contractor, it becomes necessary to replace any of the Key Personnel, the Contractor shall forthwith provide as a replacement to a person of equivalent or better qualifications.

14.4 Workmen

The Contractor shall at all times enforce strict discipline and good order among its employees/ workmen and shall not employ any unfit person or anyone not skilled and experienced in the assigned task for the purpose of the completing the Scope of the Project.

14.5 Work during Night or on Sundays and Holidays

Unless otherwise provided, none of the permanent Works shall be carried out during night, Sunday or authorized holidays without permission in writing issued by NMSCDCL. However, under exceptional circumstances when execution of Works is unavoidable or necessary for the safety of life and/or priority of works, the Contractor may carry out the permanent Works with the prior approval of the Engineer.

14.6 Workmanship

The quality of workmanship produced by skilled knowledgeable and experienced workmen, machines and artisans shall be excellent. Particular attention shall be given to the strength, appearance and finish of exposed Work. All concrete work shall be form finished.

14.7 The Contractor acknowledges and agrees that the Project Manager who should be at least a B.E. (Civil) or equivalent qualification with minimum 15 years of experience shall be appointed as a part of the Key Personnel. The Project Manager shall be the Contractor's representative at the Site and shall have authority to act on behalf of the Contractor. All communications, instructions and directions given to the Project Manager shall be binding as if given to the Contractor by the Engineer not otherwise required to be in writing.

15. **CONTRACTOR'S RISKS**

- 15.1 The Contractor agrees and undertakes that all risks of loss of or damage to physical property and/or of personal injury and death which may arise during and as a consequence of execution of Works shall solely be attributable to the Contractor.
- 15.2 The Contractor agrees and undertakes that all risks and consequences arising from the inaccuracies or falseness of the documents and/or information submitted by the Contractor shall be the responsibility of the Contractor alone, notwithstanding the fact that designs/ drawings or other documents have been approved by NMSCDCL.
- It is also agreed that NMSCDCL shall not be liable in any manner on account of grant or 15.3 otherwise, of any approval under this Contract and that such approval or denial thereof shall not in any manner absolve the Contractors from any liability or obligation under this Contract or under any Applicable Law.

15.4 **Night and Holiday Work**

The Contractor shall be allowed to execute the work round the clock on all days as per the Implementation Plan except for declared public holidays and days closed by NMSCDCL, if any.

15.5 Qualified Personnel

Fully qualified and experienced quality control Engineers shall be employed by the Contractor and shall be available on site at all times when important work is taking place. The operators and foreman in-charge shall be fully trained and experienced in their classes of work for undertaking any scope of work as set out in Appendix X.

15.6 LABOUR

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

- 15.7 The Contractor shall, if required by the Chief Executive Officer, NMSCDCL or his nominee, deliver to the Chief Executive Officer or his nominee a return in detail, in such form and at such intervals as the Chief Executive Officer or his nominee may prescribe, showing the staff and numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Chief Executive Officer or his nominee may require.
- 15.8 After award of contract, the Contractor shall provide a list of staff along with police verification deputed by the Contractor for the Project in Nashik to NMSCDCL in the following format for records within 7 (seven) days of deploying such labour at the Site. The Contractor will issue its own photo identity cards to its employees deployed in the Project for above contract purposes.
 - Expanded Name
 - Father's Name (Expanded)
 - Educational Qualifications
 - Ex-servicemen
 - Age with date of birth
 - Permanent Address (with authenticated proof)
 - Local Address (with authenticated)
- 15.9 To report unusual happening, if any to, NMSCDCL or any other authorized person, in writing by NMSCDCL being awarded with the Contract.
- 15.10 NMSCDCL reserves the right to direct the Contractor to remove / replace any staff for unsatisfactory performance and to provide substitute during the Construction Period.
- 15.11 In case of loss or damage to biodiversity of the river / or in the premises covered under contract by the personnel deployed for the job, the Contractor shall be fully responsible for replacing such personnel(s). The decision of NMSCDCL in this regard shall be binding and final.
- 15.12 Nothing in this Contract will constitute or be deemed to constitute any agency, partnership, joint venture, unincorporated association, co-operative entity or other joint relationship between NMSCDCL and the Contractor for any purpose. In no event shall any of the employee/workman of the Contractor shall be considered to be the employee of NMSCDCL. It is expressly

- understood and agreed by the Parties that any personnel engaged by the Contractor in connection with the performance of the obligations under this Contract, shall at no time become or be deemed to have become the employees, agents, representatives or servants of NMSCDCL.
- 15.13 The Contractor will be responsible for preserving good order, discipline and decorum in and around the Project area, on day to day basis during their activities at site. The agency shall be responsible for providing uniform, boots and other safety apparels and appliances to the personnel deployed.
- 15.14 The Contractor, at all time during the Construction Period, shall be responsible to remove / take out the garbage and materials waste (if any) generated while undertaking the Scope of the Project to the designated site as may be prescribed by NMSCDCL.
- 15.15 The personnel should be properly turned out during duty hours. The staff deployed by the Contractor shall be provided proper uniform and requisite kit by the Contractor.
- 15.16 The Contractor shall be responsible for getting police verification of the employees/ labours deployed by him from time to time.
- 15.17 The Contractor, at its own cost and expense, shall procure and ensure adequate safety measure for ensuring the safety of the personnel(s) engaged for undertaking the Scope of the Project during the Construction Period and shall maintain at its own expenses, all lights, guards, and watching whether on shore or afloat when and where necessary or as may be required by any authority for the safety and convenience of the public or others.
- 15.18 For the purpose of measurement the method prescribed in the Indian Standards unless stated otherwise in this contract. In the case of any ambiguity the decision of NMSCDCL shall be final and binding on the Contractor.

16. CONSTRUCTION OF SITE OFFICES

- 16.1 The Contractor shall procure and ensure that adequate Site offices are constructed at the Site to facilitate discharging of its obligations under this Contract. The Contractor agrees and undertakes to ensure that the Site offices shall have separated and adequate spaces with necessary utilities like water, electricity and sanitation for NMSCDCL employees/agents for the purpose of site visit and inspection.
- 16.2 The time period for completion of work shall be strictly adhered to. No extension of time shall be granted. The Contractor is free to deploy additional manpower/machinery jack up barges etc. to complete the work within stipulated time.
- 16.3 Language of instructions or communication or documentation to be used for working out the tender shall be English only.
- 16.4 The Contractor may sub-contract any portion of the Scope of Project to any third party or entity, with the prior written permission of NMSCDCL, which permission may be granted at the sole discretion of NMSCDCL and subject to such terms and conditions as NMSCDCL deems fit. Notwithstanding any such subcontracting by the Contractor, the Contractor shall, at all times, be responsible and liable for all its obligations under this Contract notwithstanding anything

320 | P a g e Document No.: MAH-NAS-032-053-RFP-V02-01

contained in any other agreement that it enters into with any third party or entity, and no default under any agreement shall excuse the Contractor from its obligations or liability hereunder.

16.5 The Contractor agrees and undertakes to provide a four wheeler vehicle, in good working condition, to be exclusively used by NMSCDCL's employee/agents/representatives/PMC team for the purpose of site visit and inspection.

16.6 Water Charges

Water required for drinking, construction and testing of pipe line and Reservoir like Sump, GSR, and ESR etc. may be supplied by metered connection at the rate of INR 22 /- per 1000 lit. from Nashik Municipal Corporation if pipe line is available near site. However, all arrangement for carrying water from Nashik Municipal Corporation's pipeline will have to be done by the contractor at his cost. If Corporation pipe line is not available, then contractor has to make its own arrangement for water at its sole cost and expense.

16.7 **Electricity charges**

If the Contractor requires electric supply from existing electric point of NMSCDCL for domestic or construction purpose, meter must be provided to count the electric units and charges so far should be remitted according to the rule and regulations of the Maharashtra State Electricity Board towards NMSCDCL. M.C. Wiring and fitting from tapping point should be done by contractor at his own cost and risk. However, to give the electric supply to the Contractor is not binding on NMSCDCL, or Contractor may obtain electric supply directly from Maharashtra State Electricity Board at its sole cost and expense, the necessary letters only shall be issued by NMSCDCL, if required.

