



TENDER DOCUMENT

Particulars	Details
Client	Nashik Municipal Smart City Development Corporation Limited
ProjectName	Godavari Riverfront Development Civil Works including Storm Water Drain, Sewer Lines and Water lines in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra)
CostofBlankTenderForm	INR10,000/- (Rupees Ten Thousand only) + INR90 + 9% SGST + 9% CGST
EstimatedCost	INR 7,26,49,271/- (Rupees Seven Crores Twenty Six Lakhs Forty Nine Thousand Two Hundred Seventy One only) excluding GST
Earnest Money Deposit/Bid	INR 3,64,000/- (Rupees Three Lakhs Sixty Four Thousand only)
Performance Security	INR 14,53,000/- (Rupees Fourteen Lakhs Fifty Three Thousand only)
Document Issue Date	07/03/2019
Document Number	(MAH-NAS-017-RFP-01)

Nashik Municipal Smart City Development Corporation Limited
Lokneta Panditrao Khaire Panchavati Divisional Office, 4th floor, MakhmalabadNaka,
Panchavati, Nashik - 422003

March, 2019



Nashik Municipal Smart City Development Corporation Limited (NMSCDCL)

E-Tender no. 30 (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 form (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	Request for Proposal for selection of contractor for Godavari Riverfront Development Civil Works including Storm Water Drains, Sewerage and Water lines in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra)	Rs. 10000/- + Rs. 90 + CGST (9%) + SGST (9%)	INR 3,64,000/- (Rupees Three Lakhs Sixty Four Thousand only)	18 months (including monsoon and trial run)	07/03/2019 3:00 PM	07/03/2019 03:00 PM	14/03/2019 03:00PM	1/04/2019 03:00 PM	1/04/2019 03:00 PM

**- Online Payment mode via Net banking through mahatender portal*

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.

TENDER NOTICE

Online digitally signed Bids in 'B1' Form (*percentage 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 Civil Works including Storm Water Drain, Sewer Lines and Water lines in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra)
2	Estimated Cost	INR 7,26,49,271/- (Rupees Seven Crores Twenty Six Lakhs Forty Nine Thousand Two Hundred Seventy One only) excluding GST
3	Cost of Blank Bid form/TD Fee (Non-Refundable)	INR 10,000/- (Rupees Ten Thousand only) +Rs. 90/- + 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	54 (Fifty-Four) months consisting of: (a) 18 (Eighteen) months of Construction Period (b) 36 (Thirty Six) months of Defect Liability Period
5	NMSCDCL Contact Details	Nashik Municipal Smart City Development Corporation Limited Loknete Panditrao Khaire Panchavati Divisional Office, 4 th Floor, Makhamalabad Naka, Panchavati Nashik. - 422003 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 Deposit	INR 3,64,000/- (Rupees Three Lakhs Sixty Four Thousand only) and is to be deposited online using credit card/ debit card/ net banking at https://mahatenders.gov.in

Table A

Name of work	Estimated Cost (INR)	Construction Period	Defect Liability Period
Civil Works including Storm Water Drain, Sewer Lines and Water lines	INR 7,26,49,271/- (Rupees Seven Crores Twenty Six Lakhs Forty Nine Thousand Two Hundred Seventy One only)	18 (Eighteen) Months	36 (Thirty-Six) months

SCHEDULE OF BIDDING PROCESS

S. No.	Particulars	Date and Time
1	Period of availability of the Bidding Document on Web Site	From 07/03/2019, 15:00 hrs. To 1/04/2019, 15:00 hrs.
2	Last date and address for submission of letters seeking clarifications or suggest amendments to RFP in writing	Date: 14/03/2019, Time: 15:00hrs. Email ID: pmc@nashiksmartcity.in Address: The Chief Executive Officer, NMSCDCL Office, Loknete Panditrao Khaire Panchavati Divisional Office, 4 th Floor, Makhmalabad Naka, Panchavati, Nashik-422003
3	Time and date of Pre-Bid Conference	Date: 14/03/2019, Time: 15:00hrs.
4	Last date of issuing clarifications from NMSCDCL	To be intimated separately
5	Last date and time for Online Receipt of Bids	Date: 1/04/2019, Time: 15:00 hrs.
6	Date and time for physical/ hard copy receipt of Bids	Date: 1/04/2019, Time: 15:00 hrs.
7	Time and date of opening of Envelope A Pre – Qualification Bids (Bids will be opened Online by the authorized officers)	Date: 2/04/2019, Time: 15:00 hrs.
8	Time and date of opening of Envelope B- Financial Bids (Bids will be opened online by the authorized officers)	To be intimated separately to the Qualified Bidders
9	Officer inviting Bids	The Chief Executive Officer, NMSCDCL Office, Loknete Panditrao Khaire Panchavati Divisional Office, 4 th Floor, Makhmalabad 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 is 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 querie srelated to the Bidding Documents, please contact NMSCDCL.

Chief Executive Officer

NMSCDCL

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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:

ABD	Area Based Development
Addendum	As defined in clause 2.9.1
Additional Performance Security	As defined in clause 2.27
Assessed Available Bid Capacity	As defined in clause 2.2.2 (A)
Associate	As defined in clause 2.2.1 (d)
Bids	As defined in Disclaimer
Bidders	As defined in clause 3.1.2
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
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)
Consortium	As defined in clause 2.2.1 (b)
Consortium Agreement	As defined in clause 2.2.1 (c) (vi)
Construction Period	Means the period of 18 (Eighteen) months from the date of issuance of Work Order for completing the Project.
Contract Agreement	As defined in clause 1.1.4 and as set forth in Appendix XIII of the RFP
Damages	As defined in clause 2.2.1 (d)

Defect Liability Period	Means the period of 36 (Thirty Six) months applicable for Project.
Entity	Means: (a) A company or body corporate, (b) A limited liability partnership or partnership firm, (c) An association or body of individuals, whether incorporated or not, (d) An artificial juridical person.
Estimated Project Cost	INR 7,26,49,271/- (Rupees Seven Crores Twenty Six Lakhs Forty Nine Thousand Two Hundred Seventy One only) excluding GST 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 Bid Price 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)
L1 Bidder	As defined in clause 2.20.1
LOA	As defined in clause 2.20.4
Lead Member	As defined in clause 2.2.1(c) (iii)
Member	Means member of a Consortium
Net Worth	As defined in clause 2.2.4
NMC	Means Nashik Municipal Corporation
NMSCDCL	Means Nashik Municipal Smart City Development Corporation Limited
Performance Security	As defined in clause 2.26.1
Pre-Qualification Bid	As defined in clause 1.2.1

Pre - Qualification Criteria	As set out in clause 2.2 and comprises of Assessed Available Bid Capacity, Technical Capacity and Financial Capacity
Project	Means the Godavari Riverfront Development Civil Works including Storm Water Drain, Sewer Lines and Water lines in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra) comprising of Defect Liability Period
Qualified Bidder	As defined in clause 1.2.1 and means an Eligible Bidder who satisfies the Pre-Qualification criteria under Clause 2.2
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) which has to be satisfied by the Bidders for the purpose of evaluation of Pre-Qualification Bid

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. 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 supersede 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**), Swachh 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 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 detailed out in Appendix X:
- 1.1.4 DELETED
- 1.1.5 The estimated cost of the Project is **INR 7,26,49,271/-** (Rupees Seven Crores Twenty-Six Lakhs Forty Nine Thousand Two Hundred Seventy-One only) **excluding GST ("Estimated Project Cost")**. The estimated cost of each part of the Project is in accordance with Table A of this RFP. 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**"). 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 2.13 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

- 1.2.1 NMSCDCL has adopted a single stage-two envelope bidding process ("**Bidding Process**") for selection of the Bidder for award of the Project. All Bidders shall simultaneously submit their relevant qualification details for the purpose of meeting the minimum Pre-Qualification Criteria ("**Pre-Qualification Bid**"), and the Financial Bid for quoting the Bid Price online through e-procurement portal - <https://mahatenders.gov.in> pursuant to this RFP. 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 submitting the Bid, the Bidder shall pay to NMSCDCL the Bid Document Fee. The Financial Bid under the second envelopeshallbe opened for the Qualified Bidders who satisfy the minimum criteria of Pre-Qualification under Clause 2.2.

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 In terms of the RFP, a Bidder is required to deposit, along with its Bid, a bid security equivalent to an amount of **INR 3,64,000/-** (Rupees Three Lakhs Sixty-Four 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 percentage 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 for the Project;
 - (b) Defect Liability Period for each Project.
- 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.
- 1.2.7 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 Redevelopment of Godavari Riverfront Development Civil Works including Storm Water Drain, Sewer Lines and Water lines in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra)"**

SECTION 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.

2.2 Qualification Criteria

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 may be a private Entity 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 **Two members** in total i.e. **one Lead Member Plus One Associate 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;(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). the Bidder or its Member (or any constituent thereof) and any other 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 effective date 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. 2017-18. The Bidder should submit attested copies of auditor's report along with the audited financial statements as per the format set forth in Annexure 2 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

The Bidders Whose Assessed Available Bid Capacity is more than or equal to the Estimated Project Cost shall be qualified under the Pre- Qualification Bid. The Assessed Available Bid Capacity shall be calculated as under:

$$\text{Assessed Available Bid Capacity} = (A * N * 2) - B$$

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 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:

1. ***Shall have successfully completed either of the following similar works during the last 7 (seven) years preceding the Bid Due Date:***
 - a. One similar work costing not less than INR 5,81,00,000/- (Rupees Five Crores Eighty-One Lakhs Only) **OR**
 - b. Two similar works costing not less than INR 3,63,00,000/- (Rupees Three Crores Sixty-Three Lacs Only) **OR**
 - c. Three similar works costing not less than INR 2,90,00,000/- (Rupees Two Crores Ninty Lakhs Only)

"Similar works" means an infrastructure project successfully completed in the Storm Water sector OR Water Sector OR Sewerage sector OR any combination thereof.

2. **Shall have successfully Completed the following works**

- a. One work of construction of RCC Box drain of minimum width of 1 m and above for a length of at least 200 mtr a single contract during last 7 (seven) years preceding the Bid Due Date
- b. One work of minimum 200 mm diameter and above for length of at least 1 km related to providing, lowering, laying, jointing, testing and commissioning of RCC pipeline for sewerage during last 7 (seven) years preceding the Bid Due Date in a single contract.
- c. One work of minimum 100 mm diameter and above for length of at least 400 m related to providing, lowering, laying, jointing, testing and commissioning of CI/ DI/ MS pipelines for Water Supply works during last 7 (seven) years preceding the Bid Due Date in a single Contract.

- *For considering the Technical Capacity of the Consortium, experience of each Member shall be clubbed.*
- *In case of the Consortium, each Member shall satisfy at least one of the criteria given hereinabove.*
- *Completion Certificates for the technical capacity and experience Clause 2.2.2 (B) should be issued by an officer not below the rank of Executive Engineer or equivalent from any of Central/State Govt. Departments Government Under takings, Public Sector, Municipal Corporations formed under relevant Act and published in central/state gazette.*
- *For the purpose of evaluation of Pre-Qualification Bid, the value of executed work submitted by the Bidder as per the terms of the RFP shall be brought to current value at simple rate of 5% per annum from the date of completion of work.*

(C) Financial Capacity

(a) ***For demonstrating financial capacity (“Financial Capacity”), the Bidder shall have a minimum (In case of Consortium, only the Lead Member has to meet the Financial Capacity):***

- i. Net Worth should be positive as of 31 March 2018 at the close of the preceding financial year i.e. FY 2017 -18;
- ii. Average annual turnover of at least INR 3,60,00,000/- (Rupees Three Crores Sixty Lakhs only) averaged over a period of 3 (three) years of the preceding financial years i.e. 2015-16, FY 2016 -17, FY 2017 – 18.; and
- iii. The Bidder shall submit a solvency certificate from a nationalized or scheduled bank to the tune of INR 1,80,00,000/- (Rupees OneCrores Eighty Lakhs 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 III, 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) Methodology adopted for calculating such net worth
- (c) 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.

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 which has been barred or black-listed by the Central / State Government, municipal Corporations 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, either individually or as member of a Consortium.

2.2.7 Any Bidder including any Member should, in the last 3 (three) years, have neither failed to perform any contract, as evidenced by imposition of a penalty by an arbitral or judicial employer or a judicial pronouncement or arbitration award against the Bidder or its Associate, as the case may be, nor has been expelled from any project or contract by any public entity nor have had any contract terminated by any public entity for breach by such Bidder or its Associate. For the purpose of this clause 2.2.7, the Bidder shall submit an undertaking in the format as set out in Appendix IV.

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 2.5 above.
- (d) satisfied itself about all matters, things and information including matters referred to in clause 2.5 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 2.5 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, 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.

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 II A	Power of Attorney for Lead Member of Consortium (applicable in case a Bid is submitted by a Consortium)
Appendix II B	Consortium Agreement
Appendix III	Statement of Legal Capacity
Appendix IV	Format for Declaration by the Bidder for not being Blacklisted / Debarred
Appendix V	<p>Letter comprising the Pre- Qualification Bid</p> <p>Annexure 1 Details of works executed by the Bidder;</p> <p>Annexure 2 Financial Capacity of the Bidder.</p> <p>Annexure 3 Details of Plants and Machinery to be deployed by the Bidder in accordance with clause 31 of the General Conditions of Contract as set out in Appendix XIII;</p> <p>Annexure 4 Details of technical personnel to be deployed by the Bidder in accordance with clause 10.1 of the General Conditions of Contract as set out in Appendix XIII;</p> <p>Annexure 5 Approach and Methodology; and</p> <p>Annexure 6 Details of work tendered for and in hand as on the date of submission of this RFP.</p>

Appendix VI	Letter comprising the Financial Bid
Appendix VII	Format of sending Pre-bid queries
Appendix VIII	Format for Performance Security
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. xlsformat 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 4. 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, 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 II A Power of Attorney for Lead Member of Consortium (applicable incase a Bid is submitted by a Consortium)
- (c) Appendix III Statement of Legal Capacity
- (d) Appendix IV Format for Declaration by the Bidder for not being Blacklisted / Debarred
- (e) Bid Security online payment fee receipt
- (f) Bid Document Fee online payment receipt
- (h) Appendix - V (Letter comprising the Pre – Qualification Bid) including Annexure 1 to 6 and supporting certificates/documents.

Note: Scanned copy of above mentioned document shall be uploaded online 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 in favour of whom the power of attorney for signing the bid (Appendix II) is submitted.

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 as mentioned in this RFP. Bidder shall submit the hard copies of the Pre- Qualification Bid on or before the date and time specified in this RFP.

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 on Page 4.

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:

- 2.16.1 NMSCDCL shall open the Bids as mentioned in this RFP 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.
- 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, modification, 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 alter 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 3.1.4.
- (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 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.

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 offer to match the said L1 Bidder in the second 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 Performance Security in accordance with clause 2.26.

In the event the duplicate copy of the LOA duly signed by the L1 Bidder 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.

2.20.5 After acknowledgement of the LOA as aforesaid by the Selected Bidder, the Selected Bidder shall not be entitled to seek any deviation, modification or amendment in 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 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:
- (a) If a Bidder submits a non-responsive Bid;
 - (b) 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;
 - (c) 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;
 - (d) In the case of Selected Bidder, if it fails within the specified time limit:
 - (i) to sign and return the duplicate copy of LOA;
 - (ii) to sign the Contract Agreement; or
 - (iii) to furnish the Performance Security within the period prescribed in clause 2.26.

2.26 Performance Security

- 2.26.1 The Selected Bidder shall obtain (at his cost) a Performance Security for proper performance, amounting to **INR 14,52,000/-** (Rupees Fourteen Lakhs Fifty-Two Thousand only) ("**Performance Security**").
- 2.26.2 Within 15 (fifteen) days from the date of issuance of LOA, the Selected Bidder shall furnish 50% of the Performance Security,) which may be in form of an unconditional and irrevocable bank guarantee in accordance with Appendix VIII or a Demand Draft.
- 2.26.2 Deleted
- 2.26.3 The remaining 50% 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 50% of the Performance Security shall be released at the time of issuance of Completion Certificate.
- (ii) The remaining 50% 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 Defect Liability Period, 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 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 or a Demand Draft.
- 2.27.2 The Additional Performance Security submitted by the Bidder shall be payable by the Bidder as mentioned below:

Final Bid by the Bidder	Additional Performance Security (APS)
up to 10% below the Estimated Project Cost	1% of the Estimated Project Cost
more than 10% below the Estimated Project Cost and up to 15%	% of the APS = (% rate quoted – 10%) plus 1%. E.g.: If the final bid is 14% below the Estimated Project Cost, then:

	$APS = (14\% - 10\%) + 1\% = 5\%$
more than 15% below the Estimated Project Cost	$\% \text{ of the APS} = (\% \text{ rate quoted} - 15\%) \times 2.$ e.g.: If the final bid is 19% below the Estimated Project Cost, then: $APS = (19\% - 15\%) * 2\% = 8\%$

2.27.3 The Additional Performance Security payable shall be submitted by the Bidder within 15 (fifteen) days from the date of issuance of LOA, at time of submitting 50% of the Performance Security under Clause 2.26.2

2.27.4 DELETED

SECTION 3

3. Criteria for Evaluation

3.1 Evaluation Parameters

3.1.1 Subject to Clause 2.1, the Bidder's competence and capability is proposed to be established under the Pre – Qualification Bid 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 (B); and
- (c) Financial Capacity as set out in clause 2.2.2 (C).

3.1.2 The Bids of the Bidders considered as responsive in terms of Clause 2.18.1 ("**Bidders**") shall be evaluated. Bids of the Bidders which do not meet these criteria shall be rejected.

3.1.3 In case of any discrepancy between the documents submitted in hard copy and in soft copy (online), the documents, except in case of the Power of Attorney(ies), submitted online shall prevail.

3.1.4 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 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.

3.1.5 Deleted

3.2 Details of Experience

3.2.1 DELETED

3.2.2 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.

3.2.3 Deleted

3.2.4 Financial information for purposes of evaluation

- (a) 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.

- (b) 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 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.
- 4.2 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.
- 4.3 For the purposes of this Section 4, the following terms shall have the meaning hereinafter respectively assigned to them:
- (a) **"Corrupt practice"** means
- (i) 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

- (ii) 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;

- (b) "**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;

- (c) "**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;

- (d) "**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

- (e) "**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.

4.4 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

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 on page 4 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.	Type	Consortium/Company/partnership firm/LLP/Sole proprietorship
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	

Signature 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 Nodated 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
..... (Insert the name of the executants company)

Through the hand of

Mr.

Duly authorized by the Board to issue such Power of Attorney

Dated this day of

Accepted

.....

Signature of Attorney
(Name, designation and address of the Attorney)

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 Member of Consortium

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

Whereas the Nashik (the "**Authority**") has invited bids for the redevelopment of Godavari Riverfront Development Civil Works including Storm Water Drain, Sewer Lines and Water lines in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra). Whereas, _____, and _____ (collectively the "**Consortium**") being Members of the Consortium are interested in bidding for the Project in accordance with the terms and conditions of the Request for Proposal and other connected documents in respect of the Project, and;

Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's bid for the Project and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We, ____ (having our registered office at _____, M/s. ____, having our registered office at _____, and M/s. _____, having our registered office at _____, {insert the respective names and addresses of the registered office of members} (hereinafter collectively referred to as the "**Members of the Consortium**") do hereby irrevocably designate, nominate, constitute, appoint and authorise M/s _____, having its registered office at ____, being one of the Members of the Consortium, as the **Lead Member** and true and lawful attorney of the Consortium (hereinafter referred to as the "**Attorney**").

