N. F. RAILWAY

(Construction Department)

SECTION 1 INTRODUCTION

1.1 Background

- 1.1.1 The President of India represented by the CE/CON-1, Northeast Frontier Railway (the "Authority"), having its principal office at the Office of GM (Const.) Office, Maligaon -781011, India is engaged in the development of railways and related infrastructure, and as part of this endeavour, the Authority has decided to undertake the Major Upgradation of Railway Station at at Dimapur (the "Project") through Engineering, Procurement and Construction (the "EPC") Contract, and has decided to carry out a single stage Bidding process for selection of a Bidder to whom the Project may be awarded.
- 1.1.2 The brief particulars of the Project and the Bidding Process are as follows in the Key Information Table (KIT):

S No.	Particular	Details
1.	Name of the Work	Request for Proposal (RFP) for Major Upgradation of Railway Station at Dimapur , on Engineering, Procurement and Construction (EPC) mode.
2.	Estimated Project Cost	INR [286.00 Crore (Rupees Two Hundred Eighty Six Crore)]
3.	Construction Period	36 months
4.	Bid Due Date and time	By 14.30 hrs (IST) on 26.03.2024
5.	Physical Submission of all documents listed in clause no. 2.11.2	Upto 17:00 hrs of 02.04.2024
6.	Date and Time of Opening of Bid	At 15:30 hrs (IST) on 03.04.2024
7.	Mode of tendering	Single stage two packet
8.	Mode of submission of Bids	Online submission on e-Procurement Portal
9.	E-Procurement Portal	www.ireps.gov.in
10.	RFP document Fee	NIL
11.	Bid Security/EMD	INR. 1,43,00,000.00 (Rupees One Crore Forty Three Lakhs only)
12.	Bank Account Details of the Authority	Name of Beneficiary: FA&CAO/CON/MLG Name of the Bank: STATE BANK OF INDIA Account No.: 30106800062 Address of the Branch: Railway Headquarter MLG IFSC code: SBIN0000229

894158/2024/0)/o CE/	CON-1/NFR Officer and Address to	Name of Officer
	13.	Submit the physical documents as per clause 2.11.4 of RFP	Name of Officer: Designation: Dy. Chief Engineer/Con/ Tender, NF Railway, Maligaon Address: Office of General Manager (Const.), Maligaon - 781011, India Phone: 9957556213 E-mail: dycetender.nfr@gmail.com
	14.	Validity of the Bid	120 days from the Bid Due Date
	15.	Pre-bid Conference Details	Date: 01.03.2024 Time: 15:30 hrs Venue: GM Conference Hall/Construction through Offline/VC Mode
	16.	Last date of receiving Queries	15:30 hrs of 29.02.2024
	17.	Uploading Replies to Queries if required	within 11.03.2024
	18.	Performance Security	5% of Contract Price in terms of Clause 2.21.1
	19.	Submission of Performance Security	Within 30 days of issue of Letter of Award (LOA)
	20.	Signing of Agreement	Within 30 days of submission of Performance Security.
	21.	Documents enclosed with the RFP	 a) EPC RFP (Volume: I) b) EPC Agreement (Volume: II-a) c) EPC Agreement (Volume: II-b) d) EPC Schedule DA, DB, DC e) Plinth Area Estimate & Quotation f) Report on OHE connection g) Soil Test/Geotechnical Investigation h) Detail Project Report (DPR) i) Drawings
	22.	Consultant engaged by Authority for this Project	EDMAC Engineering Consultant (India) Pvt. Ltd., G-1/ L.G.F., South Extension-II, New Delhi-110049, India Tel: 011- 46078600, Mobile: 09911089278 Fax: 011- 46078666, E-mail: infodel@edmacconsulting.com

1.1.3 The Selected Bidder (the "Contractor") shall be responsible for Engineering, Procurement and Construction of the Project under and in accordance with the provisions of an Engineering, Procurement and Construction agreement (the "EPC Agreement") to be entered into between the Selected Bidder and the Authority in the form provided by the Authority as part of the Bidding Documents pursuant hereto. The scope of work of EPC broadly comprises Design, Detailed Engineering, Surveys (Pre-Engineering, Pre-Construction and Post-Construction), Procurement, Fabrication, Transportation, Construction (Civil, Structural, Mechanical, Electrical, HVAC, Fire Fighting and other related services) and Installation, Testing, Pre - commissioning, Authority's Requirement

Appendix- 7 Approved Makes/ Brands

APPROVED MAKES/ BRANDS

The sanitary fitting shall be of premium quality of approved brand make and manufacture as per approval of Engineer-in-Charge.

All the urinals, taps shall be sensor based.

Specification/brands names of materials to be used as per the scope of work are listed here. The efforts should be made by the agency to use indigenous products. The agency should also consider the availability of spares parts/components for maintenance purposes while proposing any brand/manufacturer. The materials of any other brand/manufacturer may be proposed for use by the agency in case the brands specified below are not available in the market and/or agency intends to use some other brand better than the brands mentioned in this list. The alternate brand can be used only after the approval of Engineer-in-Charge.