16.8 The price quoted by the contractor shall not in any case exceed the control price if any fixed by Government or reasonable price which is permissible for him to charge a private purchaser for the same class and description, the controlled price or the price permissible under Hoarding and Profiteering Ordinance, 1943 as amended from time to time. If the price quoted exceeds the controlled price or the price permissible under Hoarding and Profiteering Prevention Ordinance, the contractor will specifically mention this fact in his tender along with the reason for quoting such higher prices. The Purchaser at his discretion will in such case exercise the right of revising the price at any stage so as to confirm with the controlled price on the permissible under the Hoarding and Profiteering Prevention Ordinance. This discretion will be exercised without prejudice to any other action that may be taken against the contractor.

17. SAFETY AND PRECAUTION

In addition to Fire precautions under Clause 22 of the GCC, the Contractor shall take the following measures for safety at the Site.

17.1 The Contractor will be responsible for making all arrangements to ensure safety and security of all authorised persons and its machinery available at the Site. No unauthorized personnel

shall be available on the Site. In case the Contractor fails to make such arrangements, NMSCDCL shall be entitled to cause them to be provided and to recover the cost thereof from the Contractor.

The Contractor shall: 17.2

- complies with all applicable safety regulations, a.
- take care for the safety of all persons entitled to be on the Site, b.
- uses reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as c. to avoid danger to these persons,
- d. provide fencing, lighting, guarding and watching of the Works during the subsistence of
- e. provides any temporary works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.
- 17.3 The Contractor shall undertake all such precautions, furnish and maintain protection to prevent damage, injury or loss to other persons who may be affected thereby, all the Works and all materials and equipment to be incorporated therein whether in storage on or off the Site, under the care, custody or control of the Contractor or any of its sub-contractor and other improvements and property at the Site or where Work is to be performed including building, trees and plants, pole lines, fences, guard rails, guide posts, culvert and project markers, sign structures, conduits, pipelines and improvements within or adjacent to streets, right-of-way or easements, except those items required to be removed by the Contractor in the Contract.
- 17.4 The Contractor agrees and undertakes to include all the safety precautions and other necessary forms of protection and the notification of NMSCDCLs of utilities and adjacent property at the Site during the Contract Period.
- 17.5 The Contractor shall protect adjoining area against structural, decorative and other damages that could be caused by the execution of Works and make good at its cost any such damages that could be caused by the execution of Works and make good at its sole cost and expense any such damages within reasonable time.
- 17.6 The Contractor shall prepare and implement the after-flood restoration plan as per the guidelines and approval of NMSCDCL. In the event, NMSCDCL determines that the Contractor has failed to implement after flood restoration plan, NMSCDCL shall have the right to carry out works pertaining to after flood restoration as may be required at the sole cost and expense of the Contractor.

17.7 **Condition for Malaria Eradication**

Document No.: MAH-NAS-032-053-RFP-V02-01

- Contractor shall carry out anti-malaria measures in the areas per guidelines directed by a. the joint director (Malaria and Filarial) of Health Services, Nashik.
- b. Contractor shall see that mosquitozenic conditions are not created so as to keep vector population to minimum level.

- c. In case of default in carrying out prescribed anti-malaria measures resulting increase in malaria incidence, Contractor shall be liable to pay Government on anti-malaria measures to control the situation in addition to fine.
- d. Relation with public authorities: The Contractor shall make sufficient arrangements for draining away the salvage water as well as water coming from the bathing and washing places and shall dispose of this water in such a way as not to cause any musicale. He shall also keep the premise clean by employing sufficient of sweepers. The Contractor shall comply with all rules, regulations, bye laws and direction given from time to time by any local or public authority connection with this work and shall pay fees or charges which are livable on him without any extra cost to Government.

18. **POLICE PROTECTION:**

If special protection of his camp of workpeople is asked for by the contractor, the NMSCDCL will arrange for such protection as far as possible from the authorities concerned and the full cost of such protection shall be debited to the contractor and recovered from his bills.

19. MATERIALS AND EQUIPMENT

- 19.1 The Contractor shall ensure that all materials and equipment utilized for execution of the Works shall be new and of best quality. Materials and equipment not covered by detailed requirements in the Contract shall be of the best commercial quality suitable for the purpose intended and approved by NMSCDCL prior to use in the Works as set out in Clause 19.3 of the SCC below.
- 19.2 The Contractor shall ensure that only one brand, kind or make of material and equipment shall be used for each specific purpose through-out the Works, notwithstanding that similar material or equipment of two or more manufacturers or proprietary items may be specified for the same purpose.
- 19.3 Except as otherwise specified in the Contract, the Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall promptly forward to the Engineer duly certified reports of the tests. When the specified tests have been passed, the Engineer shall endorse the Contractor's test certificate, or issue a certificate to the Contractor, to that effect.
- 19.4 If, as a result of an examination, inspection, measurement or testing, any materials or equipment is found to be defective or otherwise not in accordance with the Contract, the Engineer may reject such materials or equipment by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract. If the Engineer requires any materials or equipment to be retested, the tests shall be repeated under the same terms and conditions.
- 19.5 Notwithstanding any previous test or certification, the Engineer may instruct the Contractor to:
 - a. removes from the Site and replace any materials or equipment which is not in accordance with the Contract.
 - b. removes and re-execute any other work which is not in accordance with the Contract, and

- c. executes any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.
- 19.6 The Contractor shall comply with such instructions within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under Clause 19.5 (c) above. If the Contractor fails to comply with the instruction, NMSCDCL shall be entitled to employ and pay other persons to carry out the work at the cost and expense of the Contractor.

20. TEST AND INSPECTION

- 20.1 The Contractor shall conduct test for materials and works undertaken on a periodic basis or as may be instructed by NMSCDCL from a laboratory accredited by NABL and consented by the Engineer in Charge, pursuant to this Contract and shall submit such reports to NMSCDCL within 30 days of issuance of report by such laboratory.
- 20.2 The Contractor shall, at its own expense, carry out on the Site, all applicable Tests and/or inspections of the Works, in accordance with the Technical Specifications at regular intervals from an NABL accredited laboratory. The Contractor shall, at its own cost, provide all equipment and materials, assistance, documents and other information, equipments, consumables, instruments, permits and suitably qualified Contractor's personnel, as are necessary to carry out the said Tests and/or inspections efficiently to demonstrate that the Works are sound, complete and functioning in compliance with the Technical Specifications.
- 20.3 The Contractor shall in its Implementation Plan submit the intervals at which it shall carry out periodical testing of the materials and works and shall provide a 7 (seven) day prior notice to the Engineer in writing when any portion of the Work is ready for inspection, along with the dates of inspection and details of the selected laboratory, to enable the Engineer to confirm the selected laboratory, attend the inspection and ensure smooth testing—without affecting the further progress of the Work. The Work shall not be considered to have been completed in accordance with the terms of the Contract until the accredited laboratory followed by the Engineer-in-Charge shall have certified in writing to that effect. No approval of materials or workmanship or approval of part of the Work during the progress of execution shall bind the Engineer or in any way affect the Engineer even to reject the Work which is alleged to be of inferior quality and to suspend the issue of the Completion Certificate until such alternations and modifications or reconstruction have been affected at the cost of the Contractor as shall enable the Engineer to certify that the Work has been completed to his satisfaction.
- 20.4 In addition to the regular testing and inspection, the contractor shall inform, by writing in advance to the Engineer-in-charge, if he wants that work should be inspected, alongwith the details of the laboratory,, or if he wants some decision, checking, clarification etc. from Engineer-in-charge.
- 20.5 The instructions on site given by Engineer-in-charge shall be recorded in appropriate visit register. The compliance along with the note shall be brought up in the office documents of the work.
- 20.6 Notwithstanding anything contained in the article, the Engineer-in-charge is empowered to visit, inspect the work without giving notice to the contractor at any time (surprise visit or so) for which the contractor shall not take any objection. All the compliance, rectification, repair

- etc. shall be done by the contractor, as soon as they are brought to his notice, unless which the payment shall not be made (of the items concerned).
- 20.7 Any report submitted by a third party or laboratory which has not been accredited by NABL shall be rejected. The Engineer may at its discretion reject the laboratory selected by the Contractor, as a result of which, the Contractor shall provide for another NABL accredited laboratory as an option to the Engineer for testing.

20A LIQUIDATED DAMAGES

the commencement of Work is delayed beyond 1 (one) month from the date of issuance of Work Order for reasons attributable to the Contractor, the Contractor shall pay to NMSCDCL as liquidated damages and not as penalty, a sum calculated at the rate of [0.005% (zero decimal zero zero zero five percent) of the price of the the contract price for every day of delay or part there of up to a maximum of 10% (ten percent) of the Contract Price.