Accordingly:

- (1) We hereby irrevocably authorise the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium and us during the bidding process.
- (2) in the event the Consortium is awarded the Project, during the execution of the Project, and in this regard, to do on our behalf and on behalf of the Consortium, all and any such acts, deeds or things as are necessary or required or incidental to the submission of its bid for the Project, including but not limited to
 - a. signing and submission of all applications, bids and other documents and writings,
 - b. participate in bidders' meetings and other conferences,
 - c. respond to queries, submit information/ documents,
 - d. sign and execute contracts and undertakings consequent to acceptance of the bid of the Consortium andgenerally, to represent the Consortium in all its dealings with the Authority, and/ or any other Authority agency or any person, in all matters in connection with or relating to or arising out of the Consortium's bid for the Project and/ or upon award thereof till the Contract Agreement is entered into with the Authority.
- (3) We hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise

of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/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)

(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))

(To be executed on Stamp paper of appropriate value)

THIS CONSORTIUM AGREEMENT is entered into on this the day of 20...

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 FIRSTthe SECONDPART 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. dated(the "**RFP**") for selection of a Contractor for Godavari Riverfront Development Civil Works including Storm Water Drain, Sewer Lines and Water lines in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra) ("**Project**").

(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:

[•]

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

[•]

(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 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.

SIGNED, SEALED AND DELIVERED

For and on behalf of

LEAD MEMBER by:

(Signature)

(Name)

(Designation)

(Address)

SIGNED, SEALED AND DELIVERED

For and on behalf of

SECOND PART

(Signature)

(Name)

(Designation)

(Address)

SIGNED, SEALED AND DELIVERED

For and on behalf of

THIRD PART by:

(Signature)

(Name)

(Designation)

(Address)

In the presence of:

1.

2.

Notes:

- 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 attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on*

behalf of the 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
LoknetePanditraoKhairePanchavati Divisional Office,
4th Floor, Makhmalabad Naka
Panchavati Nashik. - 422003

Dear Sir,

We hereby confirm that we satisfy the terms and conditions laid out in the RFP.

We have agreed that [●]. {insert individual's name holding the power of attorney for signing the bid} will act as our representative and has been duly authorized to submit the RFP. Further, the authorized signatory is vested with requisite powers to furnish such letter and authenticate the same. Thanking you,

Yours faithfully,

[●]

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

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

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

Date: [●]

To

Chief Executive Officer

Nashik Municipal Smart City Development Corporation Limited

LoknetePanditraoKhairePanchavati Divisional Office

4th Floor, Makhmalabad Naka

Panchavati

Nashik - 422003

Subject: Declaration for not being debarred/ black-listed by Central/ any State Government department in India as on the date of submission of the Bid

RFP Reference No: [●]

Dear Sir,

I, authorized representative of _____, hereby solemnly confirm that the Contractor _____ is not debarred / black-listed by any Central/State Government/ PSU entity/ Municipal Corporation in India for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices or for any other reason as on date of submission of the Bid.

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

Nashik Municipal Smart City Development Corporation Limited

Loknete Panditrao Khaire Panchawati Divisional Office

4th Floor, Makhamalabad Naka

Panchavati

Nashik - 422003

Subject: Application for Pre – Qualification Bid for Selection of a Contractor for Godavari Riverfront Development Civil Works including Storm Water Drain, Sewer Lines and Water lines 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 the Project.
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(e) 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 all necessary 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, 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.

10. 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.
11. 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.
12. 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.
13. 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-VIII thereof.
14. 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.
15. 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.
16. 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.
17. I offer a Bid Security of **INR 3,64,000/-** (Rupees Three Lakhs Sixty-Four Thousand only) to NMSCDCL in accordance with the RFP.
18. I agree and undertake to abide by all the terms and conditions of the RFP.
19. I certify that in terms of the RFP, our Net Worth is Rs [●] (Rs. In words)
20. I undertake to engage personnel specialized/ sub-contractors for design and construction of those elements of the Project for which we do not have adequate experience.
21. I agree and undertake to be jointly and severally liable for all the obligations of the Contractor under the Contract Agreement.

22. 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.
23. 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 works executed by the Bidder

(Refer clause 2.2.2 (B) of the RFP)

NAME OF THE BIDDER:

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

ANNEXURE 2: Financial capacity of the Bidder

(Refer Clause 2.2.2 (C), 2.2.3 and 2.2.4 of the RFP)

Part A:

	Financial Year 2015-2016	Financial Year 2016- 2017	Financial Year 2017- 2018
<i>Average Turnover</i>			

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

Part B:

	Financial Year preceding the Bid Due Date
<i>Net Worth</i>	

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 3: Details of plants and machinery to be deployed by the Bidder for the Project

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 proposed to be deployed by the Bidder for the Project.

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.

ANNEXURE 5: Approach and Methodology.

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.

ANNEXURE 6: Details of work tendered for and in hand as on the date of submission of this RFP

(Refer clause 2.2.2 of the RfP)

NAME OF THE BIDDER:

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

APPENDIX VI: Letter comprising the Financial Bid

(Refer Clauses 2.12.1, and 2.18)

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

Subject: Financial Bid for Selection of a Contractor for Godavari Riverfront Development Civil Works including Storm Water Drain, Sewer Lines and Water lines 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.

1. I/We 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/We undertake that the prices are in conformity with the specifications prescribed. The quote/ price is 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/We undertake, if our Bid is accepted, to complete the Project in adherence to the Bidding Document.
4. I/We have examined and have no reservations to the Bidding Documents, including any corrigendum/addendums issued by NMSCDCL.

5. I/We 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/We 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/We hereby declare that in case the LoAis 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/We 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/We 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.

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: MAH-NAS-017-RFP-01

To be given in accordance with the Bill of Quantities (refer Appendix XII) for the Project respectively including the financial quote for defect Liability Period:

I/We quoted my/our offer as at par or [●] percent above or [●] percent below the Estimated Project Cost i.e. **INR 7,26,49,271/-** (Rupees Seven Crores Twenty Six Lakhs Forty Nine Thousand Two Hundred Seventy One only) excluding GST

APPENDIX VII: Format of sending pre-bid queries

RFP No: [●]

Bidder's Request For Clarification				
Sr. No.	Clause No.	Page No.	Content of RFP Requiring Clarification/ changes	Clarification required/ Change Requested
Name and complete official address of Organization submitting query / request for clarification			Telephone, Fax and E-mail of the organization Tel: Fax: Email:	
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 Civil Works including Storm Water Drain, Sewer Lines and Water lines 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}.

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 on its behalf, any amount up to and not exceeding INR [●]/- (Rupees [●]), 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.

Our liability under this Guarantee is restricted to INR [●]/- (Rupees [●] only). Our Guarantee shall remain in force until..... NMSCDCL shall be entitled to invoke this Guarantee till

The Guarantor Bank hereby agrees and acknowledges that NMSCDCL shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

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.

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

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Nashik shall have exclusive jurisdiction.

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.

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.

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.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs. _____ (Rs. _____ only) and it shall remain in force until We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if NMSCDCL serves upon us a written claim or demand.

Signature _____

Name _____

Power of Attorney No. _____

For

_____ [Insert Name of the Bank] _____

Banker's Stamp and Full Address.

Dated this ____ day of ____, 20__

Witness:

1.

Signature

Name and Address

2.

Signature

Name and Address

ANNEXURE 1: Check list for Performance Security

Sl. 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	
B	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	
E	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?	
H	Contact details of issuing bank including details of Branch Manager, email id, mobile number etc.	
I	Is the Jurisdiction of Court is restricted to Courts of Nashik	

APPENDIX VIII-B: BANK GUARANTEE FOR MOBILIZATION ADVANCE

To

Chief Executive Officer
Nashik Municipal Smart City Development Corporation Limited
LoknetePanditraoKhairePanchavatiDivisional Office
4thFloor, Makhamalabad Naka
Panchavati Nashik
Nashik

1 In consideration of The Chief Executive Officer, NMSCDCL, Nashik (hereinafter called "the Authority"), having agreed to give interest bearing mobilization advance to Rs._____ (In Words: Rupees _____) as against the total amount of Rs._____ (In Words: Rupees _____) to

M/s._____ hereinafter called the said **Contractor** from the demand under the clause of the special conditions of contract agreement

No._____ Based on the letter of award No. _____ made between Authority and M/s _____ an interest bearing mobilization advance at interest of 10%. Such Bank Guarantee should be from Branch of such bank in Maharashtra only. The mobilization advance together with accrued interest shall be recovered in first Two (2) Running Account (R.A.) Bills. In case of mobilization advance not being recovered in full, the balance unrecovered advance shall carry an interest of p.a. Similarly, if the advance is not fully recovered as above, the balance amount shall carry an interest of till it is full recovered through R.A. Bills.

For the work of (hereinafter called 'the said agreement') an interest bearing mobilization advance can be granted on production Bank Guarantee for Rs..... (RupeesOnly), we bank constituted under having its Central Office at, and amongst other places, a Branch at (hereinafter referred to as the Bank) at the request of the said contractor do hereby undertake to pay unconditionally and irrevocably the corporation an amount not exceeding Rs..... (RupeesOnly) and the interest due thereon from time to time against any loss or damage caused to or suffered or would be caused to or suffered by the corporation by reason of any breach by the said contractor of any of the terms and conditions continued in the said Agreement.

2 We, the Bank do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Municipality stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the NMSCDCL by reason of breach by the Contractor(s) of any of the terms and conditions contained in the said Agreement or by reasons of the Contractor(s) failure to perform the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our

liability under this guarantee shall be restricted to an amount not exceeding Rs.....
.....(Rupees Only).

- 3 We undertake to pay to the Authority, any money so demanded notwithstanding any dispute or disputes raised by the Contractor in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor shall have no claim against us for making such payments.

- 4 We, the Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Authority, under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the Chief Executive Officer, NMSCDCL on behalf of the Authority certifies that the terms and conditions of the said Agreement have been fully properly carried out by the said Contractor and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the date _____ we shall be discharged from all liability under this guarantee thereafter.

- 5 We, the Bank further agree with the Authority that the Authority shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Authority against the said contractor and to enforce or forbear from enforcing any or the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor for any forbearance, act or omission on the part of the Authority, or any indulgence by the Authority to the said contractor or by any such matter or thing whatsoever which under the law relating to the guarantees would, but for this provision, have effect of so relieving us from such liability.

- 6 This guarantee will not be discharged due to the change in the constitution of the bank or the Contractor.

- 7 This guarantee is furnished and is deemed to be furnished in ----- and the courts in -----
---- will have Civil Jurisdiction.

- 8 We, the Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Authority in writing.

- 9 Notwithstanding anything contained herein before, our liability under the guarantee is restricted to Rs..... (Rupees Only) Our Guarantee shall remain in force till

_____. Unless a claim under this guarantee is made before that date i.e. _____ all your rights under the said guarantee shall be forfeited and we shall be relieved and be discharged from all liability there-under.

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

Storm Water Drain and Sewerage Line

River Godavari flows through Nashik and its Northern part is called Panchavati. It is said that lord Shri Ram and Sita along with Laxman stayed at Panchvati for some time. Thus Panchavati has gained holy importance. The most important place in Panchavati is RamKund. It is so called because Lord Rama is believed to have taken bath there. Mortal remains (Asthi) immersed in this kunda, are immediately absorbed in the water. A dip in this sacred kunda is considered very pious. Situated nearby is Gandhi lake (Talav) having a memorable monument made from white marble, in memory of the Father of the nation. The ashes were dropped in Ramkund after Gandhiji passed away on 30th January 1948. Mr Nehru was also present on this occasion.

The project is to achieve and maintain River Godavari ensuring acceptable water quality at Ramkund and Laxmankund, ensuring environmentally sustainable development through disconnection of sewer with storm box drain of Aruna Riverto ensure effective abatement of pollution and rejuvenation of the River Godavari by adopting interception of Aruna River with Waghadi River. Therefore, the scope of the work will include:

- a) Construction of RCC Box Drain from Ramkund to Gadge Maharaj Bridge the Size of the RCC Box is 2m X 2m and length is about 550m.
- b) Providing, Laying, jointing, testing and commissioning of length about 2.4 Km RCC NP3 class main sewer lines, laterals and sub-mains, diameters ranging from 300mm to 1200 mm as per the Drawings.
 - Construction of various sizes of the manholes with frame and cover as per BOQ and Drawings.
 - Providing and making house service connections with chambers as required.
 - Desilting and retrofitting of existing sewer network as per site conditions.
 - Detailed location survey for drainage lines.
 - Providing as-built drawings.

Water Pipe Line

Laying of water pipeline from Indrakund to Ramkund of about 950m of diameter ranging from 150mm to 250mm

Ramkund has significant cultural and spiritual value in terms of its usage. It is important to have water in Ramkund throughout the year, but during the summers the water flow from the Godavari river is limited and hence to maintain the water level in the Ramkund a pipeline is proposed from Indrakund to Ramkund.

Scope of Work

- Procurement and installation of submersible pump
- Construction of small water storage
- Procurement and laying of pipeline from Indrakund to Ramkund

APPENDIX XI: TECHNICAL SPECIFICATIONS

RCC BOX DRAIN

(Life expectancy of the structure is of 50 years.)

1. Earthwork excavation in soils 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).
2. 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.
3. Vibrated Reinforced cement concrete M30 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 & HS pecification 1500, 1700, 2100 (5th Revision) for Pile Caps.
4. 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.
5. Providing weep holes in Abutments, Return walls and wing walls with 100mm Diameter A. C. pipe extending through the full width of the structure at 1.00m C/C in both horizontal and vertical directions of 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 labour charges for cutting to required length, placing the pipe with a slope of about 1:20 towards stream side face etc., complete for finished item of work for weep holes as per MoRT & H Specification 2706 & 2200 (5th Revision)

A. Technical Specifications: Box Drain

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 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 modulus 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. Chemical admixtures 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 1791 and/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 then 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 its 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 well before 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 15°C to 35°C.
- 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.

6. 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 starting 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 as 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., shall 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 if the tests show unsatisfactory results.
- h. **Method of Measurement:** -Concrete shall be measured in M3 as per IS 1200 – part 2.

7. 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 re- propping 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.

8. Reinforcement Steel:

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

- a. **Scope of work** Scope 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 shall be 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 shall 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.

SEWER LINES

1. Measurement of pipe laying work

Measurement of laid pipe shall be carried out along the centre line as per actual work done on ground.

2. Storage of material

Contractor to allocate suitable space within the project area for the storage of pipes and other materials. Transportation of material up to storage site and from storage site to site of work is the sole responsibility of Contractor. The full cost thereof are included in the rates for various items of completed work laid down in the bill of quantities.

3. Alignment and Grade:

The sewers are to be laid to the alignment and gradients shown in the layout drawings but to such modifications as shall be ordered by the engineer in charge time to time to meet the requirements of the works. No deviations from the lines, depths of cuttings or gradients of the sewers in the plans and the sections shall be permitted except by the consent in writing by the engineer in charge

4. Removal of Water from Sewer Trenches

The Contractor at all times during the progress of the work keep the trenches and the excavations free from the water which shall be disposed of by him in a manner as will neither cause injury to the public health nor public or private property nor to the work completed or in progress nor to the surface of any Road

1. Timbering Shoring and Supports

All timbering, shoring, supporting and under pinning shall be carried out and maintained by the Contractor at all times at his own cost, in a manner so as to effectively prevent slipping or collapse of sides of trenches or adjacent buildings, walls and other structures to the full satisfaction and the requirements of the Engineer in charge. All work, materials and labour provided for this work shall be deemed as temporary work incidental to the construction work and the full costs there of shall be included in the rates for various items for the completed items in the schedule and no other payment therefore shall be made to the Contractor.

2. Contractor's responsibility for secure shoring and or all damages

The Contractors will be held responsible for providing secure shoring and for adopting every other precaution which may be necessary or proper for protecting any building which may be damaged or be liable to be damaged by the excavation of any trench or otherwise by the execution of the works in the vicinity of such building. If the Engineer in charge shall require the adoption of any special or extra measures or precautions the Contractor shall forthwith adopt and supply the same, but this provision is not to be read or understood as in any degree relieving the Contractors from responsibility. After the work is complete near buildings, the Contractors shall remove any shoring and make good any cutting out or other damage that may have been done.

3. Liability of Timbering

No work done by the Contractor or his workmen for the fact that the timbering has complied with his specification shall absolve the Contractor from his responsibility and he will be responsible for making good any damage caused as a result of the timbering failing to give proper support to the sides of the excavation.

The timbering to the sides of excavation for structure shall be carried out in such a way that there is no obstruction caused to the filling of formwork for the walls. The supporting struts walling shall be removed by the Contractor in stages to suit progress of concreting.

If the Engineer in charge is not satisfied that the standard of timbering is equal to the shown on the approved drawing or that the sides of the excavation have not been secured in a manner to render such excavations safe for working, he may one hour after notifying the Contractors or his representative in writing, employ his own man to alter the timbering and the cost of such workmen and materials employed shall be paid by the Contractor.

4. Removing of Shoring

No part of the shoring shall at any time be removed by the Contractor without obtaining permission from the Engineer in charge. While taking out shoring planks the hollows if any formed must simultaneously be filled in with soft earth well rammed with rammers and with water.

5. Shoring left in trenches

The Engineer in charge may order portion of shoring to be left in the trenches at such places, where it is found absolutely necessary to do so, so as to avoid any damage which may be caused to buildings, cables, gas-mains water-mains, sewers, etc in close proximity of the excavation, by pulling out the shoring from the excavation. The Contractor shall be paid if provided in BOQ at a rate inserted by them in the Bill of shoring from the excavation, only by the order of Engineer in charge, and they shall not claim, on any reason whatsoever for the shoring which may have been left in by them at their own discretion.

Any allowance for shoring left in the portions of rakers, struts, or other timber cut off and not permanently left in the work will not be included

Any allowance for shoring such as plates struts or other timber cut off and not permanently left in the work will not be included

6. Refilling

After the sewer or the other work has been constructed and proved to be watertight the trench and other excavation to be refilled. The utmost care shall be taken in doing this so that no damage shall be caused to the sewer and other permanent work. The refilling will be done in carefully in 15 cm. by excavated material in layers, each layer being watered to assist the consolidation and properly rammed to the satisfaction of the Engineer in charge.

7. Disposal of surplus soil

The Contractor shall dispose of all the surplus material in to the depressions or other suitable sites as approved by the Engineer in charge. The soil at the disposal point shall be dressed and trimmed as directed by the Engineer

in charge. The surplus materials not used for restoration shall be removed by the Contractor before the final payment.

8. Excavation in trenches

Excavation in trenches for pipe laying will be as per details given below:

For every subsequent lift step of 0.3m on either side

Bw = Bottom width of trench
 = (Outer dia of pipe+0.3m+0.3m)
 D = Total depth of cutting
 (d+bd+bc), m

Where d= outer diameter of pipe in m
 bd = bedding below pipe line.
 bc = depth of cover

The excavated soil will be stacked not more than 3 meters from the edge of the excavation & the backfill will be from excavated material in 15 cm layers consolidating each deposited layer by ramming, watering and then disposing of the surplus excavated earth as directed by Engineer in charge with in all leads and lifts in all kind of soil such as pick work, jumper work, blasting work & chiseling work will be directed by the Engineer in charge.