1. CIVIL & STRUCTURAL					
Sl. No.	Material		Approved Makes / Brands		
1	Ordinary Portland Cement / Portland Pozzolona	ACC	Ultratech	J. K Cement	
1.	Cement	Birla Cement	Ambuja / Prism	India Cement	
2.	White Cement	Birla White	J.K. White	Lafarge, ACC	
		ACC Company	Ultratech	JK Cement	
3.	Ready Mix Concrete	Lafarge Company	L&T		
		SAIL	Tata Steel	RINL	
4.	Reinforcement Steel (HYSD TMT-Fe 500)	JSW Steel Ltd	Electro steel	Vizag	
		JSPL	Shyam Steel	APL Apollo	
		ΤΑΤΑ	JSW Steel Ltd	SAIL	
5.	Structural Steel / M.S. Tubes (Pre Galvanized)	Jindal Steel & Power Ltd	Rashtriya Ispat Nigam Ltd	Vizag	
		APL Apollo			
		M.C. Bauchemie	Fosroc	Pidilite	
<i>.</i>	Plasticizer, Super Plasticizer, Admixtures,	CICO	Sika	Reynoarch	
6.	Other construction chemicals	Asian Laboratories	Ultracon	Kryton	
		Berger	MYK Arment		
		BASF	Sika	Penetron	
7.	Waterproofing Compound (Crystalline)	Fosroc	Kryton	Fire Stone	
	,	Pidilite	Carlisle	Kryton, Berger	

		Tikidan	MYK Arment	Sunanda Chemicals
		MC Bauchemic	Reynoarch	
		GRACE	Fosroc	Pidilite
		Kintop, Kryton	Keshun	MYK Arment
8.	Waterproofing Self Adhesive (HDPE)	Carlisle	Tikidan	STP, Sika
	membrane	MC Bauchemic	Sunanda Chemicals	Technolicol
		Reynoarch	Mapei, Berger	Asian Paints
0	EPDM	Fire Stone	Polygomma, Kryton	Pidilite, Berger
9.	Waterproofing Membrane	Reynoarch	DBS, STP	Sunanda Chemicals- Fire Stone
	PU Elastomeric Membrane (spray applied	BASF	Fosroc, Kryton	Sika, STP
10.	for Deck Waterproofing)	Reynoarch	Pidilite	MYK Arment
11.	Glasswool Insulation	UP Twica	Poly Glass	Ownscorning, Unidus
12.	Insulation	Roxul Rockwool	Unidus	
12		Pidilite	Fosroc	Keshun
13.	Swellable Bar	Hayakawa		
14.	Roofing	Kingspan	Kalzip, <mark>APL Apollo</mark>	Rigidal
15.	Straight walkways	Kingspan	Wulmet	Kartosar
16.	Fall Arrest System	Kingspan	Wulmet	Kartosar
17.	Step Walkways	Kingspan	Wulmet	Latchways
18.	Seam Clamp	Kingspan		
19.	Roof hatch	Kingspan	Nystrom	Babenko

	<u>г</u>			
20.	Polycarbonate Sheet	GE Plastic (SABIC)	Gallina	DPI Daylighting
20.	i orycuroonate oneet	Lexan	Tuflite	Polygel
21.	Decking Steel Sheet	TATA Steel	Lloyds, RINL	JSW, APL Apollo
22.	Shuttering/ Formwork – Ply	Ply-Archid	Virgo	For Steel – MS Plate
	/ Steel	Merino	Kitply	Century
23.	Rebarring Chemical	Hilti	3M India	Birla, Wuerth
24.	Fire Sealant	Hilti	3M India	Fischer, Wuerth
25.	Parallel Threaded Couplers (Compliant to IS 16172:2014)	Dextra	Halfen Moment	G-Tech
26.	Extruded Polysterene Board	Penguin	Kiwi	Epack
27.	AAC Block	Aerocon	Builtech	Instablock
27.	AAC Block	Finecrete	Magicrete	ЈК
28.	AAC Mortar	Ferrouscrete	Ultratech	ЈК
		Saint Gobain	Gyprox	USG Boral
29.	Moisture Resistant Board	Greenlam	Duro	Merino
20	V IN CIRCLE	Merino	Duro	Greenlam
30.	Veneered Particle Board	Kitply	Archid	Jayna
	Laminated Particle Board	Merino	Greenlam	Century
31.	/ Laminates / PVC	Archid	Duro, Virgo	
32.	Flush door / Laminated Flush Doors	Century	Green	Merino