20A.2 If the Contractor fails to achieve the respective milestones for Project as set out in Schedule 1, the Contractor shall pay to NMSCDCL as liquidated damages and not as penalty, a sum calculated at the rate of [0.005% (zero decimal zero zero zero five percent) of the contract price part there of up to a maximum of 10% (ten percent) of the of the Contract Price.

20A.3 If Scope of Work is not completed within the Completion Date for reasons attributable to the Contractor, the Contractor shall pay to NMSCDCL as liquidated damages and not as penalty, a sum calculated at the rate of [0.005% (zero decimal zero zero zero five percent) of the contract price for every day of delay or part there of up to a maximum of 10% (ten percent) of the Contract Price.

21. **OPERATION AND MAINTENANCE**

Document No.: MAH-NAS-032-053-RFP-V02-01

21.1 **O&M PERIOD**

The Contractor shall commence the operation and maintenance of Part B, Part C and Part D immediately after the issuance of Completion Certificate for a period 3 (three) years ("O&M Period").

21.2 Contractor's operation and maintenance obligations

- The Contractor shall operate, maintain and manage the Project on behalf of NMSCDCL a. and also perform the specific duties as set forth in this Agreement and/or identified under the Implementation Plan.
- The Contractor shall be responsible to operate and maintain the Part B, Part C and Part D b. in such condition basis which NMSCDCL had issued the Completion Certificate for Part A, Part B and Part D duly conforming to the Technical Specifications as set out under Appendix XI.
- During the O&M Period, the Contractor shall exercise such degree of skill, diligence, c. prudence, foresight, and operating/maintenance practice generally followed internationally by highly qualified, prudent professionals for river cleaning purpose.

- d. The Contractor shall prepare a detailed plan ("O&M Manual") for carrying out the operation and maintenance of the Part B, Part C and Part D at the Site during the O& M Period in accordance with the Drawings, Technical Specifications which shall *inter alia* include the details regarding the operation and maintenance activities proposed to be carried out by the Contractor at the Site, proportional monthly break up of expenses incurred, mobilization of personnel(s) and such other details as may be required by NMSCDCL.
- e. The Contractor shall submit the O&M Manual within 45 (forty-five) days of the execution of this Agreement to NMSCDCL for its approval.
- f. Within [30 (thirty)] days of the submission of the O&M Manual, NMSCDCL shall either approve the O&M Manual or provide to the Contractor, any comments or suggested changes that NMSCDCL may have on the O&M Manual. If NMSCDCL provides any comments and/or suggestions to the O&M Manual, then, the Contractor shall within 30 (thirty) days of receipt thereof, submit to NMSCDCL a revised O&M Manual by suitably incorporating such comments and/or changes suggested by NMSCDCL. However, in the event, NMSCDCL does not approve the O&M Plan or provide its comment and/or suggestions to the O&M Manual within the prescribed period, the O&M Plan shall be deemed to be approved by NMSCDCL. The O&M Manual shall accordingly be finalised by the Contractor for carrying out the operation and maintenance of Part B, Part C and Part D.
- g. During the O&M Period, the Contractor shall be responsible to maintain the Site falling under Part B, Part C and Part D to the satisfaction of NMSCDCL and further undertakes to adhere to the instructions given by NMSCDCL, from time to time, for the purpose of maintaining the Site.

22. **DEFECT LIABILITY PERIOD**

- 22.1 The Defect Liability Period shall be applicable to Part A, Part C and Part D of the Project including all civil works under Part A. It shall commence on the date of issuance of the Completion Certificate to the Contractor and shall continue till 5 (five) years.
- During the Defect Liability Period, the Contractor shall remain liable for any technical or other defects in Part A, Part C and Part D. If post completion of the Construction Period and after issuance of the Completion Certificate, any defect is found in the construction, installation and workmanship of the works relating to Part A, Part C & Part D, the Contractor shall promptly and in any event no later than 15 (fifteen) Days from the receipt of the notice from NMSCDCL in terms of Clause 22.4 below or such extended period as may be agreed in consultation and agreement with NMSCDCL, correct any errors, omissions, defects or deficiencies in such works, re-perform any part of the works, or repair, replace or otherwise make good (as the Contractor shall, at its discretion, determine) such defect, in addition to any damage to the Site caused by such deficiency in Part A, Part C and Part D, at the sole risk and expense of the Contractor.
- 22.3 In the event of the Contractor failing or neglecting to commence execution of the said rectification work pertaining to Part A, Part C and Part D within the period prescribed thereof

in the said notice and/or to complete the same as aforesaid as required by the said notice, NMSCDCL shall get the same executed and carried out internally or by any other agency at the risk and cost of the Contractor. The Contractor shall forthwith on demand pay to NMSCDCL the amount of such cost, charges and expenses sustained or incurred by NMSCDCL of which the certificate of the Engineer in charge shall be final and binding on the Contractor. Such cost, charges and expenses shall be deemed to be Damages and shall be liable to be recovered from the Performance Security if not paid by the Contractor. NMSCDCL shall also be entitled to deduct the same from any amount, which may then be payable or may thereafter become payable by NMSCDCL to the Contractor either in respect of the said Work or any other work whatsoever.

22.4 **Notice of Defect**

NMSCDCL shall provide the Contractor a notice stating the nature of any defect in Part A, Part C and Part D together with all available evidence, promptly following the discovery of such defect. NMSCDCL shall afford all reasonable opportunity to the Contractor to inspect any such defect. The Contractor shall, within 7 (seven) days of the notice from NMSCDCL in this regard, submit to NMSCDCL details of the proposed re-performance of the Part A, Part C and Part D and/or the repairs or replacements, which it proposes to make, the estimated duration of the repairs or the duration required to effect the replacement works, details or parts of the Part A, Part C and Part D and the proposed dates for such re-performance, repairs or replacements. All works and repairs and replacements under the Defect Liability Period shall be carried out at a time and for periods agreed with NMSCDCL.

- 22.5 Upon expiry of the Defect Liability Period, NMSCDCL shall issue a '**Take Over Certificate**' to the Contractor certifying the **Take Over** of Part A, Part C and Part D provided that:
 - a. the Contractor has completed the outstanding works pertaining to Part A, Part C and Part D in accordance with the provisions of the Contract, to the satisfaction of NMSCDCL during the Defect Liability Period;
 - b. The Contractor has performed all of its obligations during the Defect Liability Period under this Contract to the satisfaction of NMSCDCL.

23. SUSPENSION

- 23.1 The Engineer may at any time instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage. The Engineer may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, then Clauses 23.2 shall not apply.
- 23.2 If the Contractor suffers delay and/or incurs any cost from complying with the Engineer's instructions under Clause 23.1 above and/or from resuming the work, the Contractor shall give notice to the Engineer and shall be entitled to an extension of time for any such delay, if the Completion is or will be delayed at the sole discretion of NMSCDCL.
- 23.3 The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or

materials, or of the Contractor's failure to protect, store or secure in accordance with Clause 23.1 above.

After the permission or instruction to proceed is given, the Contractor and the Engineer shall 23.4 jointly examine the Works and the plant and materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or plant or materials, which has occurred during the suspension after receiving from the Engineer an instruction to this effect.

24. **INSURANCE**

Contractor shall, at its own cost, take out necessary Insurance Policy/ Policies so as to provide adequate Insurance cover for execution of the awarded contract work from the "Directorate of Insurance, Maharashtra State, Mumbai" only. It's Postal address for correspondence is "264 MHADA, First Floor, Opp. Kalanagar, Bandra (East), Mumbai – 400 051". (Telephone Nos. 6438690/ 6438746, Fax No. 6438461). Insurance Policy/ Policies taken out from other Company will not be accepted. However, if the contractor desire to effect insurance with any local officer of any insurance Company, that should be under the coinsurance-cum-servicing arrangement approved by Directorate of Insurance. If the policy taken out by the contractor is not on coinsurance basis, i.e. G.I.F. 60% and Insurance Company 40%, the same will not be accepted and the amount of premium calculated by Directorate of Insurance will be recovered directly from the amount payable to The Contractor for the executed contract work which may please be noted.