Statement showing widths to be given for excavation for either 1.20M or 1.50M (inside) circular or 1.52M x 1.52M square Manholes in Sewerage works.

Depth of Manhole up to invert level	Size of Excavation	Remarks
(1) For 1.20 M Dia M.H upto 2.30M	2.50 M Square	Without drop arrangement
(2) For 1.50 M. dia M.H For 2.30 M to 5.00 M	3.0 M. Square 3.5 M x 3.00 M	-do- -do- With drop arrangement on both side

Depth of excavation of trenches

The depths for the trenches will be calculated from the surface to the bed of the pipes and in case when a layer of concrete and/or precast blocks are required to be placed below the pipe line, the depth to the bottom of the concrete and/or of the Block below the underside of the pipe line will be paid.

The depth of excavation for manhole shall be measured from the surface of the existing ground level to the bottom of foundation.

Laying, jointing and testing of pipelines

Reinforced Cement Concrete Pipes (Class NP3)

Scope

This specification covers are requirements for manufacturing, testing, supplying, jointing and testing at work sites of Reinforced Cement concrete (RCC) pipes.

Applicable Codes

Laying of pipes and fittings/ special shall comply with all currently applicable statues, regulation, standards and codes. In particular, the following standards, unless otherwise specified herein, shall be referred to. In all cases the latest revision of the standards/ codes shall be referred to.

- | | | |
|-----|-------------------------|---|
| (a) | IS: 783 | Code of practice for laying of concrete pipes |
| (b) | IS 458 | Specification for pre- cast concrete pipes (with and without reinforcement) |
| (c) | IS 3597 of 1966 I.S.458 | Method of tests for concrete pipes |
| (d) | IS 5382 | Specifications for rubber sealing rings for gas mains, water mains |
| (e) | IS 16098 Parts 1,2 | Structured-Wall Plastics Piping Systems for Non-Pressure Drainage and Sewerage - Specification, |

ISI Marked RCC NP3 Socket and Spigot pipes conforming to IS: 458/1988 shall only be used under this contract. Sulphate resistance cement shall be used in manufacturing of the pipes. The Pipes to be used shall be perfectly cylindrical; sound without any damage. The pipes shall be suitable for rubber jointing. The rubber shall be of good quality conforming to relevant I.S. Specifications and duly inspected by the approved third party inspecting agency.

Laying of Pipes

- Care shall be exercised in loading, transporting, and unloading of concrete Pipes. Handling shall be such as to avoid impact. Gradual unloading by inclined plane or by chain block for higher, diameter is recommended.
- Pipes shall be lowered into the trench carefully; mechanical appliances may be used. Under no circumstances shall the pipes be dropped or dumped into the trench without proper support.
- All pipe sections and connections shall be inspected carefully before being laid. Broken or defective pipes or connections shall not be used, and if such defective sections are found, the same shall be removed by the Contractor at his cost and risk and shall have to be rebuilt with good pipes and materials.
- All lumps, blisters and excess coating materials shall be removed gently from the ends of each pipe and they shall be wiped clean and dry before the pipe is laid.
- For spigot and socket pipes, with rubber jointing rings, proper jointing shall be ensured.
- Every precaution shall be taken to prevent foreign materials from entering in to pipe when it is being placed in the trench.
- Pipes shall be laid true to line and grade as specified.

- Laying of pipes shall always proceed upgrade of a slope. However, for pipes having spigot and socket joints, the socket ends shall face upstream.
- The pipe shall be secured in place with approved back fill material or concrete tamped under it except at the joint portions.
- At times when pipe laying is not in progress the open ends of pipe shall be closed by a water tight plug or canvas or other means approved by the Engineer in charge.
- Trench shall be kept free from water until the material in the joints has hardened. If bailing out of water is required for excavation and laying of pipe no extra payment for bailing out water shall be made in any form and this shall be done by the Contractor at his own cost.
- When the pipe is closed and the trench liable to be flooded by water, care shall be taken to prevent the pipe from floating.
- Walking or working on the completed sewer shall not be permitted until the trench has been back filled to a height of at least 30 cm over a pipe.
- The cutting of pipes for inserting fittings or closure shall be done in a neat and workman like manner without danger to the pipe so as to leave a smooth surface and at right angles to the axis of the pipe.
- Before connecting a pipe to a manhole, a relieving arch or any other similar protection device shall be made in the manhole for the safety of the pipe.
- The pipe when laid shall not be subjected to super imposed load beyond what the pipe can safely with stand
- The pipe shall be laid along the side of the trench, each pipe in its proper position for laying with an extra pipe after every 20 nos. to allow for cutting, if necessary. Where the trench crosses a Road or place where such distribution is inadmissible, the pipes shall be stacked in heaps at each end, sufficient to fill in the length. As far as possible, pipe shall be laid straight in rising gradient. It should be possible to empty the pipe readily and completely. The socket end of the pipe shall be facing up hill. All the pipes shall be used in standard length as far as possible. Cut length may be used only where necessary, to make up to exact length. All the pipes shall be first inspected for any damage and cracks. No cracked or damaged pipes shall be used.
- The connection to an existing sewer shall be done through manhole chamber. However, before connecting a pipe to a manhole, a relieving arch or any other similar protection device shall be made in the manhole for the safety of the pipe.

Pipe Bedding

The pipe bedding of class A, B, C will be provided as per requirement and instructions of Engineer in charge according to approved design and drawings, as per site condition.

In places where the natural foundation is inadequate, the pipes shall be laid either in a concrete cradle, supported on proper foundation or on any other suitable designed structure, to be approved by the department.

Pipes laid in trenches in earth shall be bedded evenly and firmly and as for as the haunches of the pipe so as to safely transmit the load expected from the back fill through the pipe to the bed. This shall be done either by excavating the bottom of the trench to fit the curve and around the curve of the pipe to form an even bed; necessary provision shall be made for joints, wherever required.

When the pipe is laid in trench in rock, hard clay, shale or other hard material, the space below the pipe shall be excavated and replaced with an equalizing bed of sand or compacted earth. In no case, shall the pipe be laid directly on such hard material.

Wherever required, the encasing of pipe shall be done with concrete. Suitable nos. of manholes shall be provided at proper interval or at the places where there is change of direction of the alignment and grade as per the direction of Engineer in charge

Jointing

Each concrete pipe with the rubber ring accurately positioned on the spigot shall be pushed well home into the socket of the previously laid pipe by means of uniformity applied pressure with the aid of a jack or similar appliance.

Concrete pipes of the spigot and socket type with roll on rubber rings shall be used, and the manufacturer's instructions shall be deemed to form a part of this specification.

Rubber rings shall be lubricated before making the joint and the lubricant shall only be soft soap water or an approved lubricant supplied by the manufacture.

In case of RCC Pipe entering or leaving a manhole a flexible joint may be provided at least within 0.60 M from the outer end of the manhole.

The spigot and socket pipes shall be jointed with rubber joints for which rubber gasket shall be arranged by Contractor and such rubber gaskets / rings shall conform to relevant I.S. Specifications. The department shall provide no jointing material.

The section of the pipe shall be jointed together in such a manner that there shall be as little unevenness as possible along the inside of the pipe.

Testing

- All pipelines shall be subjected to a test pressure of at least 2.50 m head of water, at the highest point of the section under test.
- The tolerance of two liters per centimeter of diameter per kilometer shall be allowed during a period of ten minutes.
- Before commencing the hydraulic test, the pipelines shall be filled with water and maintained full for 24 hours by adding water, if necessary under a head of 60 cms of water.
- The test shall be carried out by suitably plugging the low end of the drains and the ends of connections, if any and filling the system with water.
- A knuckle bend shall be temporarily jointed in at the top end and a sufficient length of vertical pipe jointed to it so as to provide the required test head, or the top end may be plugged with a connection to a hose ending, in funnel which could be raised or lowered till the required head is obtained and fixed suitably for observation.
- If any leakage is found visible, then the defective part of the work should be cut out and made good. A slight amount of sweating which is uniform may be over looked but excessive sweating from a particular pipe or joint shall be watched for and taken as indicating a defect to be made good.
- Any joint found leaking or sweating shall be rectified or embedded into 15 cm layer of cement concrete (1:2:4) 30 Cm in length and the section re-tested.

- The testing of the rubber rings shall confirm to I. S 3400 of 1965 and also I.S. 5382 of 1969. However, after the delivery of the pipes made at sites, the Contractor shall have to arrange for visual tests for whole of the lot, received from time to time at site.

Sewer Connections

These shall be laid in the same manner as the sewer, in case the connection is at a level higher than 60 cm a vertical drop arrangement comprising of 90° or a double tee junction enclosed in 1/2 thick, brickwork shall be provided. The drop arrangement shall be in brick work in C.M. 1:3 plastered with 20 mm thick cement plaster from outside in C.M. 1:3. The lowest bend may preferably be of cast iron and the entire vertical pipeline enclosed in concrete. The top end of the drop arrangement in the manholes, when a tee is used, shall be plugged with brick work with a conspicuous mark there on, so that in case a serious sewer choke occurs in the incoming line, this end can be made use of for Roding purposes.

All Works to be Water Tight

- The drains, manholes and all joints of pipes must be made thoroughly sound and water tight, and any joint which may be proved to be leaky at any time during the progress of the works or during the Contractors subsequent period of maintenance shall be immediately made sound by the Contractors at their own expense. The Contractors, when required by the Engineer in charge shall at their own cost prove all works to be water tight by filling it with water to such height as the Engineer in charge may determine. Any additional precautionary measure or appliances that may be found necessary to ensure the water tightness of the manholes, flush tanks, disc plug in junctions and the joints of pipes shall be adopted by the Contractors without extra charge, the responsibility of making them completely water tight resting upon the Contractors.
- Immediately after the test with the double disc or cylinder has been completed and any defect hereby disclosed have been made good the Contractor shall prove the joints of the stretch of under-ground pipes whether of stoneware, cast iron or R.C. Pipes, to be water tight by filing in pipes with water before filling in the trench to the level of 1.50 M above the top of the highest pipe in the stretch and heading the water up for the period of one hour or such further time as the Engineer in charge may direct. The apparatus used for the purpose of testing shall be approved by the Engineer in charge. The Contractor if required by the Engineer in charge shall make the excavation dry and keep it so during the period of testing. No test applied to part of a stretch of pipes shall be considered conclusive nor shall it be deemed to obviate the necessity of an application of the test to the whole of stretch when completed. The loss of water over a period of 30 minutes should be measured by adding water from a measuring vessel at regular 10 minutes and noting the quantity required to maintain the original water level. For the purpose of this test the average quantity added should not exceed 1 litre/hour/100 linear metres/10 mm of nominal internal diameter (0.2 gallons/hours/100 linear feet/inch of nominal internal diameter.)
- Any leakage including excessive sweating which causes a drop in the test water level will be visible and the defective part of the work should be removed and made good.
- In the case of cast-iron rising mains, they shall be tested for a safe pressure as directed by the Engineer in charge.
- The manholes when they have been raised above the highest subsoil water level expected in the monsoon shall similarly be tested of water tightness as for the pipelines. The procedure of this shall be as follows:
- The mouths of all pipes entering the manholes shall be suitably plugged with brick, masonry or wooden or any other type of plug. The manhole under test shall then be filled with water upto the general sub-soil

water level and observed for a period of one hour. If the level does not drop by more than 50 mm in one hour it shall be assumed that the manhole is water tight.

- During the period of the test the outside trench shall be kept free from any accumulation of subsoil water in case of a drop of more than 50 mm in the water level the Contractor shall note the places from where the leakage is taking place & take steps to stop the leakage,

Inspection of the Joints

After the joints of any pipes in underground work have thoroughly set, the Engineer in charge (or any person whom he may appoint) any inspect the joints and if he has any doubt as to their soundness he may required the Contractors to cut open and clean away the cement or lead as the case may be of any joint that he may select and to make good the same at their expense provided that unless some defect be found, they shall not be required to open more than one joint in 20 M of pipe length if the defect be found the Engineer in charge may direct them to open as many joints as he may deem necessary.

Cleaning of the Pipes

As soon as a stretch of pipe whether of stoneware or Cast iron or R.C. Pipes has been laid from manhole to manhole, the Contractor shall run through the pipes both backwards and forwards a double disc or solid or closed cylinder 75 mm less in diameter than the internal diameter of the pipes. The open end of an incomplete stretch of pipeline shall be securely closed as may be directed by the Engineer in charge to prevent entry of mud or silt etc.

If as a result of the removal of any obstruction the Engineer in charge considers that damages may have been caused to the pipelines, he shall be entitled to order the length to be re tested at the expense of the Contractor. Should such retest prove unsatisfactory the Contractor shall at his own expenses amend the work and carry out such further tests as are required by the Engineer in charge.

It shall also be ascertained by the Contractors that each stretch from manhole to manhole is absolute clear and without any obstruction by means of visual examination of the interior of the pipe line suitably enlightened by projected sunlight or otherwise.

Fracture of Pipes

In the event of pipes being fractured after being laid whether due to imperfect loads have or the material for refilling have been improperly selected or to any other cause, the Contractor in every instance will be held responsible and will be called upon to replace such defective pipes at his own cost, if such defect appears before the expiration of the period of maintenance.

Any pipe or length of pipes found to be defective shall be immediately removed and replaced at the Contractor's expense and leaking joints shall be remade. The inspections and tests shall then be repeated as often as necessary until the whole line under inspection or test is accepted by the Engineer in charge.

All works to be clear, clean and perfect

The Contractors shall after completion or whenever required by the Engineer in charge, prove all pipes and fitting to be clear clean and perfect, and for this purpose shall at their own expense and in the presence of the Engineer in charge or his appointee, provide suitable instruments and appliances and pass them through the pipes and shall, if required, throw in water and show that it passes freely through every portion of the work. Brick, mortar and rubbish shall not be allowed to fall into the manholes of sewer lines while fixing or if allowed, shall be removed by the Contractors at their own expense.

Contractors to clean and use existing pipes met with

The Contractors are, if and when required, to take up any existing pipes that may be met with and clean and prepare them for reuse. For such work they will be paid at their contract rates for excavation and filling. Such excavation will be measured 0.90 wide for 225 mm to 450 mm pipes, 0.60 M wide for smaller pipes and only in case to the depth of the pipe bed. The filling, consolidation, etc shall be done as described for new work and under the same condition in every respect.

Measurement of Pipes

All pipes be measured according to the work actually done by them and no allowance will be made for any waste in cutting to the exact length required. An exception to this will be made only in the case of short branches of 100 mm dia stoneware pipe, which be treated in the manner here after described with regard to fittings. The Contractor shall be under obligation to use the pieces or part of the pieces cut off from 100 mm stoneware pipes, if it be deemed by the Engineer in charge practicable to do so; and no further payments shall be made for the same to the Contractors. A socket attached to be straight pipe will not be measured, but a spigot end of a straight pipe whether such end be free for entering into a socket will be measured to its full length.

A bend, junction, or any separate piece of fitting which may have necessarily been cut for the exigencies of the work will be taken into account as if whole provided that the cutting has been done properly and that the portion used in the work is sound. This clause shall not apply to a straight pipe under any circumstances, except only at 100 mm dia stoneware pipes as here in before described. In measuring the lengths of pipes laid deduction shall be made for the lengths of channels between the inside face of the walls of manholes.

Tests shall not be made until at least two days have elapsed.

- The field test pressure to be imposed should be not less than the greatest of the following:
- One times the maximum sustained operating pressure
- One times the maximum pipeline static pressure, and
- Sum of the maximum static pressure and surge pressure subject to the test pressure.
- Where the field test pressure is less than two third the test pressure, the period of test should be at least 24 hours. The test pressure shall be gradually raised at the rate of nearly 0.1 N/mm² per minute.
- Under the test pressure no leaks or sweating shall be visible at all section of pipes, fittings, valves and welded joints. Any defective pipes, fittings and valves discovered in consequence of this pressure test shall be removed and replaced by sound material and the test shall be repeated until satisfactory of the engineer in charge.
- After the tests are completed to the satisfaction of Owner/Engineer, the backfilling of trenches shall be done as per specification

Manholes

This specification covers the requirements for providing and constructing ordinary manholes, drop manholes and Vent shafts etc.

The manholes of suitable size shall be provided at prescribed distance and at the point of inter-connection of two or more sewers and the point of change of grade and alignment, as per IS 4111 (Part I): 1967 and all other relevant I.S. specification, all updated. All the manholes shall be in brick masonry.

Construction of Brick Masonry Manholes

The walls of the manholes shall be built in brick work in cement mortar and walls and the cap is plastered both from inside and outside with cement plaster 1:2. In the case of conical manholes, the walls shall be brought up to within 475 mm of the Road surface over which 30cm thick concrete cap of M 150 conical shape as shown in the drawing and is cast in situ and shall be covered over with a cast iron/SRFC frame and cover or a cast iron plate with a cast iron frame and cover as may in each case be required by the Engineer in charge. The opening shall be formed by means of joists of sizes as shown on drawing resting on the side wall & embedded in the slab on these joints support walls of brick in cement shall be erected and brought up to within 475 mm of the Road surface where they shall be covered with C.I frame / SRFC and cover etc., as described above. The work shall be properly bedded and the courses brought up in a regular and uniform manner.

The manholes on the sewers shall be constructed in the form and of the dimensions shown on the drawing. Sulphate resistance cement shall be used in construction of the manholes. The depth of the manholes shall be measured from the top of cover to the invert level of the manhole.

Manhole Covers and Frames

SRFC manhole covers and frames conforming to IS specifications of 560 mm dia shall be provided and fixed by the Contractor. The frame shall be embedded / fixed in the manhole slab in CC M – 15 as per specifications. Colour of the frame and manhole cover shall match with the colour of the footpath.

The following information shall be clearly marked on each cover

- Logo of NMC.
- Identification mark of the purchaser.
- Arrow showing direction of flow.

Drop Arrangement

- The rate for providing 150 mm, 250 mm, 300 mm diameter vertical drop arrangement 0.60 M high in manholes with drop arrangements will include: -
- Providing 150 mm, 250 mm or 300 mm dia S.W. pipe of required length embedded in the masonry of the manholes at the upper and lower ends of the drop arrangement.
- Providing and fixing 1 No. 150 mm., 250 mm or 300 mm S.W. right angled bend and 1 No 150 mm x 150 mm, 250 mm x 250 mm or 300 mm x 300 mm. S.W double Tee junction including cutting the ends if require and jointing and filleting as specified.
- ½ brick thick 1:2 brick masonry encasement all round with extra brick work below the bend up to the excavation level of manhole and that in the tapering portion of the manhole including curing and finishing smooth with cement plaster 20 mm thick 1:1.
- Plugging the open mouths of the double Tee Junctions and house connection pipes wherever directed so as to make them watertight.

