Volume-2

SECTION 6

BILL OF QUANTITIES

PREAMBLE

Bill of Quantities for the Works:

- 1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Special Conditions of Contract, Technical Specifications and Drawings.
- 2. The quantities given in the Bill of Quantities are estimated & are given to provide a common basis for bidding. The Contractor to measure the work under the observation & control of the Engineer, which shall be valued at the rates provided in the priced Bill of Quantities, where applicable, & otherwise at such rates as the Engineer may fix within the terms of the Contract, which shall form the basis for payments to the Contractor.
- 3. The rates in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all construction plant, labour, supervision, materials, all temporary works and false works, erection, transportation, maintenance, insurance, administrative overheads, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract, and including remedy of any defects during the Defects Liability Period.
- 4. A rate shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates entered in the Bill of Quantities.
- 5. The costs of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities. Where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of work.
- 6. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering rates against each item in the priced Bill of Quantities.
- 7. The Bill of Quantities of the Work is comprised of the various Bills of construction activities. During execution, however, the items existing in any of the Bills can be made applicable for execution elsewhere also on the Works if considered appropriate and directed by the Engineer.
- 8. The method of measurement of completed work for payment shall be as per Specification.
- 9. Errors, if any, shall be corrected by Employer in terms of Clause 27 of ITB.

Execution of Major Maintenance and Repair Works at Sikar-Bikaner Section of NH-11 from Km 340.188 of NH-11 to Km 557.775 of NH-11 via Sikar Bypass & Bikaner Bypass from Km 553.869 of NH-11 to Km 267.325 of NH-89 in the State of Rajasthan

Bill of Quantities

S. N.	Description	Unit	Qty	Rate ₹	Amount ₹
1	Milling of existing wearing course up to 50 mm using fine milling drum & disposal of milled material incl. all leads with suitable place disposal. The rate quoted shall be inclusive of the rebate for the salvage value of the milled material.	Sqm	40,908		
2	Providing & applying tack coat with bitumen emulsion using emulsion pressure distributor at the rate of 0.25 kg per sqm on the prepared bituminous / granular surface cleaned with mechanical broom.	Sqm	117,112		
3	Providing and laying <i>Dense Bituminous Macadam</i> with batch type HMP producing mix using crushed aggregates of specified grading, premixed with bituminous binder VG 40 (Grading -II- Bituminous binder content as per approved Job mix formula but not lesser than that specified in relevant clause of MoRT&H Specifications) & filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specifications complete in all respects. Item rate shall be inclusive of all material, taxes, duties, manpower, equipment cost, royalties, transportation, etc.	Cum	735		
4	Providing & laying <i>Bituminous Concrete</i> with VG-40 with 100-120 TPH batch type hot mix plant producing an average output of 75 tones per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 per cent of mix & filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level & alignment, rolling with smooth wheeled, vibratory & tandem rollers to achieve the desired compaction as per MORTH/IRC/NHAI specifications complete in all respects. Item rate shall be inclusive of all material, taxes, duties, manpower, equipment	Cum	4,096		

S. N.	Description	Unit	Qty	Rate ₹	Amount ₹
	cost, royalties, transportation, etc.				
5	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes.	Sqm	46,432		
6	Natural GSB Including material, transportation, laying, watering and compaction etc.	Cum	3,858		
7	Crack sealing using emulsion and fine aggregate	Sqm	42,810		
	as per specification.	Rmt	2,760		
	Total Amount Incl. GST - (₹)				

Notes:

- 1. Quoted rates are inclusive of GST as per ITB Clause 42.1 and other applicable taxes
- 2. Item rate shall be inclusive of all material, manpower, equipment cost, royalties, transportation, etc.
- 3. Contractor shall arrange all the necessary equipment's required to execute the work as per the Standards and Specifications and as per good industrial practice
- 4. The Construction Performance Security shall be provided by the Contractor to EMSL as per Tender document before signing of contract.
- 5. Retention Money shall be deducted and withheld by EMSL as per Contract Condition. The retention money shall be released interest free to contractor by EMSL upon successful completion of Defects Liability Period.
- 6. The Contractor shall solely be responsible for implementation of Traffic Management and Diversion during execution of awarded work as per IRC:SP:55-2014 "Guidelines on Traffic Management in Work Zones, other relevant IRC Codes, Clause 112 of Specifications for Road & Bridge Works (5th Revision) and as per Annexure -5B of RFB Volume I. Failing to adhere to implement Traffic Management, Diversion and Safety as per agreed & defined norms shall result in imposition of penalty equivalent to 2% of amount from each Running Account Bill of the Contractor.
- 7. TDS shall be deducted at the rates applicable as per provisions of Income Tax Act from contractor's running bills. For this purpose, Contractor shall submit necessary documents / details / information's as may be required to EMSL from time to time.
- 8. The contractor shall be responsible for compliance as per prevalent Labour Laws including the labour cess compliances and its payment to Authority
- 9. Contractor shall arrange for all insurances including contractor's equipment if any and its own surrounding property workmen's compensation, group accident, and group Mediclaim. EMSL will not be liable for any compensation towards loss of life & property.
- 10. Above Bill of Quantities with rates shall be submitted on letterhead of the Bidder with signature of authorized signatory and company stamp