25. **INDEMNITY**

- 25.1 The contractor shall indemnify the NMSCDCL of all actions, suits, claims and demands brought or made against NMSCDCL in respect of any matter or thing done or omitted and being done by the Contractor and loss or damage to the NMSCDCL covering consequences of any action or suits being brought against the information of the works of this contract.
- 25.2 Compensation for all damage done intentionally or unintentionally by the Contractor's labour whether in or beyond the limits of government property including any damage caused during the Contract Period shall be estimated by the Engineer or such other officer as may be appointed by NMSCDCL and the estimate of the Engineer subject to the decision of the CEO, NMSCDCL on appeal shall be final and binding on the Contractor. For the avoidance of doubt, the Contractor shall be bound to pay the amount of the assessed compensation on demand failing which the same will be recovered from the Contractor as damages by NMSCDCL and shall be reduced by the Engineer from any sums that may be due or payable to the Contractor under this Contract.
- 25.3 The Contractor shall bear expenses of defending any action or other legal proceedings that may be brought by any person for injury sustained by such person owing to neglect of precautions by the Contractor during performance of its obligations under this Contract and shall solely pay any compensation in this regard as may be awarded by any court of law.

25.4 Liability for accidents to person

Document No.: MAH-NAS-032-053-RFP-V02-01

The Contractor agrees and undertakes to hold harmless and indemnify NMSCDCL, from and against any and all direct damages, losses, liabilities, obligations, claims or proceedings of any kind, interest, penalties, cost, fee, or expenses (including, without limitation, reasonable attorneys' fees and expenses) suffered, incurred or paid, directly, as a result of, in connection with or arising from any breach of its covenants, obligations and responsibilities hereunder pursuant to the Scope of the Project or against all action, suits, claims, demands, costs etc. arising in connection with injuries suffered by any persons employed by the Contractor or its subcontractor for the Works whether under the applicable law force at the time of dealing with the question of the liability of employees/ workmen for the injuries suffered by employees/ workmen and to have taken steps properly to ensure against any claim thereunder.

- 25.5 The Contractor shall at all times keep NMSCDCL indemnified against any and all penalties and liability of every kind arising out or in connection with this Contract for breach of any applicable laws or applicable permits.
- 25.6 In the event of an accident in respect of which compensation may become payable by the Contractor, such sum of money as may, in the opinion of the Engineer, be sufficient to meet such liability will be kept in deposit either from any amount payable to the Contractor under this Contract or from the Performance Security. On the receipt of any award or ruling against the Contractor in regard to the quantum of compensation, the difference in the amount will be adjusted."
- 25.7 The contractor shall take all precautions against damages by Flood or from accidents. No compensation will be allowed to the contractor for his plant and materials, centring for R.C.C. works etc. lost or damaged by floods or from any other cause. The contractor shall be liable to make good any plant or materials belonging to NMSCDCL lost or damaged by floods or from any other cause while in charge of the contractor, correcting and repairing any damage which may be suffered from floods or any other natural calamity or accident at any part of the site during construction shall not be paid to the contractor.

26. USE OF COMPLETED PORTIONS

NMSCDCL shall have the right, upon written notice to the Contractor to possession or occupancy of and use any completed or partially completed portions of the Work, notwithstanding that the time for completing the entire Work or such portions may not have expired but such taking possession or occupancy and use shall not deemed to waive of any requirement of the Contract or a waiver or acceptance of any Work not completed in accordance with the Contract.

27. CLEANING UP

The Contractor shall at all times during the execution of Works keep the Site, adjoining property and public property free from accumulations of waste materials, rubbish and other debris resulting from the Works and at the Completion shall remove all waste materials, rubbish and debris from and about the Site and adjoining property as well as all tools, construction equipment and machinery and surplus materials, and shall leave the Site and premises, clean, tidy and ready for occupancy by NMSCDCL. The Contractor shall restore to its original condition those portions of the Site not designated for alteration by the Contract paved ways,

parking areas and roadways disturbed by the construction shall be redone by filling the excavation, if any, by sand compacted material and bringing it to its original shape as directed and approved by the Engineer. No waste material shall be buried or disposed-of on NMSCDCL's property unless so approved in writing by the Engineer. Before the Contractor applies for final inspection and acceptance of the Work, all items of work shall be complete, ready to operate and in a clean condition as determined by the Engineer. All slip roads and adjoining area must be kept free of metal/ sand and to that extent regular sweeping of the road/ adjoining area shall be done by the Contractor at its cost.

28. NMSCDCL RIGHT TO CLEAN UP

If the Contractor fails to satisfactorily keep the Site clean, the Contractor agrees and undertakes that the Engineer, at the sole cost and expense of the Contractor, shall have the right to get the Site cleaned up by a third party. For the avoidance of doubt, NMSDCDL shall deduct the amount paid to such third party from the next payment due to the Contractor.

29. IMPORT LICENSE AND PROCUREMENT OF IMPORTED MATERIALS

The Contractor shall use the indigenous equipment only, as far as possible for the Work contracted. Foreign exchanges and import licenses, if any, required shall have to be arranged by the Contractor itself, independently. Delay in getting any material, will not be entertained for extension of time limit nor the risk of foreign exchange variation will be covered by NMSCDCL.

30. MACHINERY REQUIRED

- 30.1 All machinery required for erection/ execution purposes such as concrete batching plant, excavator with rock breaker unit, cranes, trucks, etc. shall be arranged by the Contractor at its own cost and expense. NMSCDCL will not take any responsibility for providing such machinery even on rental basis. Execution of any part of the Work will be allowed only after the required machinery as directed by the Engineer-in-Charge is made available in working condition.
- 30.2 The Contractor shall ensure the availability of the following machinery during the Construction Period either on ownership or hire-purchase:

Sr. No	Type of Equipment	Max. Age as Bid Submission	Capacity	Nos
1	Excavators with Rock breaker	10	Min 1.25 m ³	
2	Backhoe Loader/JCB	5	Min 0.3 m ³	
	Vibratory Tendom Roller		Minimum 10 Ton operating wt.	
	(with intelligent compaction			
3	system)	5		
4	Vibratory soil Compactor	5	Minimum 5 Tonn operating wt.	

5	Mini Vibrator Roller	5	4/6 Tonn	
6	Pneumatic Roller	5	Wt = 8-10 Tonn;	
			8 –Tyred	
7	Water Tanker/ Sprinklers	-	-	
8	Dumper/ Tippers/Tractor	5	Minimum 6 cum	
	Tippers			
9	RMC Batch Mix Plant	10	30 cum/hr.	
10	Transit Mixers	3	6 cum	
11	Internal Concrete Vibrator	5	-	
12	Air Compressor	5	Min capacity 250 cum	
13	Survey Equipments			
	i) Total Station	3	-	
	ii) Auto Level	3	-	
14	Mud Pump Machine for	5	-	
	Bentonite Slurry			
15	Pile Rig	5	-	

31. DRAWINGS AND TECHNICAL SPECIFICATIONS

- 31.1 The Contractor shall, at its own cost and expense, conduct field surveys, geological and/or hydrological studies, and investigation for preparation of detailed Documents for the purpose of completing the Scope of the Project.
- 31.2 The Contractor shall not depart from the Drawings, unless consented to in advance by NMSCDCL.
- 31.3 Any Work that may be reasonably inferred from the Drawings as being required to produce the intended result shall be undertaken by the Contractor whether or not it is specifically called for. The Contractor shall furnish and pay for all labour, supervision, materials, transportation, construction, equipment and machinery tools, appliances, water, fuel, power, energy, light, heat, utilities, telephone, storage, protections, safety provisions, and all other facilities, services and incidentals of any nature whatsoever necessary for the satisfactory and acceptable execution, testing and Completion in accordance with the provisions of this Contract. The cost of all these arrangements shall be deemed to be included in the Contract Price and no separate payment shall be made by NMSCDCL in this regard.
- Written clarifications or interpretations necessary for the proper execution or progress of the Works, in the form of drawings or otherwise, will be issued with reasonable promptness by the Engineer and in accordance with any schedule agreed upon. Such clarifications or interpretations shall be consistent with or reasonably inferable from the intent of the Contract and shall become a part thereof. Where there is a discrepancy between the Drawings and the

Technical Specifications, the Contractor shall obtain the interpretation of the Engineer, which shall be binding on the Contractor.