- The rate for extra each meter height of 150 mm or 250 mm or 300 mm vertical drop arrangement shall include the following.
- Providing 150 mm, 250 mm, 300-mm S.W. pipes including cutting, jointing, filleting, etc., all complete.
- ½ brick thick 1:2 brick masonry encasement all round including cutting and finishing smooth the exposed surface with cement plaster 20 mm thick 1:1.
- For the payment of the items of vertical drop arrangement the height will be measured from the invert of the right angled bend to the invert of the sewer or house connection that is being dropped 600 mm height being paid under the item of Extra per Meter height of drop arrangement.”
- In case of drop arrangement above 300 mm dia the class of R.C. pipe used shall be NP2 class. It shall consist of right angled bend of required diameter and double “T” junction. It will be surrounded by ½ brick thick masonry (1:2) encasement all round with extra brick below etc. as mentioned above.

Steps

Where the depth of the invert exceeds 1:20M below the surface of the ground, cast – iron steps weighing not less than 5.44 kg and of approved pattern shall be built at every four courses or 40 cm intervals in concrete manhole with such additional steps as may be necessary for safety. The first step shall be provided at 0.6M. Cast Iron steps shall be as per IS: 5455. The size of steps shall be of 150-mm x 375- mm overall dimensions. The steps shall be clean, well cast is free from air and sand holes. The steps shall be coated with a black bituminous composition.

Safety Chains

Safety chains shall be made of aluminum alloy as approved by the Engineer in charge.

Ladders

Except where otherwise specified ladders shall be of aluminum alloy of approved design and manufacture.

Manholes

The rate to be quoted in the Bill of Quantities for the manholes shall include complete masonry structure concrete cap plastered with cement both inside and outside bottom concrete and channel or channel with the C.I/ SRFC frame and covers, C.I Sheet etc., everything complete as per type design drawing including 3” x 3” (75 mm x 75 mm) vata around the extended wall at bedding and including cutting the pipes flush with the inside plaster of the wall flush without excavation and rubble soling if required 150 mm dia vertical pipe 150 mm dia S.W. Double Tee junction 150 mm dia S.W right angled bend etc., or branch connection will be paid for separately.

LIST OF REFERENCE CODES, STANDARDS, AND GUIDELINES

The following Codes and Standards have been referred in preparing the document

1. Documents prepared for Central Public Health and Environmental Engineering Organisation (CPHEEO).
 - a. Manual on water supply and treatment
 - b. Manual on Sewerage and Treatment
 - c. Maharashtra Jeevan Pradhikaran Guidelines

WATER PIPE LINE

1. Ductile Iron Pipes

DI pipes and fittings (Class K7) shall be in accordance with IS: 8329 and DI specials (K12) as per IS: 9523. Pipes and fittings shall be procured from reputed manufacturers with Engineer-in-charge's approval. Engineer-in-charge or his authorised representative shall at all reasonable times have free access to the place where the pipes and fittings are manufactured for the purpose of examining and testing the pipes and fittings and for witnessing the test and manufacturing, if so desired.

All tests specified either in this specification or in the relevant Indian Standards specified above shall be performed by the supplier/contractor at his own cost and in presence of Engineer-in-charge if desired. For this, sufficient notice before testing of the pipes and fittings shall be given to Engineer-in-charge. Contractor shall arrange third party inspection as stated elsewhere.

If the test is found unsatisfactory, Engineer-in-charge may reject any or all pipes and fittings of that lot. The decision of Engineer-in-charge in this matter shall be final and binding on the Contractor and not subject to any arbitration or appeal.

The pipes and fittings shall be stripped, with all precautions necessary to avoid warping or shrinking defects. The pipes and fittings shall be free from defects. Any defect in pipes and fittings in the opinion of Engineer-in-charge shall be rejected and shall be replaced by new one. In the case of spigot and socket pipes and fittings rubber and tyton joints shall be separately supplied.

1.1. Material

The materials used in the manufacture of pipes and fittings shall conform to requirements specified in IS: 8329 and IS: 9523 or other relevant / latest edition of IS specifications.

1.2. Dimensions and Tolerances

The internal diameter, thickness and length of barrel, dimensions of pipes and fittings shall be as per relevant tables of IS: 8329/IS: 9523 for different class of pipes and fittings. Each pipe shall be of uniform thickness throughout its length.

The tolerances for pipes and fittings regarding dimensions, mass, ovality and deviations from straight line in case of pipes shall be as per IS: 8329/IS: 9523.

1.3. Coating

1.3.1. General

Unless otherwise specified, DI pipes and fittings shall be coated with Bitumen in accordance with relevant IS specifications. Coating shall not be applied to pipe and fittings unless its surface is clean, dry and free from rust. Pipe coatings shall be inspected at site and any damage or defective areas shall be made good to the satisfaction of the Engineer-in-charge.

1.3.2. Bitumen coating

Bitumen coating shall be of normal thickness of 75 microns unless otherwise specified. It shall be cold applied compound complying with the requirements of relevant Indian standards, factory applied in accordance with the manufacturer's instructions.

1.3.3. Cement mortar lining

All pipes and fittings shall be internally lined with cement mortar in accordance with IS: 11906. Cement mortar lining shall be applied at the factory in conformance with the above mentioned standards. No admixtures in the mortar shall be used without the approval of the Engineer-in-charge.

Pipe linings shall be inspected on site and any damage or defective areas shall be made good to the satisfaction of the Engineer-in-charge.

Lining shall be uniform in thickness all along the pipe. The minimum thickness of factory applied cement mortar lining shall be as per IS: 11906.

1.3.4. Marking

Marking shall be done as per IS: 8329 and IS: 9523 or any other relevant IS codes.

1.4. Jointing of the Pipes

Joints between pipes and specials shall be of Tyton joint with rubber gasket or of flanged joint as specified in Bill of Quantities. Jointing between valves and DI pipes shall be with flanged joint only. Tailpiece with spigot/socket at one end and flange at other end shall be used for jointing Valves pipes to the pipeline with spigot and socket joint (tyton joint)

1.4.1. Tyton Joint

Tyton joint shall be with rubber gasket conforming to IS:5382 and IS:12820. The groove and the socket shall be thoroughly cleaned before inserting the rubber gasket. While inserting the gasket it shall be made sure that it faces the proper direction and that it is correctly seated in the groove. After cleaning dirt or foreign materials from the plain end, lubricant shall be applied in accordance with the pipe manufacturer's recommendations.

1.4.2. Flanged Joint

Flanged joint shall be with 1.5 to 3 mm thick rubber gasket in between the flanges. Rubber gasket material shall conform to IS: 638. All fastener material viz. Bolts, Nuts, Washers whether in contact with water or not shall be of MS with GI coating construction and other parameters shall meet the requirement of IS:1363 Class 4.6/Class 4 as relevant.

1.5. Testing

1.5.1. Test during Manufacturing

The following tests shall be carried out during manufacture of pipes

i. Mechanical Tests

Mechanical tests shall be carried out during manufacture of pipes and fittings as specified in IS: 8329 / IS: 9523. The frequency and sampling of tests for each batch of pipes shall be in accordance with IS: 8329. The test results so obtained for all the pipes and fittings of different sizes shall be submitted to Engineer-in-charge. The method for tensile tests and the minimum tensile strength requirement for pipes and fittings shall be as per IS: 8329/IS: 9523.

ii. Brinell Hardness Test

For checking the Brinell hardness, the test shall be carried out on the test ring or bars cut from the pipes used for the ring test and tensile test in accordance with IS: 1500. The test shall comply with the requirements specified in IS: 1500/IS: 8329.

iii. Re-tests

If any test piece representing a lot fails in the first instance, two additional tests shall be made on test pieces selected from two other pipes from the same lot. If both the test results satisfy the specified requirements, the lot shall be accepted. Should either of these additional test pieces fail to pass the test, the lot shall be liable for rejection.

iv. Hydrostatic Test

For hydrostatic test at works, the pipes and fittings shall be kept under test pressure as specified in IS: 8329 / IS: 9523, during which the pipes shall be struck moderately with a 700g hammer for conformation of satisfactory sound. They shall withstand the pressure test without showing any leakage, sweating or other defect of any kind. The hydrostatic test shall be conducted before surface coating and lining.

1.5.2. Field Hydrostatic Test

After the new pipe is laid, jointed and partially back filled tests are to be carried out. Portions of the line shall be tested by subjecting the pressure test as the laying progresses before the entire line is completed (the test stretch should not generally exceed 500 m), to identify any error of workmanship which can be detected and corrected at minimum cost. For all these tests water of approved quality has to be arranged by the Contractor.

a) Pressure test

The field test pressure shall be carried out as specified by the Central Public Health and Environmental Engineering Organization, Ministry of Urban Development.

The field test pressure should not be not less than the maximum of the following:

- 1 ½ times the maximum sustained operating pressure.
- 1 ½ times the maximum pipeline static pressure.

Pipes and joints shall be absolutely water tight under the test. The procedure for pressure testing shall be as follows:

- i. Each valved section of the pipe shall be slowly filled with water and all air shall be expelled from the pipe through the hydrants and blow offs. If these are not available at high places, necessary taping may be made at points of highest elevation before the test is made and plugs inserted after the tests have been completed.
- ii. (ii) Sufficient backfill shall be placed on the pipe to resist the movement due to pressure while testing. Trench shall be partially backfilled such that the joints, couplings, valves, hydrants or any other fittings shall be left exposed for observations during testing. The specified pressure based on the elevation of the lowest point of the line or section under test and corrected to the elevation of the test guage, shall be applied by means of a pump connected to pipe in a manner satisfactory to the Engineer-in-charge. The duration of the test shall not be less than 1 hr.
- iii. During testing, all exposed pipes, fittings etc., should be carefully examined. When the joints are made with lead, all such joints showing visible leaks shall be recaulked until tight. When the joints are made with cement and show seepage or slight leakage, such joints shall be cut out and replaced as directed by the Engineer-in-charge. Any cracked or defective pipes, fittings, valves or hydrants etc., discovered in consequence of this pressure test shall be removed and replaced by sound material and the test shall be repeated until satisfactory to the Engineer-in-charge.

b) Leakage test

After the successful completion of the pressure test, Leakage test shall be conducted at a pressure to be specified by the Engineer-in-charge for duration of two hours. The procedure for Leakage test shall be as follows:

- i. Leakage is defined as the quantity of water to be supplied into the newly laid pipe, or any valved section thereof, necessary to maintain the specified leakage test pressure after the pipe has been filled with water and the air expelled.
- ii. No pipe installation shall be accepted until the leakage is less than the quantity of cm³/hr, as determined by the following formula:
$$ql = (ND\sqrt{P})/115$$
where
ql = the allowable leakage in cm³/hr
N = number of joints in the length of the pipe line,
D = diameter of pipe in mm, and
P = average test pressure during the leakage testing kg/cm²
- i. Should any test of the pipe laid in position disclosed leakage greater than that obtained by the above formula, the defective joints shall be replaced until the leakage is within the specified allowance. This should not exceed 0.1 liter per mm of pipe per km per day for each 30m head of water pressure applied.
The factory test pressure shall be as per IS 8329.

1.6. Measurement of pipes and specials

The length of pipe shall be measured in running meter correct to a centimetre for the finished work measured along the centre line of pipe inclusive of specials and excluding of valves and its specials like tail pieces, dismantling joints etc. Joints and specials will not be measured separately and no separate payment for the same shall be made.

1.7. Carting and Handling

Pipes and fittings/specials shall be transported from the factory to the work sites at places along the alignment of pipeline as approved by Engineer-in-charge in lengths not more than the length of the transporting vehicle. Contractor shall be responsible for the safety of pipes and fittings/specials in transit, loading/unloading. Every care shall be exercised in handling pipes and fittings/specials to avoid damage. While unloading, the pipes and fittings/specials shall not be thrown down from the truck on to hard surfaces. They should be unloaded on timber skids with steadying ropes and / or by any other approved means. Padding shall be provided between coated pipes, fittings/specials and timber skids to avoid damage to the coating. Suitable gaps between pipes should be left at intervals in order to permit access from one side to the other. As far as possible pipes shall be unloaded on one side of the trench only. The pipes shall be checked for any visible damage (such as broken edges, cracking or spalling of pipe) while unloading and shall be sorted out for replacement. Any pipe, which shows damage in the opinion of Engineer-in-charge, shall be discarded and replaced by new one without extra cost. Dragging of pipes and fitting/specials along Road or pipeline alignment shall be prohibited.

2. Providing, supplying manufacturing and fixing specials and sluice valves specification

Specials and Sluice Valves

- i. CI/DI specials such as bends, and flanged adapters shall be manufactured and tested as per IS 13382-1992 Tyton jointed or mechanical jointed with SBR grade rubber gaskets, double flanged tee, flange and spigot tail pieces and double flanged reducers shall be manufactured as per IS: 2038
- ii. Sluice valves shall be manufactured and tested as per IS 7801984 and 2906-19841984. Suitable for hand wheel operation with variable stem length.

- iii. The tenderer shall procure all materials required to complete the work in all respects so as to complete the work within specified period of completion, all materials to be procured shall be as per I.S. or as directed by the Engineer-in-charge. Specials shall be stacked near to Tenderer work site or store in a manner so that under no circumstances inconvenience is caused to other tenderer or traffic or casual injury to pedestrians.
- iv. The specials before laying shall be brushed internally throughout the length to remove any soil or stone that may have accumulated therein inside of socket and outside of the spigot shall be thoroughly cleaned
- v. Appurtenance such as kinetic air valve, scour sluice valve and pressure relief shall be supplied by the tenderer. The rate includes the cost of nuts and bolts and cost of rubber packing washer etc.

2.1. Mode OF MEASUREMENT and PAYMENTS

Providing and fixing of valves on number basis. Providing and Fixing of Specials shall be on number basis and be the schedule given for supply of pipes. 70% payment can be made on supply of valves at site after Third party testing. Balance 20% will be paid after laying/fixing and 10% after satisfactorily hydraulic testing and commissioning.

2.2. NOTE:

The tender price shall include all labour and machinery and all materials necessary for the proper, manufacture of the goods, for tests at the contractor's works for the insurance and for delivery to works for the proper maintenance and for discharging every obligations and requirement of the contract, in accordance with the intent of the contract documents, as stated in the General Conditions of Contract.

2.3. STANDARDS

Where reference is made to a particular standard, it shall be the latest revision of the Indian Standard Institution. Unless otherwise specified, the sluice valves shall be in accordance with the provisions of IS:780:1980 and IS: 2906: 1984 or sizes of the sluice valves covered under relevant standards.

2.4. MARKING OF SLUICE VALVES

Each sluice valve shall be marked as per IS: 780:1980, Para-II for sizes (50 mm to 300 mm) and IS: 2906: 1984, page: 11.1 (for sizes 350 mm to 1200 mm).

2.5. PACKING AND HANDLING

The contractor shall dispatch from the manufacturer's works goods adequately protected to prevent damage and deterioration during transportation and storage, etc. The packing is to be quite robust to withstanding rough handling during the transit by road/ rail/ sea and storage.

Each package / create will contain sluice valve of one size only in relevant class.

The packing procedure followed shall be in accordance with para 12 of IS: 780: 1980 and para 12.1 of IS: 2906: 1984

The contractor shall use proper handling equipment or follow suitable handling method as approved by the Engineer to unload the materials at the delivery site to prevent damage to the goods and equipments.

Third party inspection from agency approved by NMSCDCL should be carried out at contractor's cost only.

The contractor should produce manufacturer's test certificate conforming that the valves have been tested in accordance with I.S. specifications, stating the actual pressure and the medium used in the test. The design workmanship, material, strength and dimensions of all parts shall be as per I.S.S. The product shall be of proven quality rendering reliable service during maintenance and requirement.

2.6. THIRD PARTY INSPECTION

Third party inspection shall be carried from

- 1) SGS
- 2) M/s Dr. Amin Controler Pvt.Ltd, Mumbai
- 3) RITES

4) QSS

5) M/s Central institute of Plastic Engineering and Technology, Aurangabad

The valve shall be tested in factory by third party in presence of NMSCDCL representative at least for

- a. Review of martial of construction
- b Overall dimension of all component
- c. Hydraulic testing.

3. 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. 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.

4. Bedding

Bedding for the pipeline shall be of two different classes depending on the soil strata and as per drawings and as per the direction of the Employer's Representative.

When soil strata in the trench is soil (other than soft or hard rock), the trench shall be properly compacted and no extra bedding shall be provided. The bottom of the trench shall be prepared in such a way that profile of the pipe shall touch the bottom of the trench at 120 degrees from the center of the pipe. This profile of pipe at the bottom of trench for uniform support shall not be made more than 2 days prior to actual laying of pipe.

When soil strata in the trench is rocky, or consists of any unsuitable material which is likely in the opinion of the Employer's Representative to cause damage to the pipe, then sand bedding shall be provided. The sand used for bedding shall be clean, well graded and free from topsoil, clay or vegetable matter and to the approval of the Employer's Representative. If the sand supplied is unclean it shall be washed. In no case shall sand containing more than 3.5% by dry volume or 5% by wet volume of clay, loam or silt be accepted. Tests specified for determining silt in sand and organic impurities as described in IS 383 shall apply.

The bedding shall be done as under:

- The filling and compaction shall be done up to appropriate depth.
- The bedding shall be compacted, at optimum moisture content and by mechanical equipment with suitably shaped tamping feet/ plate, to 90% modified proctor density.
- The compacted fill shall be re-excavated in a profile to match the pipe profile to form a "cradle" which will provide a 120-degree uniform support to the pipe.

- The appropriate depth is such that after re-excavating the fill minimum 150 mm of sand bedding material shall remain below the bottom center of the pipe.
- The profile of pipe in compacted fill for uniform support shall not be made more than 2 days prior to actual laying of pipe.

5. Earth work in excavation for pipeline trench

5.1. General

- The earthwork excavation for laying of pipes shall be carried out as per standard specification followed by the State Government or an Indian Standard Specification (if available). The Contractor shall make all excavations required for laying and jointing of the pipeline and construction of pertinent structures as required by the project. Except where otherwise required by the project or instructed by the Engineer-in-charge, all excavation shall be in open cut to the specified widths and depths. The Contractor is advised to satisfy himself with regard to the likely conditions that may be met with during the execution of the Works, with regard to the underground obstructions or conditions, excavation and pipe laying in storm water drains, necessary dewatering requirements or construction of coffer dams, diversion bunds, and construction of temporary drains etc., before quoting the rates.

- The Contractor shall be responsible for the adequate pumping, drainage and bailing out of water from the excavation. In case of failure to make such provisions or any other provisions, which may result in unsuitable sub-grade conditions, the Contractor shall replace and repair the sub-grade as directed to the satisfaction of the Engineer-in-charge, at his own cost and responsibility.

- If the Contractor select to use a gravel sub-grade to facilitate flow of water to pumps or other points of disposal, such gravel sub-grade shall not be measured or paid for as an extra item. Contractor should assess the availability of extra earth required for refilling in case of shortage in any particular reach well before quoting rates. Even in case the Contractor resorts to mechanical excavation, the Contractor should take care of proper refilling, consolidation and disposal of surplus earth.