SECTION 7 SECURITIES AND OTHER FORMS

SECTION 7: SECURITIES AND OTHER FORMS

Form -7A: Form of Bid

Form – 7B : Bid Security (Bank Guarantee)

Form -7C: Letter of Acceptance

 $\begin{array}{cccc} Form-7D & : & Deleted \\ Form-7E & : & Deleted \\ Form-7F & : & Deleted \\ Form-7G & : & Deleted \\ \end{array}$

Form – 7H : Bank Guarantee for Advance Payment

Form – 7I : Performance Bank Guarantee

Forms of Securities

Acceptable forms of securities are annexed. Bidders should not complete Advance Payment Security forms at this time. Only the successful Bidder will be required to provide Advance Payment Securities in accordance with one of the forms, or in a similar form acceptable to the Employer.

(Please refer Clause 18 of ITB)

FORM OF BID

Elsamex Maintenance Services Limited

25th Floor, GIFT 1 Tower, GIFT City, Gandhinagar, Gujarat 382355

Gentlemen.

Scope

Sub.: Execution of Major Maintenance and Repair Works at Sikar-Bikaner Section of NH-11 from Km 340.188 of NH-11 to Km 557.775 of NH-11 via Sikar Bypass & Bikaner Bypass from Km 553.869 of NH-11 to Km 267.325 of NH-89 in the State of Rajasthan

1.	We offer to execute the Works described above in accordance with the Bidding
	Documents including Invitation for Bid, Instructions to Bidders, Conditions of Contract,
	Specifications and Drawings, Bill of Quantities, Annexures and Addenda for the Prices
	and sum mentioned in Annexure 1(a) of Section 6 of the Bidding Document attached with
	this letter. As per this, the payment for Works is ₹ as per the sum
	total as given in Annexure 1(a) of Section 6.

- 2. We understand that you are not bound to accept the lowest or any Bid you receive.
- 3. Unless and until an Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding Contract between us, but without prejudice to your right to withdraw such acceptance under the provisions of the Bid Document.
- 4. We assure you that the criteria based on which we are qualified are valid.
- 5. We agree to abide by this Bid for the period of <u>One Hundred Twenty (120) days</u> from the closing date of Bid Submission, and it shall remain binding upon us and may be accepted at any time before the expiry of that period.
- 6. We understand that for this Bid, we shall comply with the Eligibility, Bid Validity and Bid Security required as stated in the Bidding documents. We attach herewith our current Income Tax clearance certificate.

7. We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

Yours faithfully,

Authorized Signature:
Name & Title of Signatory:
Name of Bidder with official seal:
Address :

BID SECURITY (BANK GUARANTEE)

WH	ERE	AS,	[name of Bidder] (hereinafter called "the Bidder")
			[date] for the works "Execution of
Maj	or M	Iaintenance and Repair	Works at Sikar-Bikaner Section of NH-11 from Km
			5 of NH-11 via Sikar Bypass & Bikaner Bypass from
			7.325 of NH-89 in the State of Rajasthan" (Hereinafter
calle	ed "th	e Bid").	
Scop	pe		
			presents that We
			ered office at
			e bound unto Elsamex Maintenance Services Limited
) in the sum offor
		syment well and truly to and assigns by these pre	be made to the said Employer the Bank binds itself, his sents.
SEA	LED	with the Common Seal o	f the said Bank this day of 2022
THE	E COI	NDITIONS of this obligat	ion are:
1)		fter Bid opening the Bid cified in the Form of Bid;	der withdraws his Bid during the period of Bid validity or
2)		ne Bidder having been not period of Bid validity:	ified of the acceptance of his Bid by the Employer during
	a.	fails or refuses to exc Instructions to Bidders,	ecute the Form of Agreement in accordance with the if required; or
	b.	Deleted	
	c.	does not accept the corr	ection of the Bid Price pursuant to Clause 27 of ITB:

we undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including 60 days after the Bid validity period
as stated in the Instructions to Bidders or as it may be extended by the Employer, notice of
which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee
should reach the Bank not later than the above date.