- 31.5 Figured dimensions on Drawings shall only be followed and detailed Drawings shall govern over general drawings. The Contractor shall keep an approved set of Drawings at the Site and copies of the approved Drawings shall be made available to Engineer or its representative for checking record etc.
- 31.6 The work, materials or equipment required in Works shall have a well-known trade or technical meaning shall be deemed to refer to such recognized meanings.
- 31.7 The Contractor shall be responsible for any discrepancies, errors or omissions in the drawings and other particulars, supplied by it, whether such drawings and particulars have been approved by the Engineer or not, provided that such discrepancies, errors or omissions be not due to inaccurate information or particulars furnished in writing to the Contractor by the Engineer.
- 31.8 The Work specified in this Contract shall include all general work, preparatory to river cleaning and any kind of work necessary for the due and satisfactory performance of the obligations of the Contractor in accordance with the Drawings, Implementation Plan and the Technical Specification.
- 31.9 The Contractor shall appoint an experienced structural engineer for preparing the design of centering and various formwork and getting it approved from NMSCDCL. The Contractor shall also prepare design of shoring and strutting etc. required for excavation work. The work of centering and formwork, shoring and strutting shall be done under supervision of the structural engineer of the Contractor and get it approved from the Engineer. The cost of such engineer is incidental to work and deemed to be included in the rate. No claim in this regard shall be paid by NMSCDCL.
- 31.10 The Contractor shall during the course of execution prepare and keep updated a complete set of 'as built' drawings to show each and every change from the contract drawings, changes recorded shall be countersigned by NMSCDCL/Engineer and the Contractor. All costs incurred in this respect shall be borne by the Contractor.
- 31.11 The Drawings shall be considered as complimentary and explanatory, of each other and together shall form the technical requirements and stipulations under the Contract. Detailed drawings shall have preference over small-scale drawings. Similarly, detailed specifications shall have preference over general specifications. Should any discrepancy arise as to the meaning, intent or interpretation of any specification or drawing the decision of the Engineer shall be final and binding on the Contractor.

32. **SETTLEMENT OF DISPUTE**

32.1 Mutual Settlement

If any dispute of any kind whatsoever arises between NMSCDCL and the Contractor in connection the performance of the Work sunder his Contract whether during the progress of Works or after its completion or whether before or after termination, abandonment or breach

of the Contract, the Parties shall seek to resolve any such dispute or difference by mutual consent through amicablesettlement.

32.2 Settlement by CEO,NMSCDCL

- If the Parties fail to resolve, such a dispute or difference by mutual consent, within 15(fifteen) days of its arising, then the dispute in the first instance be referred to th Chief Executive Officer(CEO), NMSCDCL who shall provide its written decision within a period of 1 5(fifteen) days ofthedispute being referred to it by either Party.
- In the event that the CEO, NMSCDCL fails to provide its decision within 15 b. (fifteen) days after being requested as a foresaid, or in the event that either NMSCDCL or the Contractor isdissatisfied withanysuchdecision,asthecasemaybe,eitherPartymay,within15(fifteen)daysafter the date on which such decision is required to be provided in accordance with Clause 32.2(a) above. datethedecisionisprovidedbytheCEO,NMSCDCL,asthecasemaybereferthematterin dispute to arbitration in accordance with Clause 32.3 of the SCC.

32.3 Disputes and Arbitration

NO ARBITRATION IS ALLOWED IN ANY FORM WHATSOEVER. Disputes (if any) raised out of contract is subject to jurisdiction of civil court of Nashik only.

- 32.4 This clause shall remain in full force and effect notwithstanding any lawful termination of the Contract where either arbitration has already commenced or the liabilities between NMSCDCL and the Contractor have not been fully determined.
- 32.5 Notwithstanding anything contained in this Clause 32 of the SCC, the Parties shall continue to perform their respective obligations under the Contract.

33. **TERMINATION**

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

33.2 NMSCDCL shall be entitled to terminate the Contract:

- if the Contractor persistently fails to execute this Contract in accordance with the a. provisions of this Contract or persistently neglects to carry out its obligations under this Contract, without just cause;
- b. the Contractor has insolvency, receivership, reorganisation, bankruptcy, or proceedings of a similar nature brought against it and the proceedings are not dismissed or effectively stayed within 30 (thirty) days of such commencement;
- if the Contractor without reasonable excuse fails to comply with the notice to correct a c. particular defect within a reasonable period of time;
- d. if the Contractor does not maintain a valid instrument of Performance Security (and additional performance security, if any), as prescribed;

- e. if the Contractor has delayed the Completion by such duration for which the maximum amount of liquidated damages is recoverable;
- f. if the Contractor fails to deploy machinery and equipment or personnel as specified in the Contract.
- g. if the Contractor, in the judgement of NMSCDCL has engaged in corrupt or fraudulent practices in competing for or in executing the Contract;
- h. if the Contractor fails to provide NMSCDCL with the Performance Security in terms of Clause 1 of the GCC or if, at any time prior to its respective expiry, the Performance Security ceases to be legal, valid or binding (unless such Performance Security is duly replaced in accordance with the terms of this Contract or is otherwise fully discharged in accordance with its terms);
- i. Any other breach as specified in the Contract.
- In any of these events or circumstances, NMSCDCL may, upon giving 14 (fourteen) days' written notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub clause (b), (g) or (i) of Clause 33.2 above, the Contract may be immediately terminated.
- Notwithstanding the above, NMSCDCL may terminate the Contract for convenience by giving 30 (thirty) days' written notice to the Contractor.

34. **PAYMENT UPON TERMINATION**

- 34.1 If the Contract is terminated under Clause 33.2 of the SCC, the Engineer shall issue a certificate for value of the Work accepted on final measurements, less advance payments and liquidated damages as indicated in the Contract. The amount so arrived at shall be determined by the Engineer and shall be final and binding on both the Parties. The Contractor agrees and acknowledges that upon termination of this Contract as per Clause 33.2 of the SCC, NMSCDCL shall have the right to forfeit and encash the Performance Security of the Contractor.
- 34.2 Payment on termination under Clause 33.4 of the SCC above, the Engineer shall issue a certificate for the value of the Work done, the reasonable cost of removal of equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the Contract and less taxes due to be deducted at source as per applicable law.

34.3 Requirements after Termination

- a. Upon Termination of this Contract in accordance with the terms of Clause 30 of the SCC, the Contractor shall comply with and conform to the following:
- b. delivers to NMSCDCL all plant and materials which shall have become the property of NMSCDCL under Clause 33 of the SCC;
- deliver all relevant records, reports and other licences pertaining to the Works, other design documents and in case of termination under Clause 33 of the SCC, the "as built' Drawings for the Works;

- d. transfer and/or deliver all applicable permits to the extent permissible under applicable laws; and
- e. vacate the Site within 15 (fifteen) days.

35. **FORCE MAJEURE**

35.1 "Force Majeure Event" means any act, event or circumstance, or combination of acts, events or circumstances, which may affect the affected Party's performance of its obligations pursuant to the terms of this Contract, but only if and to the extent that such acts, events or circumstances are not within the affected Party's reasonable control, were not reasonably foreseeable and could not have been prevented or overcome by the affected Party through the exercise of reasonable skill or care. Any act, event, circumstance or combination thereof meeting the description of Force Majeure that has the same effect upon the performance of the Contractor which directly, materially and adversely affects the performance by NMSCDCL or the Contractor of its obligations in whole or in part under this Contract shall constitute Force Majeure with respect to the NMSCDCL or the Contractor respectively.

35.2 The Force Majeure Event shall comprise the acts, events and circumstances, such as

- a. act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot insurrection, civil commotion, act of terrorism or sabotage, in each case occurring inside or directly involving India;
- b. strikes or lockouts occurring within India or at the Site as part of a nation-wide, industry-wide or state-wide strike or local strike, or lock out (excluding such events which are Site specific and attributable to the Contractor);
- c. radioactive contamination or ionizing radiation or chemical contamination specifically affecting the Facility or resulting from another Force Majeure Event;
- d. flood, cyclone, Tsunami, lightning, earthquake, drought, storm or any other extreme effect of the natural elements;
- e. any action by competent governmental instrumentality having jurisdiction over the Project, NMSCDCL or the Contractor resulting in a loss of access to the Site;
- f. an act of God; and
- g. any other act or event or circumstance of an analogous nature.

35.3 Exceptions to Force Majeure

Notwithstanding the foregoing, Force Majeure shall not include:

- a. weather or ground conditions reasonably expected for the climate in the geographic area of the Project or any Site condition or event arising therefrom;
- b. any delay, default or failure (direct or indirect) by the Contractor in any agreement entered into by it; and

c. any act, event, or occurrence resulting in financial hardship, including any delay or rejection of an insurance claim, shall not constitute a Force Majeure Event.