The Earthwork for laying of the water mains shall include:

- Removal of all surface obstructions including shrub, jungle, etc.;
- Carrying out all necessary excavations;
- Providing and installing at place all sheathing, shoring and bracing to the trenches as necessary for the work and removal thereof after the work;
- Pumping and bailing out water for progressive excavation and to keep trenches dry during preparation of bedding, pipe laying and jointing process till the joints mature;
- Providing for uninterrupted surface water flow during progress of work;
- Arrangement for diversion of flows from storm drains, valleys or other sources;
- Protecting all pipes, conduits, culverts, Roads, railway tracks, utility poles, fences, buildings, and other public and private properties fouling the work;
- Back-filling with excavated material, except where granular fill is recommended;
- Removal and disposal of surplus spoil from excavation after back filling to the specified lead;
- Levelling and dressing of surplus spoil from excavation or part of it in soil banks along with the trench as directed by Engineer-in-charge;
- Restoring all structures and properties injured or disturbed by the construction activities to as near its original shape, as possible.

- Restoring the surface of all Roads, streets, valleys, walks, drives, easements, working spaces, and right of way to a condition as good as prior to excavation, unless otherwise required by the Engineer-in-charge;
- Introducing Safety measures for carrying out the work in all respect

The Contractor shall include in his rate of excavation all associated items of works as indicated below for which no extra measurement and payment will be made:

- (i). Supply installation and removal after the work all sheathing, shoring and bracing required to protect the excavation.
- (ii). Provision of side space or additional space in the trench/pit for working and/or accommodating sheathing, shoring, bracing, etc.
- (iii). Excavation outside of pipeline limits except under written order from the Engineer-in-charge for extra work or for removal of unsuitable sub grade as specified.
- (iv). Protection of excavation.
- (v). Undertaking all safety measure.
- (vi). Control on water.
- (vii). Any additional work in connection with overhead wires and poles.
- (viii). Unauthorised excavation.
- (ix). Excavation for socket or collar hollows.
- (x). Change in trench location.
- (xi). Additional work in conducting blasting operation in case of excavation in rock
- (xii). Supply and fixing of sight rails and boning rods in the trench to facilitate measurement of work.
- (xiii). Disposal of excavated earth after back-filling up to a lead of 50 metre.
- (xiv). Traffic diversion arrangement during work execution.

5.2. Classification of Excavation

All materials involved in excavation shall be classified in three categories as follows:

(a) All kinds of Soil

This includes excavation in all types of soil including soil containing gravel, murrum, loose boulders, kankaretc but exclusive of disintegrated rock, soft rock / shale

(b) Soil containing disintegrated rock, soft rock/shale (Ordinary Rock)

This category includes excavation in soil containing disintegrated rock, soft rock, soft shale, and in medium rock comprising of limestone, sand stone, hard shale, schist.

Fissured rock, and all types of laterite with varying densities and composition requiring chiselling and without resorting to blasting

(c) All type of hard rocks including fissured and unfissured.

5.3. Limits of excavation

The width of trench for laying of pipeline shall be (D+0.6m) for 300mm and above dia pipes and (D+0.4) for below 300mm dia pipes, where D is the outer diameter of the Pipe but in no case the width of the trench should not be less than 0.6 m wide. A minimum earth cover of 1.0 m shall be maintained above the pipe crown, unless otherwise specified or shown in the alignment/construction drawings. Any extra excavation required for providing suitable bedding for the pipeline or for maintaining the grade of the pipeline, shall be paid extra at

actual, and based on the quoted rates. Concrete encasing all over the pipe shall be provided if trench depth is less than 1m depth due to unavoidable obstruction upon the approval of the Engineer-in-charge.

The Contractor shall not excavate beyond the dimensions specified or shown in the drawings. Should the excavation occur beyond the dimensions specified therein, because of the negligence of the Contractor, the Contractor shall fill the excess space with granular material or concrete as directed by the Engineer-in-charge. Nothing extra shall be paid to the Contractor on account of this.

5.4. Trial pits

Trial pits may be dug by the Contractor, without being directed to do so, along the lines of the trenches in advance of the excavations for the purpose of satisfying himself as to the location of underground obstructions or soil conditions. Nothing extra shall be paid on account of this.

5.5. Slips and slides

The Contractor is responsible for proper protection of excavations made by him from any slips and slides. All slides and caving shall be handled, removed or corrected by the Contractor without any extra compensation at whatever time and under whatever circumstances they may occur. The excavations shall be made good and brought to necessary depth, width and levels without any extra cost. Special care should be taken to protect the safety of the workmen, staff and public or whoever at the site.

5.6. Stacking of excavated material

The excavated material shall be stacked along the pipe alignment without any hindrance to the traffic and at least 600 mm away from the side of the trench. In case the excavated trench sides collapse or get refilled with excavated materials due to any reason whatsoever, the same shall be made good and brought the necessary depth, width and levels by the Contractor without any extra claim.

5.7. Safety measures

Contractor shall take all safety majors to the works required, which shall include:

- (i). Barricading all sides of the open trenches.
- (ii). Red danger lights as can be easily visible from dusk to dawn at an interval of 20 m and at all the Road crossings.
- (iii). Traffic signals and display boards giving direction for diversion of traffic at the appropriate places as may be directed by the Engineer-in-charge.
- (iv). Adequately safe wooden plank / board or steel plate over the trenches at every 15 metres interval to facilitate crossing by the public residing on either side of the trench.
- (v). Round the clock watch and ward maintaining all safety regulations at the site of work and protecting the site from unauthorised intrusions.

5.8. Progress of Excavation

The Contractor shall adjust excavation of trenches in such lengths that the pipes can be laid in such exposed portion of the trench within 3 days. Unless otherwise directed by the Engineer-in-charge, the following limitations for lengths of open trenches shall rule for a pipeline in one continuous reach;

Not more than 50 m in built up area and 150 m elsewhere shall be opened in advance of pipe laying

Not more than 50 m of pipeline left uncovered after pipe laying in built up areas and not more than 150 m elsewhere.

5.9. 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.

5.10. Excavation for Valve Chambers, Pipe Ducts and Other Appurtenant Structures

Excavation for Valve Chambers and other appurtenant structures shall be done in accordance with Standard Specifications followed by State Government or the latest IS. The Contractor shall excavate as required for all the structures with foundations to firm, undisturbed earth up to the level of the underside of the structure. If the excavation is in rock, the Contractor shall excavate all rock at least to the minimum limits shown on the standard details for trenches and to the grade of the bottom of Valve Chambers and other structures as required. Where the bottom of the structure is in rock, it should be ensured that no rock shall project above the lower surface of the concrete in such a manner so as to reduce the required thickness of concrete placed simultaneously as an integral part of the foundation and to the outside of structure foundation where structure is to be built. The Contractor shall excavate the trench / pit to provide necessary working space on all sides and for accommodating any sheathing, shoring or bracing etc.

5.11. Unapproved excavation

All the unapproved excavation carried out beyond or below the lines and grades given in the construction drawings and specifications, together with the removal of such excavated materials, shall be at the Contractor's expense.

The excess space between the undisturbed bottom and sides of the excavation and the pipeline or other structures shall be refilled by the Contractor at his own expenses, with regular compacted bedding materials.

5.12. Control of Water

While pipeline and appurtenances are under construction, the Contractor, at his own expenses shall keep all excavation free of water. He shall provide all bunds, flumes or other works necessary to keep the excavation entirely clear of water, and shall provide and operate pumps or other suitable equipment of adequate capacity for de-watering the excavated trench/pit. Pipe bedding, laying, jointing and placing of the concrete or masonry shall be done in water free trench/pit and the trench/pit shall be kept dry enough until pipe joints, concrete and masonry are set and are resistant to water damage. The water shall be disposed off in a manner approved by the Engineer-in-charge.

All gutters, pipes, drains, conduits, culverts, catch basins, storm water inlets, ditches, creeks and other storm water drainage facilities shall be kept in operation or their flows be satisfactorily diverted and provided for during construction. The existing drainage facilities that are diverted shall be restored after the work to the satisfaction of the Engineer-in-charge. All costs for diverting surface water and restoring storm water facilities disturbed or damaged by the construction for keeping the excavation free of water during construction shall be included in the price bid for the various classes of excavation.

5.13. Overhead Wires and Poles

If the method of operation for the construction of pipelines requires removal and replacement or protection of any overhead wires or poles the Contractor shall make satisfactory arrangement for such work with the owners of such wires and poles. In this regard Employer will assist the Contractor in getting approval/permission. However, the entire work will be the responsibility of the Contractor.

In case of alignment of the pipeline crossing the high tension electrical transmission lines belonging to the State authorities, the Contractor shall take all precautions necessary to see that the work is carried out with care and safety. If needed, the Contractor will contact the authorities concerned and carry out all construction activities in such reaches in consultation with such authorities. If required, the Engineer-in-charge will use his good offices with the concerned authorities to solve any dispute or differences in this regard. However, the entire work will be the responsibility of the Contractor.

5.14. Change of Trench Location

In case the Engineer-in-charge orders that the location of trench be moved to a reasonable distance from that shown on the drawings, on account of presence of obstruction or due to any other reason, the Contractor shall not be entitled to extra compensation or to a claim, provided the order to change is issued by the Engineer-in-charge before commencement of the excavation. If, however, such change made at the order of the Engineer-in-charge involves the abandonment of excavation together with the necessary back fill, the same will be measured, classified and paid for in the same manner as other trench excavation and back fill of the same character.

5.15. Allowable removal of pavement

Pavement and Road surfaces may be removed as a part of the trench excavation, and the amount removed shall depend upon the width of the trench specified for the installation of the pipe and the width and length of the pavement area required to be removed for laying of pipes. The width of the pavement removed along the normal trench for the installation of the pipe shall not exceed the width of the trench specified by more than 150mm on each side of the trench. Wherever, in the opinion of the Engineer-in-charge, existing conditions make it necessary are advisable to remove the additional pavement, it shall be removed as directed by the Engineer-in-charge

5.16. Backfilling of Trenches and around foundations of structures

5.16.1. General

Pursuant to Clauses of this specification, the Contractor shall use selected surplus spoils from excavated materials for backfilling. All fill material shall be subject to Engineer-in-charge's approval and shall be conforming to Clauses of Bid Document, Standard Specifications for Procurement of Project Works. The excavated materials suitable for backfilling shall be stored not closer than 600 mm from the edge of the trench and shall not obstruct any public utilities or interfere with travel by local inhabitants or general public. Handling and storage of excavated materials must meet with the regulations of the Local Government Authorities. The detailed specifications for backfilling shall be as per Clause 8 of IS: 3114-1994.

5.16.2. Method of Backfilling

Trenches and excavated pits for structures shall be backfilled to original ground level or to such other levels, as the Engineer-in-charge may direct. All backfilling shall be carried out in orderly manner expeditiously and consistent with good workmanship.

- Backfill material put into the trenches/pits for backfilling, shall unless otherwise specified be compacted and built up as to minimise future settlement as much as is reasonably possible. For this, care shall be exercised in selecting backfill material free from large hard clay lumps, especially in cramped areas directly adjoining the walls of structures.

- Backfilling in trenches shall be done as pipe laying progresses, with the permission of the Engineer-in-charge, after the pipe or conduit is properly bedded, jointed and inspected and all measurements for the location of Junctions are properly recorded by the Engineer-in-charge and sufficient time is allowed for the joint materials or cement concrete or mortar to set. However, the joints shall be left open for inspection during testing, which shall be backfilled after successful completion of testing, after obtaining permission from the Engineer-in-charge. Backfilling around and over the pipe, conduit, or structure shall be taken up uniformly on all sides and in the sequence and manner specified hereinafter, with care to avoid the displacement or damage to the pipe, conduit or structure. Trenches and pits should be carefully guarded till back filling.

- For the purpose of backfilling, the depth of trench shall be divided into the following three zones measured from bottom to top of trench, as follows:

- Zone A: From bottom of trench to the centre line of pipe,

- Zone B: From the level of centre line of pipe to a level of 300 mm above the top of pipe.

- Zone C: From a level of 300 mm above the top of pipe to the top of trench.

- Backfilling in the trenches and around structures shall be carried out in horizontal layers of uniform thickness of not more than 150 mm when measured loose. As may be necessary to attain maximum compaction, the backfill material shall be moistened by sprinkling with water. After placing each layer of backfill material, the layer shall be thoroughly and uniformly compacted by means of mechanical plate vibrators or hand tampers. The compacting equipment and the manner of its use shall be subject to the approval of the Engineer-in-charge.
- After the backfill material is placed in Zone A and Zone B as specified above, the remaining portion i.e., Zone C of the trench may be machine backfilled. Even in this case the backfill material shall be placed in uniform horizontal layers of not more than 150 mm thickness. Small pebbles of size less than 50 mm, if any, shall be so distributed throughout the mass, that all interstices are solidly filled with fine material. The backfill material shall be tamped with mechanical tamping equipment like plate vibrator, after moistening the backfill by sprinkling with water to obtain maximum compaction.
- Machine backfill shall be so conducted that the material deposited in the trench shall not fall directly on top of the pipe from such a height as might result in damage to the pipe joints or alignment.
- If the trench is subjected to conditions, which might cause flotation of the pipe before sufficient backfill has been placed, the Contractor shall take the necessary precautions to prevent floatation of the pipe, conduit or structure.
- Before final acceptance of the work, additional tamped earth shall be added to restore the settled trench surface to the required level of the adjacent earth surface or to the base of crushed rock wearing surface or to the finished earth base.
- If from the excavated spoil, enough backfill material is not available, imported, selected and approved backfill material from the borrow pits is required to be placed for backfill, on approval of the Engineer-in-charge. Backfilling of trenches where the excavation is in the rock shall be with the surplus soft soil obtained from borrow pits. The availability of earth for this purpose, lead and lift should be verified by the Contractor while quoting the rates.
- The earth backfills (Subgrade) in the pavement portion shall be consolidated to 95% procter density.

5.16.3. Disposal of Surplus Excavated Material

The excavated material which is in surplus to the requirements after backfilling shall be disposed off as directed by the Engineer-in-charge, with all lead and lift from the site for which no extra payment shall be made. The landfill site or disposal site is to be assessed by the Contractor and got approved by the Engineer-in-charge.

6. Measurement and Payment for Excavation

6.1. For Excavation

The measurement for excavation shall be considering the allowable widths, depths with allowed side slopes (if any) for different classes of soils as per approved classification. The measurement for excavation shall be based on “neat line” dimensions as specified in the concerned drawing or Specifications, for different types of soils and depth of excavation. Should the nature of the soil permit the trench excavation with vertical sides or with side slopes at a slope steeper than specified in the drawing the actual “neat line” dimensions as excavated, shall be measured and paid. Measurement of excavation shall be considered as per actual no more width will be considered for payment.

The total volume of excavation shall be computed as above with measurement taken 30m intervals or at closer intervals if required by site conditions. The length of the trench shall be measured as per the actual length of pipes and fittings / specials laid at work site. The volume of excavation for structures like valve chambers, thrust blocks and anchor blocks etc., shall be computed and measured for payment as per the bottom area of the particular structure on outer periphery multiplied by the average depth between the level of the finished bottom of the structure and the original surface of the ground. The quantity shall be measured in cubic metres correct to two decimal places. The method of measurement for excavation for different classes of soils shall be as follows:

6.2. In Ordinary Soil and Soil Mixed with Disintegrated Rock and Soft Rock / Shale

In this category of soils, the excavation quantity shall be computed as specified above.

6.3. For Excavation in Combination of All kinds of soil and Ordinary Rock

Wherever the excavation is undertaken in combination of all kinds of soil and Ordinary rock, the ordinary rock part shall be measured and paid and the soil part shall be measured and paid for the total measurable excavated quantity deducting the quantity measured for the ordinary rock. The total computed volume of excavation should be equal to the sum of the computed volumes for each category of excavation undertaken.

6.4. For Backfilling

Measurement of consolidated back filling shall be recorded and paid, deducting the space occupied by the pipeline and/or the permanent structure buried below the ground or any bedding in accordance with its dimensions indicated in the construction drawings from the total quantity of measurable and payable excavation. The surplus quantity of excavated earth shall be disposed off as specified in the BOQ. The quantity shall be measured in cubic meter correct to two decimal points.

6.5. Road Cutting

In Road cutting payment shall be made for cutting pavement part i.e. base and sub-base course, and subgrade.

6.6. Restoration of Pavement

Measurement for restoration of damaged pavement shall be based on neat line dimensions as shown in the drawings and as measured at site. Rate quoted shall be inclusive of providing all materials and labour.

7. Contractor's Responsibility

(a) Preparatory work

The Contractor shall inspect the route along which the pipeline is proposed to be laid. He should observe/ find out the existing underground utilities/ construction and propose suitable alignment along which the pipeline is to be laid. He should make all efforts to keep the pipe as straight as possible with the help of ranging rods. Wherever there is need for change in direction, it should be done with the use of necessary specials or by deflection in pipe joints in case of Tyton joints (limited to 75% of permissible deflection as per manufacturer recommendation). The alignment as proposed should be marked on ground with a line of white chalk and got approved from Engineer-in-charge.

(b) Pipeline Alignment

The alignments and location of specials, valves and chambers may be changed at site in co-ordination with and after approval of the Engineer-in-charge. The minimum soil cover to the top of the pipe crown shall be 1 m. The Contractor shall be responsible for the adequate pumping, drainage and bailing out of water from the excavation. In case of failure to make such provisions or any other provisions, which may result in unsuitable sub-grade conditions, the Contractor shall replace and repair the sub-grade as directed to the satisfaction of the Engineer-in-charge, at his own cost and responsibility.

Should the Contractor select to use a gravel sub-grade to facilitate flow of water to pumps or other points of disposal, such gravel sub-grade shall not be measured or paid for as an extra item.

(c) Trial pits

Trial pits may be dug by the Contractor, without being directed to do so, along the lines of the trenches in advance of the excavations for the purpose of satisfying himself as to the location of underground obstructions, soil conditions or location of utilities. Nothing extra shall be paid on account of this.

8. Ancillary Works

- Valve Chambers, Thrust Blocks, Anchor Blocks, Pipe Supports, Pipe Ducts, Pipe Encasing etc.
- The Contractor shall build Valve Chambers, Thrust Blocks, Anchor Blocks, Pipe Supports, Pipe Ducts, Pipe bedding and such other miscellaneous structures that may be required at the locations shown by the Engineer-in-charge and as shown in the drawings or as may be otherwise specified or directed. The specifications of these ancillary structures shall generally be as specified in bid document or Standard Specifications followed by the State Government for similar Project Works, unless otherwise specified in this Section or advised by the Engineer-in-charge based on the site conditions.

- The various structures shall be built as the pipe laying progresses and the Engineer-in-charge at his discretion, may stop work entirely on the laying of pipe or construction of other structures, until the construction of the structures already approved by the Engineer-in-charge are completed by the Contractor.
- At the time of construction, in case of any deviation from the standard dimensions of the valve chambers shown in the drawings due to site conditions, the payment will be made on prorate basis after getting approval from the Engineer-in-charge.

9. Pipe encasing

Where pipes are laid below storm water drains / Nallahs and at Road crossings, the pipeline shall be encased / bedded as per the construction drawing. The encasement shall be of RCC of grade M20 / PCC of grade M15 as directed by the Engineer.

10. Valve chambers

RCC valve chambers with pre cast RCC slabs on top and RCC raft slab at bottom shall be provided for all Air valves, Scour valves, Sluice Valves etc. of various sizes above 150mm diameter.

11. Pipe Supports

Pipe supports shall be of saddle type. Pipe supports shall also be provided for the stretches of the pipe, where the pipe is to be gradually brought above the ground for crossing any obstructions and as directed by the Engineer. There shall be no joints at the location of the pipe supports. The joints shall be located on any one side of the support, at a minimum distance of 200 mm from the face of the support.