DATE	SIGNATURE	OF	THE	BANK
WITNESS	SEAL			
[signature, name, and address]]			

(Please refer Clause 31 of ITB)

(Letterhead paper of the Employer)

Letter of Acceptance

To: [name and address of the Contractor]					[date]		
Sub.:	Sub.: Execution of Major Maintenance and Repair Works at Sikar-Bikaner Section of NH-11 from Km 340.188 of NH-11 to Km 557.775 of NH-11 via Sikar Bypass & Bikaner Bypass from Km 553.869 of NH-11 to Km 267.325 of NH-89 in the State of Rajasthan						
Scope	:						
Dear S	irs,						
Ma bee quo bid	en accepted by your ding documents accepted by accepted a	confirmed that your B to Services Limited (EM) and on behalf or ou and the terms and cuments and subsequentled amount of the bid completion and mainters as under:	MSL) for the work ment for the EMSL for an amoundations as contained by addendum/corrigend for the above-ment	ntioned in the sount mentione in Volume-1 aum issued.	subject above has d below on rates and Volume-2 of an consideration,		
Parti	culars	Bid amount	Amount of Bid	Rebate	Bid Amount		
		indicated	after arithmetical	offered	after Rebate		
		by you (in ₹)	corrections (in ₹)		(in ₹.)		
Execu	ıtion of	(III V)	(III V)				
	Works						
		TOT	AL				
		epted amount of the Bid start will be as defined).		

5. The period of completion of whole work is as defined in S. No. 10 of Contract Data as

Contract Completion Date.

6. Deleted.

- 7. You are also requested to sign and execute the Contract Agreement within 28 days, failing which action as stated in Para 32.3 of ITB will be taken.
- 8. You are requested to submit a detailed Construction Program including Environment and Traffic Management Plans as per Clause 25 of General Conditions of Contract, Section 3, Part-I within 21 days of receipt of this letter.

Yours faithfully,

Authorized Signatory
Name and Title of Signatory
Name of Agency

Form-7D

(Please refer Clause 32 of ITB)

Deleted

Form – 7F

(Please refer Clause 31 of ITB)

Deleted

(Please refer Clause 31 of ITB)

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Form - 7H

(Please refer Clause 47 of GCC)

BANK GUARANTEE FOR ADVANCE PAYMENT

To, Elsamex Maintenance Services Limited 25 th Floor, GIFT 1 Tower, GIFT City, Gandhinagar, Gujarat 382355 , Bank Guarantee Nodated for ₹
WHEREAS vide the "Execution of Major Maintenance and Repair Works at Sikar-Bikaner Section of NH-11 from Km 340.188 of NH-11 to Km 557.775 of NH-11 via Sikar Bypass & Bikaner Bypass from Km 553.869 of NH-11 to Km 267.325 of NH-89 in the State of Rajasthan "Contract dated (hereinafter referred to as "the Contract"), [name of Contractor] a company incorporated under the Companies Act, 1956 and having its registered office at (hereinafter referred to as the 'Contractor' which expression shall unless repugnant to or inconsistent with the context mean and include its successors and assigns) has been awarded by Elsamex Maintenance Services Limited, having its registered office at The IL&FS Financial Center, Plot C-22, G Block, Bandra Kurla Complex, Mumbai- 400051, Maharashtra, India and Corporate Office at 25th Floor, GIFT 1 Tower, GIFT City, Gandhinagar, Gujarat 382355, (hereinafter referred to as the 'Employer' which expression shall unless repugnant to or inconsistent with the context mean and include its successors and assigns), the contract for the works "Execution of Major Maintenance and Repair Works at Sikar-Bikaner Section of NH-11 from Km 340.188 of NH-11 to Km 557.775 of NH-11 via Sikar Bypass & Bikaner Bypass from Km 553.869 of NH-11 to Km 267.325 of NH-89 in the State of Rajasthan".
AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you an Advance Payment Guarantee security, at the time of forwarding a request for Advance payment, from a specified nationalized/scheduled bank , for the sum proposed to be released as Advance Payment in accordance with the terms and conditions of the Contract.
AND WHEREAS WE, [name of Bank], a body corporate, constituted under [relevant Act] and having its head office at and branch office at

	have agreed to	o furnish a	n Advanced	Payment	Guarantee	for a	sum	of
₹	(Rupees	Only)	hereinafter re	eferred as	the guarante	eed am	ount)	as
security for comp	oliance of the Co	ontractor's	obligations u	nder the C	Contract;			

NOW THEREFORE we hereby affirm that we, as the Guarantor, are responsible to you, on behalf of the Contractor for the guaranteed amount and we irrevocably undertake to pay you, upon your first written demand and without demur or argument, any sum or sums within the limits of the guaranteed amount as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified herein. The guaranteed amount shall be payable merely on demand by the Employer. Any certification or letter stating that the amount claimed in the demand notice is due and payable, signed by a duly authorised official of the Employer to this effect, shall be final, binding and conclusive upon us.