35.4 Excused Performance

If either Party is prevented from rendering performance of its obligations, whether wholly or partially under this Contract for reasons of a Force Majeure Event, then that Party will be excused from the performance so affected by the Force Majeure Event to the extent so affected provided that:

- a. The affected Party gives the other Party written notice of the occurrence of the Force Majeure Event as soon as practicable and in any event within 15 (fifteen) Days from the date of occurrence of the Force Majeure Event, giving full particulars of such occurrence, including an estimation of its expected duration, impact on the performance of such Party's obligations hereunder, and thereafter continues to furnish thereto timely regular reports with respect to continuation of the Force Majeure Event and measures which the affected Party has taken or proposes to take to mitigate the impact of the Force Majeure Event and to resume performance of such of its obligations affected thereby and the Completion Date shall be suitably extended. If the effect of any events specified in Clause 35.2 above of the SCC lasts for a period of less than 10 (ten) days in the aggregate per year, such events shall not be construed to be Force Majeure Events.
- b. The suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event.
- c. Upon the occurrence of any circumstances of Force Majeure Event, the Contractor shall use all reasonable endeavours to continue to perform its obligations under the Contract and to minimize the adverse effects of such circumstances. The Contractor shall also use all reasonable means and best endeavours to ensure that the loss caused by the Force Majeure Event is minimized as far as possible.
- d. An event of Force Majeure does not relieve a Party from liability for an obligation which arose before the occurrence of that event.

35.5 Effect of Force Majeure Event

Neither NMSCDCL nor the Contractor shall be considered in default or in contractual breach to the extent that performance of obligations is prevented by a Force Majeure Event, which arises after the Effective Date. An extension of time to the Construction Date shall be agreed upon by the Parties, provided the Contractor proves to NMSCDCL;

- a. The execution of Works is actually and necessarily delayed by a Force Majeure Event; and
- b. The effect of such Force Majeure Event could not have been prevented or avoided or removed despite exercise of reasonable due diligence whether before, after or during the Force Majeure Event.

- 35.6 The applicability of the Clause 35 of the SCC should be construed in a fair and reasonable manner and either Party shall not take any pretext on account of terms and conditions of the Force Majeure clause to escape from its respective liability.
- 35.7 Neither Party can claim any compensation from the other Party on account of Force Majeure Event.

36. PROGRAMME AND PROGRESS SCHEDULE

- 36.1 The Contractor shall submit to NMSCDCL an item-wise monthly programme ("**Programme**") as may be mutually agreed between the Contractor and NMSCDCL laying out the specifics for the purpose of executing and completing Works in accordance with the terms and conditions of this Contract including all or any incidental works that may be required to be undertaken by the Contractor for the purpose of restoration of any or all disturbed damaged asset, utilities forming part of the Works to the satisfaction of NMSCDCL. The Programme shall provide the information as to required approvals to the methodology, drawing, samples, materials, equipment and their time of submissions to Engineer-in-Charge. The Contractor shall ensure that the trial run period is incorporated in the Programme.
- 36.2 The Contractor agrees and undertakes to submit a monthly progress report to NMSCDCL against the Programme indicating the amount of Works completed ("**Progress Report**") in the format approved by NMSCDCL. In the event the amount of works pertaining to Scope of the Project completed as per the Progress Report fall below the milestone(s) set out in the Implementation Plan, the Contractor agrees and undertakes to increase its resources i.e. machinery and labour at the Site so as to achieve the milestone(s) as set out in Schedule 1 at no extra cost.
- 36.3 In case, where the updated and revised Programme is required, the Contractor shall submit such updated and revised Programme to the Engineer for its approval which shall indicate and provide details of the potential physical and financial implication(s) in relation to the Project including men, materials and machinery requirements.

37. **BOOKS OF REFERENCE:**

- 37.1 The work included in this contract shall be carried out in accordance with the specifications, rules and regulations laid down in the books mentioned below in order of the priority.
 - a. Specifications general and item wise and special to the tender.
 - b. Standard Specifications, 1965.
 - c. Indian Road Congress Std. Specification and codes of Practice for Road Bridges section I to IV (latest edition).
 - d. Indian Railway Std. and codes of practice for reinforced concrete constructions (latest edition).
- 37.2 If the reference books quoted above are short for the items quoted in the Schedule of this contract, reference shall be made to the higher authorities and decision of whom shall be final.

It will be presumed that the contractor has tendered for the work full knowledge of the terms, conditions and specifications mentioned. The std. specifications, the plans and the special provision and all supplementary documents are essential parts of the contract.

37.3 The contractor should quote his rates taking into consideration the Octroi charge which are not refundable on any account.

38. **HUTMENTS:**

- a. Contractor shall build a sufficient number of huts on suitable plot in land for the use of the labours according to the following specification-
- b. Huts of bamboo and grass may be constructed.
- c. A good site shall be selected on high ground removed from jungle, but well provided with trees. Whenever it is available the neighbourhood of jungle grass or weeds should be particularly avoided. Camps should not be established close to large cuttings or earthwork.
- d. The lines of huts shall have spaces of at least 10 yards between two rows. When a good natural site cannot be provided, particular attention should be given to the drainage.
- e. There should be no over-crowding, floor space at the rate of 30 Sq. ft. per head shall be provided. Care should be taken to see that huts are kept clean and in good order.
- f. The contractor must find his own land and if he wants Municipal land, he should apply for and pay assessment for it.
- g. The contractor shall construct a sufficient number of bathing places. One unit per 20 persons shall be provided. Such bathing place should be suitably screened and separate places should be provided for the purpose of washing clothes.
- h. The contractor shall engage a medical officer with a mobile dispensary for a camp of 500 persons, if there is no municipal or other private dispensary situated within a Km from the camp.
- i. The contractor shall make sufficient arrangement for draining sewage water from the bathing or washing place, and shall dispose off wastewater in such a way as not to cause nuisance.
- j. The contractor shall provide the necessary staff for effecting satisfactory conservancy and cleanliness of the camp upto the satisfaction of the Corporation's Engineer. At least one sweeper per two hundred persons should be engaged.
- k. The CEO, NMSCDCL shall be consulted before opening a labour camp and as per his instructions on the matter such as the water supply, sanitary convenience at the campsite, accommodation and food supply to be followed by the contractor.

39. **MISCELLANEOUS**

39.1 TREASURE TROVE

In the event of the discovery by the contractor or by his employees during the progress of the work of any treasure minerals or other articles, or other things of interest, the Contractor shall give immediate notice thereof to the Engineer-in-charge and forthwith hand-over the Engineer-in-charge such treasure or other articles which shall be the property of the Corporation.

39.2 OCCUPATION OF ADDITIONAL LANDS:

- a. In cases when it becomes necessary for the fulfillment of the contract for the contractor to occupy land within and outside the NMC limit, the contractor shall have to make his own arrangement with the landowners and to pay fees if any as may be mutually agreed between them.
- b. The NMSCDCL will provide the contractor all responsible assistance to enable him to obtain land for such purpose.

39.3 **SEVERABILITY**

It is stated that each paragraph, clause, sub-clause, schedule or annexure of this Contract shall be deemed severable and in the event of the unenforceability of any paragraph, clause sub-clause, schedule or the remaining part of the paragraph, clause, sub-clause, schedule annexure and rest of the Contract shall continue to be in full force and effect. If any provision contained in this Contract is or becomes ineffective or invalid or is held to be ineffective or invalid by a court or tribunal having final jurisdiction thereon, all other provisions of this Contract shall remain in full force and effect and the Parties shall mutually discuss and substitute for the said provision such valid and effective provisions having an economic effect as similar as possible to said provision. The failure of the Parties to enforce at any time any of the provisions of this Contract, or any rights in respect thereof, shall not in any way affect the validity of this Contract or the obligations or responsibilities of the Parties there under. The exercise by one Party of any of its rights hereunder shall not preclude or prejudice the other Party from exercising its rights under this Contract.

39.4 VARIATION

- a. The Contractor acknowledges and agree that NMSCDCL shall have the right to issue a Variation Order during the performance of this Contract to change the scope of work as stipulated under this Contract.
- b. Any Variation Order by NMSCDCL which has the effect of addition or deletion of a significant scope of work as stipulated under this Contract and which results whether on its own or cumulatively with any other Variation Order issued by NMSCDCL under this Contract in the past in an increase or a reduction of the Contract Price not exceeding 25 % (twenty-five percent) shall be acceptable to the Contractor on terms and conditions as may be stipulated by NMSCDCL in such Variation Order.
- c. This Price Adjustment clause shall be included in works having time limit of more than 1 year according to the PWD, Government of Maharashtra, Govt. Circular No. Sankirn-2017/C.R.121/Part II/Bldg.2. Please refer to Appendix XIV for Price Variation clause.