Pipelines crossing over the Nalla shall be encased with RCC and as directed by the Engineer-in-charge.

12. Structures for Crossing Canal/Nallahs and Other Miscellaneous Structures

Structures for crossing the pipeline over canal / nallahs and other miscellaneous structures not listed in these specifications, but may be required to be built shall be as per construction drawings and as described in the Bill of Quantities. The materials of construction and workmanship for these structures shall conform to the relevant Standard Specifications followed by State Government for the similar works. The measurement of quantities involved in these structures for payment shall be done as per dimensions of the respective drawings.

APPENDIX XII: BILL OF QUANTITIES

Sr No.		DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
		Box Drain and Sewerage line				
1)	a	Carrying out detailed/final location survey for drainage schemes with chain and compass, levels, theodolite and other essential instruments including staking of final center line, locating curves, establishing B.M. and taking L section, cross section, fly leveling etc. complete in plain area. Spec. No. : As directed by Engineer in charge.				
		i) P.W.D. D.S.R 2018-19, I. No.1.28	Rmt	2900.00	1.5	4350.00
	b	Carrying out detailed/final location survey for drainage schemes with chain and compass, levels, theodolite and other essential instruments including staking of final center line, locating curves, establishing B.M. and taking L section, cross section, fly leveling etc. complete in plain area, with preparing drawing on Autocad locating the drawing on & as per NMC DP plan with one proof print for following size on plain white paper with black and colour print providing tracing with saving on disk (soft copy) of following size per number. Size A1 (817x570mm)				
		i) As per Rate Analysis	Rmt	2900.00	5.3	15370.00
2)		Dismantling of flexible pavements and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately. By Mechanical Means etc. complete.				
		i) P.W.D. D.S.R 2018-19, I. No.3.1	Cum	135.58	339.1	45973.48
3)		Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately etc. complete.				
		i) P.W.D. D.S.R 2018-19, I. No.3.11	Cum	908.67	894.6	812893.20
4)		Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in-charge (including cost of machinery, labour, fuel), etc. complete.				
		(MJP,DSR 2018-19 ,Sec-E-14,)	Bhp / Hr	725.00	65.1	47197.50

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
5)	Providing, constructing coffer dam in river basin / dam storages as per type design including excavation, filling the middle portion with B. C. soil (in gunny bags if required). Providing impervious / semipervious materials on both side of B.C. soil (in gunny bags if required) including ramming, compacting to the satisfaction of Engineer-in-charge, till the completion of work including dismantling coffer dam after completion of works and disposing off the material as directed by the Engineer-in-charge. (MJP,DSR 2018-19,Sec-I(XXI)-1,)	Cum	90.00	536.6	48294.00
6)	Dismantling dead pipeline of M.S./R.C.C./ C.I./ P.S.C. and G.I./ A. C. / P. V. C. / S. W. / H. D. P. E. pipe including cost of necessary excavation and refilling of trenches, breaking the joints, lifting the pipes and stacking to the place as directed by Engineer-in-charge with all leads and lifts including cleaning the surface, etc. complete. (MJP,DSR 2018-19)				
A	200 mm dia. (MJP,DSR 2018-19, Sec-H-11-A-5)	Rmt	50.00	179.6	8980.00
B	300 mm dia. (MJP,DSR 2018-19, Sec-H-11-A-7)	Rmt	50.00	213.2	10660.00
C	350 mm dia. (MJP,DSR 2018-19, Sec-H-11-A-8)	Rmt	50.00	239.4	11970.00
E	450 mm dia. (MJP,DSR 2018-19, Sec-H-11-A-10)	Rmt	250.00	295.1	73775.00
F	600 mm dia. (MJP,DSR 2018-19, Sec-H-11-A-12)	Rmt	50.00	381.2	19060.00
K	Dismantling stone masonry in lime or cement mortar and stacking the materials asw directed with all leads, lifts, etc. complete. (PWD,DSR 2018-19)I.NO. 46.11	Cum	123.75	283.5	35083.13
L	Dismantling B.B. Masonary in lime or cement mortar and stacking the matorials asw directed with all leads, lifts, etc. complete. (PWD,DSR 2018-19, I.NO.46.09)	Cum	6.33	249.9	1580.62
M	Dismantling Cement Concrete Masonry in rich mix lime or cement concrete and stacking the matorials asw directed with all leads, lifts, etc. complete. (PWD,DSR 2018-19, I.NO.46.13)	Cum	522.00	694	362268.00
7)	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 shutterng item but excluding back filling etc. complete. Providing and fixing shuttering shall be paid separately. (MJP,DSR 2018-19, Section-E-8,9,)				
a	Lift upto 0.0 to 1.50 m depth	Cum	518.00	372.9	193162.20

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
8)	Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum , including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, manual dewatering, preparing the bed for foundation and excluding backfilling, etc. complete.				
	(MJP,DSR 2018-19, Section-E-1,4,)				
	a Lift upto 0.0 to 1.50 m depth	Cum	4432.50	160.6	711859.50
	b Lift upto 1.5 to 3.0 m depth	Cum	1325.00	176	233200.00
9)	Excavation for foundation / pipe trenches in hard murum including removing the excavated material upto a distace of 50 M and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete.				
	(MJP,DSR 2018-19, Section-E-2,4,)				
	a Lift upto 0.0 to 1.50 m depth	Cum	1567.25	181.5	284455.88
	b Lift upto 1.5 to 3.0 m depth	Cum	394.50	196.9	77677.05
10)	Excavation for foundation / pipe trenches in hard murum and boulders, W.B.M. road including removing the excavated material upto a distance of 50 M beyond the area and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatreing, preparing the bed for foundation and excluding backfilling, etc. complete.				
	(MJP,DSR 2018-19, Section-E-3,4,)				
	a Lift upto 0.0 to 1.50 m depth	Cum	1567.25	203.5	318935.38
	b Lift upto 1.5 to 3.0 m depth	Cum	394.50	218.9	86356.05
11)	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-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete.				
	(MJP,DSR 2018-19, Section-E-5,9,)				
	a Lift upto 0.0 to 1.50 m depth	Cum	1216.50	542.3	659707.95

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
	b Lift up to 1.5 to 3.0 m depth				
	ii) Add for every additional lift of 1.5 m				
		Cum	1650.00	567.6	936540.00
	c Lift up to 3.0 to 4.5 m depth				
	ii) Add for every additional lift of 1.5 m				
		Cum	765.00	592.9	453568.50
12)	Excavation for foundation / pipe trenches in hard rock and concrete road by chiselling, wedging, line drilling, by mechanical means or by all means other than blasting including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, excluding backfilling, etc. complete by all means. (MJP,DSR 2018-19, Section-E-7,9)				
	a Lift upto 0.0 to 1.50 m depth	Cum	1131.00	904.2	1022650.20
	b Lift up to 1.5 to 3.0 m depth				
	Add. For 1.5 m depth				
		Cum	2554.50	929.5	2374407.75
	c Lift up to 3.0 to 4.5 m depth				
	Add for every 1.5 m lift				
		Cum	627.00	954.8	598659.60
13	Excavation for pipe trenches in MANJARA / Unfissured hard rock by manually or mechanical means or by chiseling wedging line drilling etc. including trimming & leveling the bed, removing the excavated material up to a distance of 50m beyond the area & for lift as specified below, stacking as directed, normal dewatering, shoring and strutting, lighting, guarding, excluding back filling etc. complete (As per Rate Analysis) (MJP,DSR 2018-19, Section-E-7,9)				
	Lift upto 0.0 to 1.50 m depth	Cum	861.00	1288.8	1109656.80
	Lift upto 1.5 to 3.0 m depth	Cum	2154.00	1351.35	2910807.90
	upto 3.0 to 4.5m	Cum	372.00	1413.85	525952.20
14)	a Filling in plinth and floors murum bedding in trenches with approved murum from excavated materials from foundation 15cm to 20cm layers including watering and compaction complete.(MJP,DSR 2018-19, Section-E-16)				
		Cum	705.00	67.2	47376.00

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
	b Filling in plinth and floors / trenches with contractor's murum for bedding in 15cm to 20cm layers including watering and compaction complete.(MJP,DSR 2018-19, Section-E-17)	Cum	4023.11	687.3	2765085.79
	c Providing and filling in sand boxing in pipeline or for foundation with sand of approved quality including watering compaction, etc. complete.(MJP,DSR 2018-19, Section-E-19)	Cum	2011.56	2066.8	4157485.32
15)	Providing dry trap / granite / quartzite / gneiss, rubble stone soling in 15cm to 20 cm thick layers (including hand packing and compacting), etc. complete. (MJP,DSR 2018-19, Section-E-18)	Cum	996.09	1073.3	1069102.68
16)	Providing and laying in situ Cement concrete of trap/granite/quartzite/ gneiss metal for PCC work below foundation and footing including normal dewatering, plywood form work, compaction, finishing and curing, etc, complete.				
	a Providing and laying in situ R.C.C. M-20 (PWD DSR 2018-19 BD.F-2/298, IS 456:2000, I.No.25.11	Cum	64.80	6272.00	406425.60
	b Providing and laying in situ P.C.C. M-15 (MJP DSR 2018-19, Sec.G.-1, I.NO.1)	Cum	1043.11	4559.7	4756262.59
17)	Providing structural steel work in rolled stanchions fixed with connecting plates or angle cleats as in main and cross beams, hip and jack rafters, purlins connecting to truss members and like as per detailed desings and drawings or as directed by Engineer-in-charge including cutting, fabricating, hoisting, erecting, fixing in position, making riveted / bolted /welded connections and one coat of anticorrosive paints and over it two coats of oil painting, etc. complete. (MJP,DSR,2018-19, sec-F-3,)	MT	0.63	53286.5	33518.18
18)	Providing uncoursed rubble masonry of trap/ granite/ quarzite/ gneiss stones in cm. 1:6 in foundation and plinth of inner walls/ in plinth of external walls including bailing-out water manually, providing flush grooved pointing on both sides and watering etc. complete. PwD,DSR,2018-19, BD-H.1/39, I.No.28.01	Cum	4.35	4730.5	20577.68

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
19)	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 ring joints, excluding GST levied by GOI & GOM in all respect including inspection charges, transport to departmental stores, unloading and stacking etc. complete as per IS-458/1988, lowering & Laying and giving satisfactory Hydraulic testing of the laid pipe line and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M.1:1 proportion or socketed R.C.C. pipes with rubber joints (excluding cost of rubber ring or R.C.C. collar,) including cost of conveyance from stores to site of work, cost of jointing material, labour, etc. complete as directed by Engineer in-charge (For all class of pipes.) as per IS-783-1985. as specified and directed by Engineer in charge etc. complete. (MJP,DSR,2018-19, Sec.-I(VI)RCC Pipes,1d,e,f,2)Page No. 94,95,96				
20	a R.C.C.NP-III Class (MJP,DSR 2018-19,Sec-I-(VI)-1-e,)				
	iv)Rate for 300 mm dia				
	Laying and jointing				
		Rmt	300.00	837.9	251370.00
	vii)Rate for 450 mm dia				
	Laying and jointing				
		Rmt	500.00	1560.3	780150.00
	ix)Rate for 600 mm dia				
	Laying and jointing				
		Rmt	500.00	2246.7	1123350.00
	xii)Rate for 900 mm dia				
	Laying and jointing				
		Rmt	600.00	3852.4	2311440.00
	xiv)Rate for 1200 mm dia				
	Laying and jointing				
		Rmt	450.00	8044.0	3619800.00
21	Lowering, laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M.1:1 proportion or socketed R.C.C. pipes with rubber joints (excluding cost of rubber ring or R.C.C. collar), including cost of conveyance from stores to site of work, cost of jointing material, labour, giving satisfactory Hydraulic testing of the laid pipe line as specified and directed by Engineer in charge etc. complete. (for all class of pipes.) (MJP,DSR,2018-19, Sec.-I(VI)RCC Pipes,2)				
	i) 150 mm dia.	Rmt		58.8	
	ii) 200 mm dia.	Rmt		78.8	
	iii) 250 mm dia.	Rmt		101.9	

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
	iv) 300 mm dia.	Rmt		123.9	
	v) 350 mm dia.	Rmt		127.1	
	vi) 400 mm dia.	Rmt		162.8	
	vii) 450 mm dia.	Rmt		194.3	
	viii) 500 mm dia.	Rmt		212.1	
22	Providing and constructing on sewer, Fly Ash Brick masonry circular manhole concentric cone 0.9 M dia. at bottom and 0.5 M dia. at top and upto a depth of 1.00 M , with 15cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for 1.0 M with 0.23m. thk. BM in CM 1:6 proportion with 12 mm thick inside & 20 mm thick on outer-side plaster with fine cement smooth finish in CM 1:4, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered), 15cm thk C.C.1:2:4 coping for 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.As per Rate Analysis.				
	Total = 1 + 2 + 3 + 4 + 5	No.	23.00	13066.5	300529.50
23	Providing and constructing on sewer, Fly Ash Brick masonry circular manhole concentric cone 1.2 M dia. at bottom and 0.5 M dia. at top and upto a depth of 2.00 M with 25 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry in Conical shape for 2.00 M with 0.23 M thick in CM 1:4 proportion excluding excavation with 12 mm thick on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:3, providing C.I. dapuri type steps each weighing 5.5 kg. at every 40cm c/c horizontal & vertical (Staggered), 15cm thk C.C.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.(MJP DSR 2018-19, SEC-I(XX)-6,)				
		No.	16.00	22880.8	366092.80

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
24	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.(MJP DSR 2018-19, SEC-I(XX)-7,)				
		No.	33.00	65871	2173743.00
25	Providing and constructing on sewer, Fly Ash Brick masonry circular manhole with concentric cone 1.80 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 with 23 cm brick work, upto depth of 2.50 M from top and 35 cm thick brick work for depth of 2.35 M depth upto 5.0 M, with M:20 Concrete for RCC Beam size of 350x150mm thk.with reinforcement steel 3nos. Tor 10 @ Bottom & 3Nos. Tor 8 @ top, stirrups Tor 8@150c/c, rest on the top of 350mm thk. brick work , in CM 1:6 proportion with 12 mm thick smooth plaster on inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:3 proportion excluding excavation, including foundation concrete 250 mm thick and haunches and channels in c.c.1:2:4 proportion, finishing channels in smooth rendering, 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.As per Rate Analysis.				
	Total = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8	No.	2.00	100875.5	201751.00

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
26	Providing and constructing on sewer, Fly Ash Brick masonry circular manhole with concentric cone 2.10 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 with 23 cm brick work upto depth of 2.50 M from top and blance in Vertical Cylinder shape 35 cm thick brick work for depth of 2.35 M depth upto 5.0 M, with M:20 Concrete for RCC Beam size of 350x150mm thk.with reinforcement steel 3nos. Tor 10 @ Bottom & 3Nos. Tor 8 @ top, stirrups Tor 8@150c/c, rest on the top of 350mm thk. brick work , in CM 1:6 proportion with 12 mm thick inside & 20 mm thick plaster with fine cement smooth finish on outer side in CM 1:3 proportion excluding excavation, including foundation concrete 250 mm thick and haunches and channels in c.c.1:2:4 proportion, finishing channels in smooth rendering, 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.As per Rate Analysis.				
	Total = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8	No.	2.00	116102.3	232204.60
27	Providing and constructing on sewer, Fly Ash Brick masonry manhole Rectangle of size 600 x 450 mm and upto a depth of 900 mm with 15 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry & with 23 cm brick work in CM 1:6proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, 15 cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 600 x 450 mm etc. complete as directed by Engineer-in-charge. (MJP DSR 2018-19,Sec-I(XX)-3-A,)				
		No	2.00	7732.8	15465.60
28	Providing and constructing on sewer, Fly Ash Brick masonry manhole Rectangle of size 600 x 900 mm and upto a depth of 900 mm with 15 cm thick CC 1:2:4 bed concrete, Fly Ash Brick masonry & with 23 cm brick work in CM 1:6,proportion with 12 mm thick smooth plaster on inside & 20 mm thick on outer side in CM 1:3, 15 cm thk C.C.1:2:4 coping for providing and fixing approved make and quality S.F.R.C. frame and cover of 600 x 900 mm etc. complete as directed by Engineer-in-charge.As per Rate Analysis.				
	Total = 1 + 2 + 3 + 4	No.	2.00	13244	26488.00

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
29	Constructing additional depth/ Rebate for Manhole of 900mm Dia. & above/below 1000 mm. depth to cover variations with 230mm.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 & vertical (Staggered) As per Rate Analysis.				
	Total = 1 + 2 + 3	Rmt	4.60	9892.3	45504.58
30	Constructing additional depth or Manhole of 1200mm Dia. & above / Rebate 2000 mm. depth with 230mm.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 & vertical (Staggered), (MJP DSR 2018-19, Sec-I(XX)-6-a,)				
		Rmt	3.20	6373	20393.60
31	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 & vertical (Staggered), (MJP DSR 2018-19, Sec-I(XX)-7-a,)				
		Rmt	-49.50	13356.4	-661141.80
32	Constructing additional/ Rebate depth for Manhole of 1800mm Dia. & below 5000 mm. depth with 350mm.thick Fly Ash Brick masonry work up to 2.50m 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 & vertical (Staggered),As per Rate Analysis.				
	Total = 1 + 2 + 3	Rmt	-3.00	22742.1	-68226.30
33	Constructing additional / Rebate depth for Manhole of 2100mm Dia. & above 5000 mm. depth with 350mm.thick Fly Ash Brick masonry work up to 3.0m 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 & vertical (Staggered),As per Rate Analysis.				
	Total = 1 + 2 + 3	Rmt	-3.00	25716.9	-77150.70
34	Providing and making ISI Mark ferrule connection to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.				