We hereby agree to pay on demand the guaranteed amount without demur by crediting to the Bank Account of the Employer, the details of which are to be informed to us by you during the validity of the guarantee.

We hereby undertake that this Guarantee is absolute, irrevocable and unconditional and shall be enforceable against us notwithstanding any security or securities comprised in any instrument executed or to be executed by the Contractor in favour of the Employer.

We hereby also agree that this guarantee shall not be wholly or partially satisfied or exhausted by any payments made to or settled with the Employer by the Contractor and shall be valid and binding on us and operative until the expiry of this Guarantee.

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

The jurisdiction in relation to this Guarantee shall be the Courts at Mumbai and laws of India shall be applicable. This guarantee shall be valid up to 45 days beyond the period of stipulated period of complete recovery defined in S. No. 19 of Contract Data ______ (Expiry Date). We hereby agree to renew and extend the validity of this Guarantee on request from you. Unless a demand or claim is lodged within the aforesaid time, i.e. Expiry Date, your rights under this Guarantee shall be forfeited and we shall not be liable there under.

WE hereby represent that there is no litigation or arbitration or other proceedings pending against us which could reasonably be expected to have a material adverse effect or change in our ability to perform our obligation under this Guarantee.

Notwithstanding anything contained herein:

a)	our liability under this Guarantee shall not exceed the guaranteed amount i.e. $\mathbf{\xi}$				
	(Rupees Only)				
b)	this guarantee shall be valid up to (Expiry Date) and				
c)	we shall be liable to pay the guaranteed amount under this Guarantee only and only if we				
	receive a written claim or demand duly signed by a duly authorised official of the				
	Employer before the as mentioned above or any other extended date.				
IN	WITNESS WHEREOF we have executed this Guarantee on this day of,				
	- •				
Sig	gnature				
Da	Date and place				

FORMAT FOR PERFORMANCE BANK GUARANTEE

To,
Elsamex Maintenance Services Limited
25th Floor, GIFT 1 Tower,
GIFT City, Gandhinagar,
Gujarat - 382355

WHEREAS:

- (B) The Agreement requires the Contractor to furnish a Performance Security to the Client / EMSL in a sum of <u>5% of Agreed Contract Value</u> as security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the Construction Period (as defined in the Agreement).
- (C) We, through our Branch at (the "Bank") have agreed to furnish this Bank Guarantee by way of Performance Security.

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

- 1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor's obligations during the Construction Period, under and in accordance with the Agreement, and agrees and undertakes to pay to the EMSL /Client, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums upto an aggregate sum of the Guarantee Amount as the EMSL / Client shall claim, without the Client / EMSL being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.
- 2. A letter from EMSL/Client that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the

Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the EMSL/Client shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during the Construction Period under the Agreement and its decision that the Contractor is in default shall be final, and binding on the Bank, notwithstanding any differences between the Client / EMSL and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.

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- 3. In order to give effect to this Guarantee, the Client / EMSL shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
- 4. It shall not be necessary, and the Bank hereby waives any necessity, for the Client / EMSL to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
- 5. The Client / EMSL shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfilment and/ or performance of all or any of the obligations of the Contractor contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Client / EMSL against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Client / EMSL, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Client / EMSL of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Client / EMSL or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.
- 6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Client / EMSL in respect of or relating to the Agreement or for the fulfilment, compliance and/or performance of all or any of the obligations of the Contractor under the Agreement.
- 7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force until the successful completion of *Defect Liability Period of 18 Months from the Date of issue of Completion Certificate* and unless a demand or claim in writing is made by

the Client / EMSL on the Bank under this Guarantee, no later than 6 (six) months from the date of expiry of this Guarantee, all rights of the Client / EMSL under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.

- 8. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Client / EMSL in writing and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
- 9. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred Branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Client / EMSL that the envelope was so posted shall be conclusive.
- 10. This Guarantee shall come into force with immediate effect and shall remain in force and effect for a period as mentioned in point 7 or until it is released earlier by the Client / EMSL pursuant to the provisions of the Agreement.
- 11. This guarantee shall also be operatable at our ______ branch at Mumbai, from whom, confirmation regarding the issue of this guarantee or extension/ renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment hereunder claimed, the said branch shall accept such invitation letter and make payment of amounts so demanded under the said invocation.

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

> (Signature) (Name) (Designation) (Code Number) (Address)

NOTES:

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