39.5 **QUALIFIED PERSONNEL**

Fully qualified and experienced quality control Engineers shall be employed by the Contractor and shall be available on site at all times when important work is taking place. The operators

and foreman in-charge shall be fully trained and experienced in their classes of work for undertaking any scope of work as set out in Appendix X.

39.6 RIGHT AND REMEDIES UNDER THE CONTRACT ONLY FOR THE PARTIES

This Contract is not intended and shall not be construed to confer on any person other than NMSCDCL and the Contractor hereto, any rights and/or remedies herein.

39.7 APPLICABLE LAW AND JURISDICTION

The Contract shall be interpreted in accordance with the laws of India and courts at Nashik shall have the exclusive jurisdiction in relation to this Contract.

39.8 CHECK MEASUREMENTS

- a. NMSCDCL reserves to itself the right to prescribe a scale of check measurement of Work in general or specific scale for specific works or by other special orders.
- b. Checking of measurement by the Engineer shall supersede measurements by subordinate officer(s), and the former will become the basis of the payment.
- c. Any over/ excess payments detected, as a result of such check measurement or otherwise at any stage during the Term, shall be recoverable from the Contractor.

39.9 LANGUAGE

- a. All notices required to be given by one Party to the other Party and all other communications, documents, drawings, instructions, design data, calculations, operation, maintenance and safety manuals, reports, labels and any other data which are in any way relevant to this Contract shall be in writing and in the English language.
- b. Language of instructions or communication or documentation to be used for working out the tender shall be English only.

39.10 **COMMUNICATIONS**

- a. Any notice or other document which may be given by either Party under this Contract shall be given in writing in person or by pre-paid recorded delivery post, email or by facsimile transmission. The notice sent by facsimile (fax) or other electronic means (email) shall also be effective on confirmation of the transmission. The notice sent by registered post or speed post or in person shall be effective on delivery of the notice.
- b. In relation to a notice given under this Contract, any such notice or other document shall be addressed to the other Party's principal or registered office address as set out below:

Engineer

Tel: [●]

Document No.: MAH-NAS-032-053-RFP-V02-01

Fax: [•]
Email: [•]
Contact: [•]

With a copy to NMSCDCL:
{Insert Address}

Tel: [•]
Fax: [•]
Email: [•]
Contact: [•] Contractor
{Insert Address}

Tel: [•]
Fax: [•]
Email: [•]

For the avoidance of doubt, either Party to this Contract may change its address, telephone number, facsimile number and nominated contact for notification purposes by giving the other reasonable prior written notice of the new information and its effective date.

39.11 LINE OUT OF THE WORK

Contact: [●]

The Contractor shall provide free of charge all labour and material required and equipment as may be required for lining out, surveying, inspection decided by the Engineer as considered necessary for the proper and systematic execution of the Work.

39.12 **SET-OFF**

Either Party may set-off or deduct any amount that has become due from the other Party to it, as per the terms of this Contract against any amount owed by such other Party to it, subject to compliance with Applicable Laws.

39.13 NO PARTNERSHIP OR AGENCY

Nothing in this Contract shall constitute or be deemed to constitute any agency, partnership, joint venture, unincorporated association, co-operative entity or other joint relationship between the Owner and the Contractor for any purpose.

39.14 **COUNTERPARTS**

This Contract may be executed in one or more counterparts, each of which shall be deemed an original and all of which collectively shall be deemed one and the same instrument.

39.15 **SOVEREIGN IMMUNITY**

The Contractor hereby unconditionally and irrevocably agree that the execution, delivery and performance by it of the Contract constitutes private and commercial acts and not public or governmental acts.

- 40. MODE AND TIMELINES OF PAYMENT
- 40.1 NMSCDCL shall make all efforts to release the payment to the Contractor within 30 days of approval of RA bill subject to the compliance of following criteria:
 - Minimum value of submitted bills shall not be less than INR 2.5 crores
 - Bill shall be submitted once in a Calender month.
 - All supporting documents shall be in order
 - All related approvals are in place

The contractor shall not hold up work and adversely affect the project's progress while the payments are being processed by NMSCDCL. NMSCDCL reserves the right to levy appropriate penalty in the event the Contractor delays execution of work for want of payment.

Further, NMSCDCL shall not pay any interest towards delay in release of payments for reasons attributable to either of the parties.

40.2 Compensation for all damages done intentionally or unintentionally by contractor's labour whether in or beyond the limits of Government property including any damage caused by the spreading of fire shall be estimated by the Engineer-in-charge or such other officer as he may appoint and the estimates of the Engineer-in-charge subject to the decision of the Commissioner N.M.C./ Director NMSCDCL on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand, failing which, the same will be recovered from the contractor as damages. or reduced by the Engineer-in-charge from any sums that may be due or become due from Authority to the contractor under this contract.

The contractor shall bear the expenses of defending any action or other legal proceedings that may be brought by any persons for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequence.

40.3 No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance works on account of any delay in according to sanction of estimates.

342 | P a g e

Document No.: MAH-NAS-032-053-RFP-V02-01

SCHEDULE 1

The item allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be to reckoned from the date on which the order to commence work is given to the contractor. The work shall through out the stipulated period of the contract be proceeded with all due diligence (time being deemed to be on the essence of the contract on the part of the contractor) and the Contractor shall pay as compensation N.M.C. (whose decision in writing shall be final) may decide amount fo the estimated cost of the whole work as shown by the tender for every day that the work remains un-commenced or unfinished after the proper date. And further to ensure good progress during the execution of the work the contractor shall be bound in all cases in which the time allowed for any work exceeds one month to complete, and abide by the programme.

1/8 of the work in ½ of the time.

3/8 of the work in $\frac{1}{2}$ of the time.

34 of the work in 34 of the time.

Document No.: MAH-NAS-032-053-RFP-V02-01

The following proportions will usually be found suitable.

In 1/10, 1/2, 3/4 of the time reasonable progress of the earth work should be 1/6, 1/2, 3/4 of the total value of the work should be done.

In 1/10, 1/6, ½, ¾ of the time reasonable progress of masonary work should be 1/6, ½, 3/4 of the total value of the work should be done.

Similar procedure should be followed in other items also.

In the event of contractor failing to comply with this condition he shall be liable to pay as compensation an amount equal to one percent or such small amount as the Commissioner (whose decision in writing shall be final) may decide of the said estimated cost of the whole work or for incomplete work provide that the total amount of compensation to be paid under the provision of this clause shall not exceed 10 percent of the estimated cost of the work as show in the tender.

If during the period of Defect Liability Period the said work is defective in any manner whatsoever, the contractor shall forthwith on receipt of notice in that behalf from the Engineer-In-Charge, duly commence execution and completely carry out at his cost in every respect all the work that may be necessary for rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portion strictly in accordance with and in the manner prescribed and under the supervision of the Engineer-In-Charge. In the event of the contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefor in the said notice, and/or to complete the same as aforesaid as required by the said notice, the Engineer-In-Charge shall get the same executed and carried out departmentally or by any other agency at the risk on account and at the cost of the contractor. The contractor shall forthwith on demand pay to the Nashik Municipal Corporation the amount of such costs, charges and expenses sustained or incurred by the Nashik Municipal Corporation of which the certificate of the Engineer-In-Charge shall be final and binding on the contractor. Such cost, charges and expenses shall be deemed to be arrears of the property Tax, and in the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of the Nashik Municipal Corporation, the same may be recovered from the contractor as arrears of Property tax. The Nashik Municipal Corporation shall also be entitled to deduct the same from any amount which may then be payable or which may thereafter become payable by the Nashik Municipal Corporation to the contractor either in respect of the said work or any other work whatsoever, or from the amount of the security deposit retained by Nashik Municipal Corporation.

APPENDIX XIV: STAR RATE FOR BASIC MATERIALS CLAUSE

The basic rate (star rate) for cement, steel & bitumen is given below. Any increase or decrease in these basic rates during operative period of contract, the difference in the rate and prevailing market rate will paid to or recovered from the contractor. For determining cement, steel, bitumen, rate difference, for quantity as per work done, contractor shall produce sufficient proof of purchased cement, steel, bitumen in the form of manufacture's authorized challan / gate pass, Excise challan mentioning quantity and grade of cement, steel, bitumen with date & time of delivery, GST paid receipts etc. or refineries' authentic challan. Contractor will have to produce authentic purchase voucher of manufacturing company, supporting voucher of manufacturer of the said brand & of same date will have to be produced of the same lot. The decision of Engineer - In charge in this regard will be final and binding about lowest market operative prices of cement, steel, or rates mentioned in refinery challan for bitumen.