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
	i) 15mm dia As per pwd DSR 2018-19 BD-V,4-551(101), I.No.42.72	No	44.00	970.2	42688.80
	ii) 20mm dia As per pwd DSR 2018-19 BD-V,4-551(101), I.No.42.73	No	47.00	1325.1	62279.70
35	Providing, Preparing, laying, spreading and compacting stone aggregates of specific sizes to Water Bound Macadam road of thickness 0.225 m. (Compacted, excluding casing) specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Power Roller Complete. By Mechanical Means GRADE-I, GRADE-II Spec. No.: MORTH - 401, I.NO.3.01,3.02, PWD DSR 2018-19				
	iv) Providing laying spreading and compacting stone aggregate of specified size WBM spec. no. MORTH 401, GRADE-I, Using screening crushable type such as murum or gravel 0.15m. Thk.I.NO.3.01,	Sqm			
	GRADE-II, Using screening crushable type such as murum or gravel 0.075m. Thk.I.NO.3.02,	Sqm			
	Total Rs	Sqm	4000.00	592	2368000.00
36	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) (MJP, DSR 2018-19, Sec-I(XX)-17,)				
	i) 540 Dia.	No	10.00	2763.6	27636.00
	ii) 560 Dia.	No	10.00	3434.6	34346.00
	iii) 90x45 cm	No	10.00	2763.6	27636.00
	iv) 90x60 cm	No	136.00	2995.7	407415.20
	v) 60 x 60 cm	No		2736.3	
	vi) 60 x 45 cm	No	10.00	2370.9	23709.00
37	Cleaning or Desilting B.B.M. of various dia chamber on sewer including removing material upto a distance of 50.0M for all lifts as directed by Engineer-in-charge.etc. complete Depth as directed by engg in charge etc complete .				
	i) PWD, DSR 2015-16. Pg.no. 162, I.NO.844	Cum	83.01	234.2	19441.82
38	Cleaning the R.C.C. choked up pipes of diameter from 200 mm to 450 mm including removing material upto				

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
	adistance of 50.0M for all lifts as directed by Engineer-in-charge.				
	Rate for one mazdoor MJP, DSR 2018-19, Sec.-B-20.				
	Assuming 10 labors for cleaning 50m R.C.C. pipe line				
	Add 15% for machinery charges etc.				
	Add 10% for overhead & contractors profit				
	Rate per running meter	Rmt	235.00	89.6	21056.00
39	Cleaning the R.C.C. choked up pipes by using bucket machine and rodding machine in different places during cleaning operation all labour and safety precaution should be taken by maintainance contractor himself (i.e. suitable gas masks, gas detection driving prompt etc.) during cleaning operation in any damages done by the contractor shall be repaired by the contractor with his own cost. To clean the existing drain line bucket and rodding machine will not be given by department & if machinery provided by department charges will recovered from bill. Diversion of sewerage water any necessary excavation if necessary should be done by the contractor at his cost during the work necessary action for cleaning line traffic permission and proper precautions should be taken by contractor after completion of a cleaning operation by contractor has to test the line in precence of enginreer-in- charge. (As per Rate Analysis)				
	a) For 200mm to 400mm dia RCC drain line	Rmt	10.00	140.5	1405.00
	b) For 450mm to 600mm dia RCC drain line	Rmt	15.00	185.4	2781.00
40	Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc. complete.				
	(MJP, DSR 2018-19, Sec.-E-15,)	Cum	10387.4 5	67.2	698036.86
41	Carting away the excess excavated stuff upto a distance as per given below including transport to departmental stores/site, loading, unloading and stacking, as specified and directed by Engineer in charge etc. complete. (MJP,DSR,2018-19,Statement-(IV),)				
	a) Upto 3.0 Km lead of from site of work				
	i) MJP, DSR 2018-19				
		Cum	4023.11	165.5	665825.26
	b) upto 5.0 km lead from site of work				
	i) MJP, DSR 2018-19				

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
		Cum	4023.11	201.9	812266.58
42	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) (MJP DSR 2018-19, Sec-E-20-a,b,)				
a	Lift 0 to 1.5 M [for non-water logged area]	Sqm	2000.00	177.5	355000.00
	Additional per Sqm. for further lifts of 1.5M each.	Sqm		30.5	
b	Lift for 0 to 1.5 M [For water logged area.]	Sqm	1000.00	203.7	203700.00
	Additional per Sqm. for further lifts of 1.5M each	Sqm		25.2	
43	Providing and laying in situ Cement concrete of trap/granite/quartzite/ gneiss metal for RCC work in following type and steel stanchions including normal dewatering, form work, compaction, finishing and curing, etc, complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L & T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted.)				
A	For RCC work in foundation like raft, grillage, strip foundation and footing.of RCC columns and steel stanchions .(MJP DSR 2018-19 Sec-G-1,)				
i v	For RCC M-300 grade	Cum	468.38	5828.4	2729929.31
B	For RCC M-..... grade - all types of columns (MJP DSR 2018-19 Sec-G-2,)				
iii	For RCC M-300 grade	Cum	13.50	7067.4	95409.90
C	For RCC M-.... grade Beams/Braces/Lintels (MJP DSR 2018-19 Sec-G-3,)				
iii	For RCC M-300 grade	Cum	1063.20	6950.9	7390196.88
D	For RCC M-... grade Slabs / Landings / Vertical Walls / Waist Slabs / Steps for Staircase (MJP DSR 2018-19 Sec-G-4,)				
iii	For RCC M-300 grade	Cum	482.13	7520.0	3625647.68
44	Providing and fixing in position steel bar reinforcement of various diameters for RCC pipes, caps, footings, foundation, slabs, beams, columns, canopies, staircases. newels, chajjas, lintels, pardies, 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, etc. complete. (including cost of binding wire) (MJP DSR 2018-19 Sec-G-RCC&RMC,7-c,)				

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
	Corrosion Resistant steel (Fe 500)	M.T.	230.121 98	51009	11738292.08
45	Providing and construction of a gabian structure for retaining earth with segments of wire crates of size 7.0 x 3.0 x 0.6m each divided into 1.5 m compartments by cross netting, made form 4 mm galvansed steel wire @ 32kg per 10 sqm having minimum tensile strength of 300Mpa conforming to IS:280 and galvanizing coating conforming to IS:4826 woven into mesh with double twist, mesh size not exceeding 100x100mm, filled with boulders with least dimension of 200mm, all loose ends to be tied with 4mm galvanized steel wire etc. complete.				
	i) PWD, DSR 2018-19. I.NO.14.82	Cum.	60.00	2719.8	163188.00
46	Providing and laying cast in situ / Ready Mix Cement Concrete M-30 for bored piles each of load capacity and as per design and of 400 mm diameter.or as directed placed through steel shells sunk to the required depth through all strata except rock excluding provision of reinforcement as per detailed drawings and design approved by the Engineer-in- charge 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 arrangements, compaction of concrete including chipping and dressing and withdrawal of shell etc. complete. (Excluding steel reinforcement)	Rmt	40.00	6624.1	264964.00
	M:30, PWD SSR 2018-19, I.No. 22.23				
47	Chiseling through pile shells in hard strata like boulders, soft and hard rocks Upto and inclusive of 550 mm diameter including removing and stacking the loose materials etc. complete and disposing of the unserviceable materials outside complete	Rig/ Hr	40.00	828.5	33140.00
	PWD SSR 2018-19, I.No. 22.39				
48	Carrying out load test for 1.5 times the proposed safe working load on the pile in driven position upto 400 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.	No	1.00	84820.1	84820.10
	PWD SSR 2018-19, I.No. 22.43				
49	Providing and fixing 25mm diameter steel anchor dowel in hard rock including drilling hole of 32 mm diameter up to 0.75 mtrs depth, placing the dowel in position and effectively grouting the hole with CM 1:1 proportion etc. complete.	No	20.00	1390.2	27804.00
	PWD SSR 2018-19, I.No. 12.13				

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
50	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	No	40.00	555.5	22220.00
	PWD SSR 2018-19, I.No. 17.66				
	Mechanical				
51	Providing, erecting and giving test of submersible pump set conforming to IS 8034 and motor conforming to IS 9283, with water proof winding. Pump shall be suitable for various delivery head and discharge with stainless steel shaft. Motor suitable for working on 415 V \pm 10%, 3 Ph, 50 Hz A.C. Supply, with cable guard, thrust carbon/fiber bearing to withstand entire hydraulic thrust. The pump set shall be suitable for direct coupling, with suitable suction strainer. Pump should have suitable discharge out let as per manufacturer's design. Antithrust stream lined non return valve shall be provided with the pump. 3 m submersible copper conductor cable in single / double run and 2 pairs of suitable size erection clamp 10 mm thick shall be provided Submersible Pump 150 mm dia (with Bronze / Stainless steel (CF8M) Impeller) up to 8 stages, 5.0hp MJP ELEC / MECH CSR 2018-19 page 2 , PM 1-2-5	no	1	28970.00	28,970.00
	Sluice Vave				
52	Providing, erecting, testing and commissioning D.I. Glandless Sluice valves suitable for working pressure of 10 kg/cm ² with standard non rising spindle, handwheel, cap etc and manufactured as per IS 2906/14846. As per detailed specifications. 150mm MJP ELEC / MECH CSR 2018-19 page 11, VL 1-6	no	1	15813.00	15,813.00

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
53	HOT Hand Operated Circular or Rectangular Travelling Crane (Single Girder) Providing , erecting and commissioning Single Girder Hand Operated Circular / Rectangular Travelling Crane with 6 m lift complete with chain pulley block ISI marked and travelling trolley both tested for 50 % overload including arrangement for longitudinal travel / circular travel and cross travel with wheel, hand chain, etc complete. 3 Tonne Capacity Up to 5 m span	no	1	149338.00	149,338.00
	MJP ELEC / MECH CSR 2018-19 page 17, LF-3				
54	Pressure gauges Providing, erecting Pressure gauge of required range complete with syphon tube, isolating cock suitable for 12 mm dia G.I. Pipe. Pressure gauge shall be installed as directed, with tapping on rising main. Pressure gauge (100 mm dia) MJP ELEC / MECH CSR 2018-19 page 08, PM 11-1	no	1.00	751.00	751.00
	Excavation for Pipe Work for Distribution Network				
55	Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum, including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, manual dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. Lift 0 to 1.5m	Cum	312.00	160.60	50,107.00
	Same as above for 1.5m to 3.0m	Cum	104.00	176.00	18,304.00
	MJP 18-19,Page No.31,Sr No.1+10%				
56	Excavation for foundation / pipe trenches in hard murum and boulders, W.B.M. road including removing the excavated materialwith 10km lead and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. Lift 0 to 1.5m	Cum	208.00	203.50	42,328.00
	Same as above for 1.5m to 3.0m	Cum	104.00	218.90	22,766.00
	MJP 18-19,Page No.31,Sr No.3+10%				

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
57	Excavation for foundation / pipe trenches in soft rock and old cement and lime masonry foundation asphalt road including removing the excavated material with 10km lead and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. Lift 0 to 1.5m	Cum	52.00	542.30	28,200.00
	Same as above for 1.5m to 3.0m	Cum	52.00	567.60	29,515.00
	MJP 18-19,Page No.31,Sr No.5+10%				
58	Excavation for foundation / pipe trenches in all types of hard rock and concrete road by chiselling, wedging, line drilling, by mechanical means or by all means other than blasting including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, excluding backfilling, etc. complete by all means.(Including Fissured Rock and Unfissured Rock) Lift 0 to 1.5m	Cum	104.00	904.20	94,037.00
	Same as above for 1.5m to 3.0m	Cum	104.00	929.50	96,668.00
	MJP 18-19,Page No.32,Sr No.7+10%				
59	Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc. complete.	Cum	1015	67.20	68,179.00
	MJP 18-19,Page No.33,Sr No.15+5%				
60	Filling in plinth and floors / trenches with contractor's murum for bedding in 15cm to 20cm layers including watering and compaction complete.	Cum	16.00	869.37	13,910.00
	MJP 18-19,Page No.33,Sr No.17+5%				
61	Carriage of surplus excavated material over distance exceeding 10 km including loading and unloading.	Cum	15.42	360.61	5,559.00
	MJP 18-19,Lead Statement IV,Page No.24. +5%				
62	Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in-charge (including cost of machinery, labour, fuel), etc. complete.	BH/Hr	90.00	65.10	5,859.00
	MJP 2018-19,Page No.33,Sr.No.14. +5%				

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
	Pipe Laying and Allied Work				
63	Providing DI Pipes (push on joints pressure pipes of DI of following class and Dia meters confirming to the indian Standard specification inclusive cost of jointing materials (Rubber gasket of EPDM Quality) excluding GST levied by GOI and GOM in all respect including third party inspection charges of TPI Agency approved by MJP including transit insurance, Railway Frieght, Unloading, stacking etc. complete as directed by Engineer in Charge (IS: 1536: 2001 for pipes and IS: 158: 1969 and 15: 12820: 1989 or latest edition/revision with amendments for rubber gaskets). (IS: 8329: 2000 latest version) .				
	MJP 18-19, Page No. 75, Sr. No. 3.				
	D.I. K-7				
	Dia. 150 mm	Rmt	200.00	1192.00	238400.00
	Dia. 250 mm	Rmt	800.00	2044.00	1635200.00
64	Lowering laying and jointing with SBR rubber gasket C.I. S/S pipes of various classes with CI/MS specials of following diameter in proper position, grade and alingment as directed by Engineer-in-charge including conveyance of material from stores to site of work, including cost of jointing materials and rubber rings labour etc. complete. Note: Only SBR rubber gaskets to be used as per IS-5382 and IS-12820				
	MJP 18-19, Page No. 73, Sr. No. 2+5%				
	D.I. K-7				
	Dia. 150 mm	Rmt	200.00	82.95	16590.00
	Dia. 250 mm	Rmt	800.00	141.75	113400.00

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
65	Providing, supplying and fixing ISI standard D. I. specials & fitting with sealing rubber gasket of S.B.R,complete with cast iron follower gland and M. S. nut holts coated or otherwise protected from rusting and suitable for D.I.pipes including cost of labour, materials, and transportation to stores, loading and unloading excluding GST levied by GOI & GOM in all respect etc. complete as per IS-9523. For all types of specials, bends tees etc. 80 mm to 300 mm dia MJP 2018-19, Page No 81 Sr No 10	Kg	538.00	96.00	51648.00
66	Hydraulic testing of C.I./D.I. pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting,placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments,labour,operation charges,etc.required for testing.the rate under this item shall also include cost of retesting,if necessary and reinstatement to original position using water supplied by the contractor. MJP 18-19,Page No.82,Sr.No.2+5%				
	D.I.-K-7				
	Dia.150 mm	Km	0.05	8763.00	438.00
	Dia.250 mm	Km	0.30	14992.00	4498.00
67	Providing vertical RCC M30 cement enasement circular chamber including reinforcement steel FE 500,Wand wall thickness of 150mm, including lockable/removable top cover with vermimesh vent arrangment and with external plaster of 12mm thichness Rate Analysis Attachment	No.	1.00	7743.72	7744.00
68	Providing and fabricating structural steel work like joists, platform, clamps, supports, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. PWD 2018-19,Sr.No.801,SSR Item No.23.010	MT	0.05	74564.70	3728.00

Sr No.	DESCRIPTION OF ITEM	Unit	Quantity	Rate	Amount
	Electrical				
69	Cables, switch board, starter, MCB, Duct and connection arrangement etc. complete	LS	LS		25,000
				Total Cost	72,649,271.16

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 [●] day of [●] 2018 at [●], India.

BETWEEN

1. 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 Member*}, 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.}

¹Notes:

- (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.*

²Applicable in case of a single bidder

³Applicable in case of a consortium

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

WHEREAS:

- A. NMSCDCL has selected the Contractor through a competitive bidding process pursuant to a Request for Proposal dated [●] for implementing the Project (**RFP**).
- B. 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.
 7. Appendix XVI of this RFP is also part of the Contract Agreement.

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

SIGNED, SEALED AND DELIVERED

For and on behalf of NMSCDCL by:

(Signature)

(Name)

(Designation)

(Address)

(Fax No.)

OR

SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor⁴ by:

(Signature)

(Name)

(Designation)

(Address)

(Fax No.)

⁴Applicable in case of a single bidder

SIGNED, SEALED AND DELIVERED

For and on behalf of NMSCDCL by:

(Signature)

(Name)

(Designation)

(Address)

(Fax No.)

SIGNED, SEALED AND DELIVERED

For and on behalf of the Lead Member⁵ by:

(Signature)

(Name)

(Designation)

(Address)

(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:

(Signature)

(Name)

(Designation)

(Address)

(Fax No.)

⁵Applicable in case of a consortium

ANNEXURE A: GENERAL CONDITIONS OF CONTRACT

Security Deposit	<p>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:</p> <ul style="list-style-type: none">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. <p>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.</p> <p>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.</p> <p>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</p>
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	<p>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.</p>
<p>Compensation of Delay</p>	<p>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 uncompleted 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.</p> <ul style="list-style-type: none"> • 1/8 of the work in 1/4 of the time • 3/8 of the work in 1/2 of the time • 3/4 of the work in 3/4 of the time <p>of detailed progress laid down by the Engineer-in-Chief. The following proportions will usually be found suitable.</p> <ul style="list-style-type: none"> • 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, 1/2, 3/4 of the time reasonable progress of masonry work should be 1/6, 1/2, 3/4 of the total value of the work should be done. <p>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.</p>

<p>Action when whole Security Deposit is Forfeited</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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. <i>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.</i></p>
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	<p>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.</p>
<p>Action when the progress of any particular portions of the work is unsatisfactory</p>	<p>Clause 4: - If the progress of any particular portion of the work is unsatisfactory, the Engineer shall notwithstanding 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.</p>
<p>Contractor remains liable to pay compensation if action not taken under Clause 3 and 4</p>	<p>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 notwithstanding 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.</p>

<p>Power to take possession of or require removal of/or sell Contractor's plant.</p>	<p>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.</p>
<p>Extension of time</p>	<p>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.</p>
<p>Final Certificate/ Completion Certificate</p>	<p>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</p>

	<p>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 possession for the purpose of executing the work, nor until the works shall have been measured by the Engineer or where the measurements have been taken by his subordinates until they have received the approval of the Engineer, the said measurements being binding and concessive against the Contractor. If the Contractor shall fail to comply with the requirements of this clause as to the removal of scaffolding, surplus materials and rubbish and cleaning off dirt on or before the date fixed for the completion of the work the Executive Engineer may, at the expense of the Contractor, remove such scaffolding, surplus materials and rubbish and dispose of the same as he thinks fit and clean of such dirt as aforesaid; and the Contractor shall forthwith pay the amount of all expenses as incurred, but shall have no claim in respect of any such scaffolding or surplus material as aforesaid except for any sum actually realised by the sale thereof.</p> <p>The Contractor after Completion shall have to clean the Site of all debris and remove all unused materials other than those supplied by NMSCDCL and all plant and machinery, equipment, tools etc. belonging to the Contractor within one month from the date of Completion, or otherwise the same shall be removed by NMSCDCL at the risk and cost of the Contractor.</p>
<p>Payment on intermediate certificate to be regarded as advances.</p>	<p>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.</p> <p>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.</p> <p>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</p>

	<p>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</p> <p>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.</p> <p>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.</p>
<p>Payments of reduced rates on account of items of work not accepted as completed to be at the discretion of Engineer-In-Charge</p>	<p>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.</p>

<p>Bills to be submitted monthly.</p>	<p>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.</p>
<p>Bills to be on printed form.</p>	<p>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.</p>
	<p>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.</p> <p>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.</p> <p>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.</p>

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.	<p>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.</p>
Extensions of time in consequence of additions or alterations.	<p>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.</p> <p>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.</p>

<p>No Claim to any payments or compensation for alteration In/or restriction of work.</p>	<p>Clause 15:</p> <p>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.</p>
	<p>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.</p>
	<p>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</p>

	<p>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 consecutive 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.</p>
<p>No claim to compensation on account of loss due to delay in supply of materials by NMSCDCL</p>	<p>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-</p> <ol style="list-style-type: none"> a) Difficulties relating to the supply of railway wagons. b) Force majeure. c) Act of God. d) Act of enemies of the State or any other reasonable cause beyond the control of NMSCDCL. <p>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.</p>
<p>Time limit for unforeseen claim.</p>	<p>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.</p>
<p>Action and compensation payable in case of bad work.</p>	<p>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</p>

	<p>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.</p>
<p>Work to be open to inspection.</p> <p>Contractor or responsible agent to be present.</p>	<p>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 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.</p>
<p>Notice to be given before works is covered up.</p>	<p>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</p>

	<p>allowance shall be made for such work or for the materials with which the same was executed.</p>
<p>Contractor liable for damage done and for imperfections</p>	<p>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.</p>
<p>Contractor to supply plant, ladders, scaffolding etc.</p>	<p>Clause 21: - The Contractor shall supply at his own cost all materials, (except such special material, if any as may in accordance with the contract, supplied from the NMSCDCL Stores), plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary work, requisite or proper for the proper execution of the 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</p>

	entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work.
And is liable for damages arising from nonprovisions of lights fencing etc.	The Contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting, weighting and assisting in the measurement or examination at any time and from time to time of the work or the materials. Failing this the same may be provided by the Engineer at the expense of the Contractor and the expenses may be deducted from any money due to the Contractor under the contract or from his security deposit or the proceeds of sale thereof or 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.
	<p>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.</p> <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 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 - <ol style="list-style-type: none"> 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.