(I) Formula for Bitumen component.

$$V1 = QB (B1 - Bo)$$

V1 = Amount of cost variation in rupees to be allowed for Bitumen components

QB = Quantity of Bitumen (Grade) in metric tonnes used in the works during the period under consideration for working out the cost difference.

B1 = Current ex-refinery price per metric tonne of Bitumen (Grade) under consideration including taxes (Octroi, excise, sales tax) during period under consideration for working out the cost difference.

Bo = Star rate (Basic rate) of Bitumen in rupees per metric tonne given below

Star rate (Basic rate) for Bitumen (VG-30) for this work is **Rs. 28,040/- per M.T Ex Mumbai**.

(II) Formula for Cement component.

Where

V2= Amount of cost variation in Rupees to be allowed for component.

Co = Rs. 4700/- per Tonne (Basic rate in rupees per metric ton as considered for working out value.)

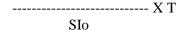
CI1 = Average cement index published in the RBI bulletin for the quarter under consideration.

CIo= Average cement index published in the RBI bulletin for the quarter preceding the month in which to the last date prescribed for receipt of tender, falls

T= Tonnage of cement used in the permanent works for the quarter under consideration.

(III) Formula for T.M.T Steel (Other Plant) component.

$$V3 = So (SI1 - SIo)$$



Where

V3= Amount of cost variation in Rupees to be allowed for T.M.T. steel component.

So = Rs.45,785/- per Tonne for T.M.T. steel (Other) per metric as considered for working out value.

SI1 = Average steel index as per RBI bulletin for the quarter under consideration.

SIo= Average of Steel index as per RBI bulletin for the quarter preceding the month in which to the last date prescribed for receipt of tender, falls

T= Tonnage of steel used in the permanent works for the quarter under consideration.

The following condition shall prevail:

- i) The operative period of the contract shall mean the period commencing from the date of work order issued to the contractor and ending on the date on which the time allowed for the completion of the works specified in the contract for work expires, taking in to consideration the extension of time, if any, for completion of the work granted by Engineer-in-Chief under the relevant clause of the conditions of contract in cases other than those where such extension is necessitated on account of default of the contract. The decision of the Engineer-in-Chief as regards the operative period of the contract shall be final and binding on the contractor. Where any compensation for liquidated damages is levied on the contractor on account of delay in completion or inadequate progress under the relevant contract provisions, the price adjustment amount for the balance of work from the date of levy of such compensation shall be worked out by pegging the insides, L1, M1, C1, P1, B1, S1, and C1 to the levels corresponding to the date from which such compensation is levied.
- ii) The cost variation shall be determined during each quarter as per formula given above in this clause.
- iii) The cost variation under this clause shall not be payable for the extra items required to be executed during the completion of the work.
- IV) This clause is operative both ways, i.e. if the variation as calculated above is on the plus side, payment on account of the cost variation shall be allowed to the contractor and if it is on the negative side the NMC shall be entitled to recover the same from the contractor and the amount shall be deductible from any amounts due and payable to the contractor under any contracts..

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

APPENDIX XV: DRAWINGS

(Refer Clause 1.1.5 of the RFP)

C1	Goda Park	AGH882A01	Master plan for Goda Park
C1	Goda Park	AGH882A02	Jetty Detail
C1	Goda Park	AGH882A03	Plan for Restaurant and Pump Room Area
C1	Goda Park	AGH882A03a	Section for Restaurant and Pump Room Area
C1	Goda Park	AGH882A03b	Detail for bourdaux mirror (mist water fountain)
C1	Goda Park	AGH882A04	StepRamp area detail for Goda Park
C1	Goda Park	AGH882A04a	Detail Bubbler jet fountain
C1	Goda Park	AGH882A05	Amphitheater Plan for Goda park
C1	Goda Park	AGH882A5a	Amphitheater Section for Goda park
C1	Goda Park	AGH882A5b	Detail for water screen at amphitheater
C1	Goda Park	AGH882A06	Detail for Heritage Walk
C1	Goda Park	AGH882A07	Children Play Area Plan for Goda park
C1	Goda Park	AGH882A07a	Children Play Area Section for Goda park
C1	Goda Park	AGH882A08	Proposed Retaining wall for goda park and goda walk
C1	Goda Park	AGH882A09	Main Entrace for Goda park
C1	Codo Dark	ACU993A10	Plantation plan for Goda Park and Ganga wadi
CI	Goda Park	AGH88ZA1U	Road to Sundar Narayan Temple
C1	Goda Park	AGH882A11	Irrigation Plan for Goda Park and Ganga wadi
			Road to Sundar Narayan Temple
C2		AGH882B01	Detail plan for Goda walk
C3	temple	AGH882C01	Master plan for Sundar Narayan Temple
C3	Sundar Narayan temple	AGH882C02	Sambhaji udyan near Sundar Narayan Temple
C3	Sundar Narayan temple	AGH882C02a	Pergola detail for Sumbhaji udyan
C3	Sundar Narayan temple	AGH882C03	Sundar Narayan Temple Detail plan
C4	Ghat Area	AGH882D01	Master plan for Ghat Area at Gandhi Talao
C4	Ghat Area	AGH882D02	Master plan for kashi vishawanath temple to ramsetu bridge
C4	Ghat Area	AGH882D03	Master plan for vishawanath Ramsetu Bridge up to Parkig
C4	Ghat Area	AGH882D04	Master plan for Parking and Modkeshowar Ghat Area
C4	Ghat Area	AGH882D05	Master plan for Talkuteshwar Ghat (Part 1)
C4	Ghat Area	AGH882D06	Master plan for Talkuteshwar Ghat (Part 2)
C4	Ghat Area	AGH882D07	Section for Ghat Area (Part 1)
C4	Ghat Area	AGH882D7a	Section for Ghat Area (Part 2)
C4	Ghat Area	AGH882D08	Ramayan circuit garden miniature pedestal
C4	Ghat Area	AGH882D09	Floor Painting option 1
C4	Ghat Area	AGH882D09a	Floor Painting option 2
C I		i e	· · · · · · · · · · · · · · · · · · ·
	C1 C	C1 Goda Park C2 Goda walk C3 Sundar Narayan temple C3 Sundar Narayan temple C3 Sundar Narayan temple C4 Ghat Area	C1 Goda Park AGH882A02 C1 Goda Park AGH882A03a C1 Goda Park AGH882A03b C1 Goda Park AGH882A04 C1 Goda Park AGH882A04 C1 Goda Park AGH882A04 C1 Goda Park AGH882A05 C1 Goda Park AGH882A5a C1 Goda Park AGH882A5b C1 Goda Park AGH882A06 C1 Goda Park AGH882A07 C1 Goda Park AGH882A07 C1 Goda Park AGH882A08 C1 Goda Park AGH882A09 C1 Goda Park AGH882A09 C1 Goda Park AGH882A10 C2 Goda Walk AGH882A11 C3 Sundar Narayan temple AGH882C01 C3 Sundar Narayan temple AGH882C02 C3 Sundar Narayan temple AGH882C02 C4 Ghat Area AGH882D01 C4

35	C5	Structure	AGH882E01	admin room, Security cabin and console room detail
36	C6	Electrical Drawing	AGH882El01	lighting fixture plan for Goda Park and Ganga wadi Road to Sundar Narayan Temple
37	C6	Electrical Drawing	AGH882El02	Lighting fixture plan for Goda Walk
38	C6	Electrical Drawing	AGH882El03	sundar narayan temple
39	C6	Electrical Drawing	AGH882El04	Ghat area
40	C7	Street Furniture	AGH882F01	Street furniture 1 for Goda river(sinage and bird House)
41	C7	Street Furniture	AGH882F02	Stone Deepstambh and Stone Bollard for Godavari riverfront
42	C7	Street Furniture	AGH882F03	Play Equipment details
43	C7	Street Furniture	AGH882F03a	Play Equipment"Alphabet", aGada walk stone sculpture,Tree grating and FRP Pot
44	C7	Street Furniture	AGH882F04	Gate Details
45	C7	Street Furniture	AGH882F05	Railing and Fencing Details

Document No.: MAH-NAS-032-053-RFP-V02-01