	<ol style="list-style-type: none">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<ol style="list-style-type: none">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; and9.3. 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);<ol style="list-style-type: none">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; and10.3. 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.
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	<p>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.</p> <p>13. Suitable precautions shall be taken to prevent persons being struck by articles, which might fall from scaffolds or other working places.</p> <p>14. Safe means of access shall be provided to all working platforms and other working places.</p>
	<p>Clause 21 B: The Contractor shall comply with the following regulations as regards the Hoisting Appliances to be used by him.</p> <p>(a) Hoisting machines and tackle, including their attachments, anchorages and supports shall.</p> <p style="padding-left: 40px;">a be of good mechanical construction, sound materials and adequate strength and free patent defect; and</p> <p style="padding-left: 40px;">b be kept in good repair and in good working order.</p> <p>(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.</p> <p>(c) Hoisting 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.</p> <p>(d) Every chain ring, hook, shackle, swivel and pulley block used in hoisting or as a means of suspension shall be periodically examined.</p> <p>(e) Every crane driver or hoisting appliance operator shall be properly qualified.</p> <p>(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.</p> <p>(g) In the case of every hoisting machine and of every chain ring, hook, shackle, swivel and pulley block used in hoisting or</p>

	<p>lowering or as a means of suspension, the safe working load shall be ascertained by adequate means.</p> <p>(h) Every hoisting machine and all gear referred to in preceding regulation shall be plainly marked with the safe working load.</p> <p>(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.</p> <p>(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.</p> <p>(k) Motors, gearing, transmissions, electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safe guards.</p> <p>(l) Hoisting appliance shall be provided with such means as will reduce to a minimum the risk of the accidental descent of the load.</p> <p>(m) Adequate precaution shall be taken in reduce to a minimum the risk of any part of a suspended load becoming accidentally displaced.</p>
<p>Measures for prevention of fire</p>	<p>Clause 22: - The Contractor shall not set fire to any standing jungle trees, brushwood or grass without a written permit from the Engineer.</p> <p>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.</p> <p>The Contractor shall make his own arrangements for drinking water for the labour employed by him</p>
<p>Liability of Contractor for any damage done in or out side work area.</p>	<p>Clause 23: - Compensation for all damage 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 mentioned in clause 22 shall be estimated by the Engineer or such other officer as he may appoint and the 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</p>

	<p>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.</p>
Employment of female labour	<p>Clause 24: - The employment of female labourers on works in the neighbourhood of soldier's barracks should avoided as far as possible.</p>
Work not to be sublet.	<p>Clause 25: - The contract shall not be assigned or sublet without the written approval of the Engineer. 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.</p>
Contract may be rescinded and security deposit forfeited for subletting it without approval of for bribing a public officer or if Contractor becomes insolvent.	<p>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</p>

	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.

<p>Stores of European or American manufacture not to be obtained from NMSCDCL</p>	<p>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.</p>
<p>Lump sums in estimates.</p>	<p>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.</p>
<p>Action where no specification.</p>	<p>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</p>
<p>Definition of work.</p>	<p>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.</p>
<p>Contractor's percentage whether applied to net or gross amounts of bill.</p>	<p>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.</p>

<p>Quarry fees and royalties.</p>	<p>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.</p>
<p>Compensation under the workmen's Compensation Act.</p>	<p>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.</p>
<p>Safety and Medical Aid to workmen</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.</p>
	<p>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.</p>

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.

<p>Minimum age of person employed the employment of donkey and/ or other animals and the payment of fair wages.</p>	<p>Clause 43:</p> <ul style="list-style-type: none"> 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.
<p>Method of payment.</p>	<p>Clause 44: - Payment to Contractors shall be made by electronic payments or cheque drawn on any treasury provided the amount exceeds INR 10/-</p>

<p>Acceptance of conditions compulsory before tendering for work.</p>	<p>Clause 45: - Any Contractor who does not accept these conditions shall not be granted the Works under this RFP.</p>
	<p>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.</p> <p>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.</p>
<p>Payment of GST</p>	<p>Clause 47: - The rates to be quoted by the Contractor must be exclusive 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.</p>
	<p>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.</p>
	<p>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 .</p>

	<p>Clause 50: - "Out of the skilled and unskilled labour to be employed by 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."</p>
	<p>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.</p>
	<p>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.</p>
	<p>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."</p>

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 which shall include the GCC, SCC and anyother amendment, modification, variation, or other document agreed between NMSCDCL and theContractor.

"Construction Period" means, a period of 18 (Eighteen) months from the date of issuance of the Work Order for completing the Project.

"Completion" means that the completion of the execution of complete work under the Project, 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 complete work under the Project, by the Contractor under Clause 7 of the GCC.

"Completion Date" means 18 (Eighteen) months 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 this SCC.

"Contract Period" means a period of 54 (Fifty-Four) months from the date of issuance of Work Order i: 18 (Eighteen) months of Construction Period for Project. and36 (Tirty Six) months of Defect Liability Period for the Project.

"Defect Liability Period" means the period of 36 (Tirty Six) monthswith respect to Project of the warranties provided by the Contractor, during which the Contractor is responsible for rectification of the defects with respect to Project.

“Disputed Invoice” shall have the meaning as set forth in Clause 3.3 of this SCC.

“Drawing” means the engineering data, drawings and the likes there of provided to the Contractor basis the Designs 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 this 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 a detailed note outlining its proposed approach, methodology and program for construction, quality assurance plan, environment management plan, 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 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.

“Performance Security/Additional Performance Security” shall have the meaning as set forth in Clause 1 of the GCC.

“Project” means the Godavari Riverfront Development Civil Works including Storm Water Drain, Sewer Lines and Water lines in ABD Area under Nashik Smart City Mission, Nashik (Maharashtra);

“SCC” means the Special Conditions of Contract entered upon between NMSCDCL and the Contractor 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 Clause 3 of this SCC.

“Site” with respect to Project, shall mean the real estate described in Schedule 2 of this Contract’

“TakeOver” means with respect to Project the successful handingover 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 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 as cribbed to such term under Clause 40.4 of the SCC when made in accordance with this 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 Effective Date of this Contract by NMSCDCL for handover of the Site to the Contractor subject to the approval of the Implementation Plan by NMSCDCL.

2. INTERPRETATIONS

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 viceversa.
- 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, asset for 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 re-enactment or consolidation of such legislation or any provision thereof so far as such amendment or re-enactment or consolidation applies or is capable of applying to any transaction entered into hereunder;
- h) references to laws of India or Indian law or regulation having the force of law shall include the laws, acts, ordinances, rules, regulations, by 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 along with the this Clause of the SCC and in the manner provided in Schedule 1 based on the measurements of the Works completed and certified by the Engineer-in-Charge (For the avoidance of doubt, all the taxes and duties levied by the state government/ central government/ local bodies at the prevailing rates applicable on the date of LOA shall be fully borne by the Contractor and shall not be reimbursed to it by NMSCDCL on any account. The Contract Price shall be inclusive of all taxes and levies under applicable laws.

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 i.e. 30 (months) 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 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 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) day so 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 inspection or tests, nullify and 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
- b) Third party claims have been filed or there is reasonable evidence indicating probable filling of such claims;
- c) Of the contractor's failure to make the payment properly to subcontractor or for labour, material or equipment;
- d) of damage to another contractor, or to the property of other caused by contractor;
- e) of reasonable indication that the works will not be completed within the completion date;
- f) of reasonable doubt that the works can not be completed for the unpaid balance of the contract price;
- g) of the Contractor's neglect or unsatisfactory execution of the work including failure to cleanup. 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. construction, testing and commissioning of Storm Water Drain, Sewer Lines and Water Lines as set out in Appendix X including the Defect Liability Period;
 - b. Performance and fulfilment of all other obligations of the Contractor in accordance with the provisions of this Contract and matters incidental there to 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 90 (ninety) months commencing on the date of issuance of the Work Order ("Term") consisting of:

- a. 30 (thirty) months of Construction Period for the Project;
- b. 60 (sixty) months of Defect Liability Period for the Project.

6.2 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 etc., at its own cost, to complete the work within stipulated time.

7. TAXES AND DUTIES

7.1 The rates shall be exclusive 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 works at its expense within 90 days of award of contract. 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 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 safe guards 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 any thing 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 of the Project in accordance with this Agreement and the RFP.

8.15 Permits

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

8.16 Explosives

- a. The contractor shall at his own expenses construct and maintain magazines if such are required for the storage of explosive for use in connection with the works, such magazines being suitably constructed and maintained in accordance with the Govt. rules applicable.
- b. The contractor shall at his own expenses obtain such license or licenses as may be necessary for storing and using explosives. The NMSCDCL shall not incur any responsibility whatsoever in connection with the stores and use of explosive on the site or any accident or occurrence whatsoever which shall be at the risk of the contractor and on his sole responsibility and the contractor shall give the NMSCDCL absolute indemnity in respect thereof.

- 8.17 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.

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 thisContract.
- 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 thisContract;
- 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 attached to 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, quasi-judicial 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.

11. CONSTRUCTION OF SITE OFFICES

11.1 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.

11.2 The Contractor agrees and undertakes to provide minimum 2(two) nos of four wheeler vehicles (Xylo or equivalent and Bolero or equivalent), in good working condition not older than three years including fuel, Maintenance and well trained driver to be exclusively used by NMSCDCL's employee/PMC staff/representatives for the purpose of site visit and inspection upto mileage for 3000 km per month per vehicle for the project work purpose during construction period only.

11.3 WaterCharges

Water required for drinking, construction and testing of pipe line and Reservoir like Sump, GSR, and ESRetc.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 pipe line 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 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.

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, 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	Relevant Work Package/ Combined Experience
1	Project Manager	B.E. (Civil)	15	1	12
2	Deputy Project Manager	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	3	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	3-6	8	2
11	Marshals	Min.	2	10	1

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

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

14.6 Work during Night or on Sundays and Holidays

14.7 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.

14.8 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.

14.9 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.

15.3 It is also agreed that NMSCDCL shall not be liable in any manner on account of grantor 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 setout 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.
- ExpandedName
 - 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 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 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 pipe line 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 authorized 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.
- 17.2 The Contractor shall:
- a. comply with all applicable safety regulations,
 - b. take care for the safety of all persons entitled to be on the Site,
 - c. use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
 - d. provide fencing, lighting, guarding and watching of the Works during the subsistence of this Contract, and
 - e. provide any temporary works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and 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 subcontractor 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
- a. Contractor shall carry out anti-malaria measures in the areas per guidelines directed by 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 nuisance. 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 leviable on him without any extra cost to Government.

18. POLICE PROTECTION:

If special protection of his camp of work people 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 eject 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. remove from the Site and replace any materials or equipment which is not in accordance with the Contract,
 - b. remove and re-execute any other work which is not in accordance with the Contract, and
 - c. execute 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 as may be instructed by NMSCDCL, 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. 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 inform the Engineer in writing when any portion of the Work is ready for inspection giving it sufficient notice to enable the Engineer to inspect the same 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 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 The contractor shall inform, by writing in advance to the Engineer-in-charge, if he wants that work should be inspected by the Engineer-in-charge, 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).

21. LIQUIDATED DAMAGES

21.1 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% 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.

21.2 If the Contractor fails to achieve the respective milestones for the 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% of the contract price part there of up to a maximum of 10% (ten percent) of the of the Contract Price.

21.3 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% 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.

22. DEFECT LIABILITY PERIOD

22.1 The Defect Liability Period shall commence on the date of issuance of the Completion Certificate to the Contractor and shall continue till 60 (sixty) months.

22.2 During the Defect Liability Period, the Contractor shall remain liable for any technical or other defects in the project. 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 the project, 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 the project, 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 the project 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. NMSCDCL shall also be entitled to deduct the same from any amount, which may then be payable or which 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 Contract or an notice stating the nature of any defect in Part A and Part B, 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 B and/or the repairs or replacements, which it proposes to make, the estimated duration of there pairs or the duration required to effect the replacement

works, details or parts of the Part A, Part B 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 B and provided that:

- a. the Contractor has completed the outstanding works pertaining to Part A, Part B, 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 20.2 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.

23.4 After the permission or instruction to proceed is given, the Contractor and the Engineer shall 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

The Contractor shall at all times keep NMSCDCL in demnified 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.

- 25.5 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."

- 25.6 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 be 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 CLEANUP

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, NMSCDCL 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 On Date of Bid submission	Capacity	Nos. Require	Owned/ Hired
1	Excavators with Rock	10	Min 1.25 m ³	2	Min. 3 Owned
2	Backhoe Loader/JC	5	Min 0.3 m ³	3	Owned/Hired
3	Motor Grader	10	-	1	Owned/Hired

4	Paver Finisher with Electronic Sensors for Grade and level control	5	Capable of paving 7m. width	1	Owned/Hired
5	Vibratory Tandom Roller (with intelligent compaction)	5	Minimum 10 Ton operating wt.	4	Owned/Hired
6	Vibratory soil	5	Minimum 5 Tonn	4	Min. 1 Owned
7	Mini Vibrator	5	4/6 Tonn	2	Owned
8	Pneumatic Roller	5	Wt = 8-10 Tonn;	1	Owned/Hired
9	Water Tanker/	-	-	2	Min. 1 Owned
10	Dumper/ Tippers/Tractor Tippers	5	Minimum 6 cum	12	Min. 2 Owned
11	RMC Batch Mix Plant	10	30 cum/hr.	1	Owned/Hired
12	Transit Mixers	3	6 cum	8	Min. 4 Owned
13	Concrete Pump	5	-	2	Owned
14	Fix Form Paver	5	-	1	Owned
15	Internal Concrete	5	-	6	Owned/Hired
16	Mechanical	-	-	1	Owned/Hired
17	Air Compressor	5	Min capacity 250 cum	2	Owned/Hired
18	Survey				
	i) Total Station	3	-	1	Owned
	ii) Auto Level	3	-	5	Owned

31 DISCREPANCIES AND OMISSIONS

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 under 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 amicable settlement.

32.2 Settlement by CEO, NMSCDCL

a. 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 the Chief Executive Officer (CEO), NMSCDCL who shall provide its written decision within a period of 15 (fifteen) days of the dispute being referred to it by either Party.

b. In the event that the CEO, NMSCDCL fails to provide its decision within 15 (fifteen) days after being requested as aforesaid, or in the event that either NMSCDCL or the Contractor is dissatisfied with any such decision, as the case may be, either Party may, within 15 (fifteen) days after the date on which such decision is required to be provided in accordance with Clause 32.2(a) above, or the date the decision is provided by the CEO, NMSCDCL, as the case may be refer the matter in 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 provisions of this Contract or persistently neglects to carry out its obligations under this Contract, without just cause;
if the Contractor persistently fails to execute this Contract in accordance with the 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;
- c. if the Contractor without reasonable excuse fails to comply with the notice to correct a 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.

33.3 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.

33.4 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. Deliver to NMSCDCL all plant and materials which shall have become the property of NMSCDCL under Clause 33 of the SCC;
- c. 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 in 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:

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.

- a. The suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event.
- b. 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.

- c. 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 an 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 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.

37 LABOUR

37.1 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.

37.2 The contractor shall submit daily reports to the Engineer regarding the strength of labour employed by him in both skilled and unskilled category and such other information as the Engineer may require, in the prescribed statement supplied by the Engineer-in-charge from time to time. The contractor if directed by the Engineer-in-charge shall

increase the strength of both skilled and unskilled labour at the Site.

- 37.3 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)
- 37.4 To report unusual happening, if any to, NMSCDCL or any other authorized person, in writing by NMSCDCL being awarded with the Contract.
- 37.5 NMSCDCL reserves the right to direct the Contractor to remove / replace any staff for unsatisfactory performance and to provide substitute during the Construction Period.
- 37.6 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.
- 37.7 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 p 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.
- 37.8 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.
- 37.9 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 .

- 37.10 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.
- 37.11 The Contractor shall be responsible for getting police verification of the employees/ labours deployed by him from time to time.
- 37.12 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.
- 37.13 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.
- 37.14 The Contractors shall furnish to the Engineer-in-charge every week during the progress of the work classified weekly returns of the number of the people employed on the work during the work.
- a. A weekly medical report showing the health of contract labour, the number or persons ill and the nature of their illness.
 - b. A report within 24 hours of its occurrence of any accident that might have taken place.

38 BOOKS OF REFERENCE:

- 38.1 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).
- 38.2 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 or tenderer for the work has 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.
- 38.3 The contractor should quote his rates taking into consideration the charge which are not

refundable on any account.

39 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 highground 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 up to the satisfaction of the Corporation's Engineer. At least one sweeper per two hundred persons should be gaged.
- 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.

40 MISCELLANEOUS

40.1 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.

40.2 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 out side 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.

40.3 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 provision 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.

40.4 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. Please refer to Appendix XIV for Price Variation clause.

40.5 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.

40.6 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.

40.7 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

40.8 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.

40.9 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: [●]

Fax: [●]

Email: [●]

Contact: [●]

With a copy to NMSCDCL:

{Insert Address} Tel: [●]

Fax: [●]

Email: [●]

Contact:[●]

Contractor

{Insert Address} Tel: [●]

Fax: [●]

Email: [●]

Contact: [●]

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.

40.10 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.

40.11 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.

40.12 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.

40.13 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.

40.14 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.

40.15 MODE AND TIMELINES OF PAYMENT

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 Calendar 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.

- 40.16 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.
- 40.17 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.

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 $\frac{1}{4}$ of the time.

3/8 of the work in $\frac{1}{2}$ of the time.

$\frac{3}{4}$ of the work in $\frac{3}{4}$ of the time.

The following proportions will usually be found suitable.

In 1/10, 1/2, $\frac{3}{4}$ of the time reasonable progress of the earth work should be 1/6, $\frac{1}{2}$, $\frac{3}{4}$ of the total value of the work should be done.

In 1/10, 1/6, $\frac{1}{2}$, $\frac{3}{4}$ of the time reasonable progress of masonry work should be 1/6, $\frac{1}{2}$, $\frac{3}{4}$ 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 Liabiluity 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.

$$V2 = \frac{Co (C11 - Clo)}{Clo} \times T$$

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.)

Cl1 = Average cement index published in the RBI bulletin for the quarter under consideration.

Clo= 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.

$$V3 = \frac{So (S11 - Slo)}{Slo} \times T$$

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.

S11 = Average steel index as per RBI bulletin for the quarter under consideration.

Slo= 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)

SR NO.	DRAWING NO.	DRAWING TITLE
1	WTE-2303-01-GS-1.00	Goda Sewer Line & Storm Water Drain Layout
2	WTE-2303-01-GS-1.01	Box Drain Detail.

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