	6. HVAC / VENTILATION SYSTEM					
S. No.	Material	Approved Makes / Brands				
		York	Carrier	Daikin		
1	Chillers	Dunham Bush	Trane			
	Chilled/ Condenser	Kirloskar	Bell & Gossett	Wilo (Mather+Platt)		
2	Pumps:	Grundfos				
3	Cooling Towers	Mihir	Advance	Paharpu		
4	Hot Water Generator	Rapid Cool	Emerald	Sandhu		
5		Air Handling Units	& TFA:			
	Air Handling Units	VTS	System Air	Stulz		
5 a.	(Eurovent certified	Flaktwood	Edgetech	Zeco		
5b.	Cooling Coil	As p	er manufacture stand	ard of AHU		
_	_	Kruger / Comferi	Airflow	Nikotra		
5c.	Fan	Rallison				
ſ	Fan Coil Unit &	Sinko	Carryaire	Trane		
6	Cassette Unit	Rallison				
7	Split AC —	Daikin	Hitachi	Toshiba		
7	Split AC	Carrier				
8	M.S. Pipes: - Any dia	Tata	Jindal Hissar	Sail, <mark>APL Apol</mark>		
		Advance	L&T	Danfoss		
9	Butterfly Valves	VTM	Axim	Castle		
	Motorized Butterfly	Belimo	Danfoss	Siemens		
10	Valve	Oventrop	Advance	Castle		
	Pressure independent	Belimo	Danfoss	Siemens		
11	control valve (PICV)	Oventrop	Advance	Castle		
		Advance	L&T	Danfoss		
12	Check Valves	VTM	Axim	Castle		
12	D -11 1-	Zoloto	Audco	RC		
13	Ball valve	VTM	Axin	Castle		

27	Air Separator	Anergy	Emerald	Sandhu
28	Auto Air Vent	Anergy	Rapid Cool	Oventrop
29	Plug Valve	Anergy	Rapid Cool	Castle
30	G.I. Sheets	Sail	Tata	Jindal, <mark>AP</mark> Apollo
31	MS. Sheets	Hindalco	Balco	NALCÓ, <mark>API</mark> Apollo
22	E' D	Systemair	Caryaire	Ruskir
32	Fire Dampers	Greenheck		
33	Damper Actuator	Belimo	Sinider	Sinider
		Systemair	Caryaire	Titus
34	Grills/Diffusers	Trox		
		Systemair	Caryaire	Titus
35	Fresh Air Louvers	Trox		
	Resinbonded Glass	UP TWIGA	Owens Corning	Kimmco
36	Wool Insulation	K-flex		
	Protective Coating	Pidilite	Foster	Idendan
37	over insulation (Lag coating)	CISBOND		
	Resinbonded Glass Wool	UP TWIGA	Owens Corning	Kimmco
38	AcousticInsulation	K-flex		
		Pidilite	Foster	CISBON D
39	Insulation Adhesive	Henkel		
	Factory Made	Rolastar	Ductofab	Zeco
40	ducting	Technofab	Ecoduct	
	Filters (in Air- conditioning system)	Thermodyne	Purolator	Anfilco
41	Ventilation Fans:	Mackmark		
42	Tube/Vane Axial	Kruger	System Air	Greenheck
		Kruger	System Air	Caryaire
43	Inline (Centrifugal)	Ostberg		
		Kruger	GE	Crompton
44	Propellr Fans	Rallison		

45	Air Washer/Scrubber	Edgetech	Zeco	System Air
		VTS	Crystal Air	
46	Fan	Kruger	Nikotra	Comferi
40	1 all	Rallison		
47	Pump	Kirloskar	Beacon	Wilo
48	Filters	As per manufacturer's standard		
49	Heat Recovery Wheel units	DRI	Enventus (Ostberg)	Flakt
50	Heat Pipe	HPT	SPC	VTS
51	Vibration Isolator	Easyflex	Resistofl ex	Dunlop
		Hilti	Fisher	Gripple
52	Anchor/Fastener	Rawlplug	Pyrotech	Wuerth
53	Duct Support	GPL	Gripple	Easyflex Zip- Clip
54	PUF Saddles	Lloyds	Beardse 11	Malanpur
55	FCU link	ATS (CSI)	Oventrop	CIM
56	Sound Attenuator	Ruskin	Systema ir	Trox
57	CO Sensor	Siemens	Omicron	Johnson
		Danfoss	ABB	Siemens
58	VFD	Fuji		
59	CO2 Sensor	Siemens	Omicron	Johnson
60	Demand Ventilation System	Fanair	Asawa	
61	Equipment	Conaire	Glenstorm	Tristar
62	Motorized Assembly	Conaire	Glenstorm	Tristar
63	Integrator	Conaire	Glenstorm	Tristar
	High Density PVC	Finolex	Kissan	Prince
64	Pipe	Supreme	APL Apollo	

65	UVCI	Universal UV Solutions	UVTronix	Supco
05	0.461		0 V Hollix	Supeo
66	Online Scale preventer	Scale Guard	Ristello	Supremo
67	Electronic Air Filtration System	Honeywell	Trion	Trane
		Daikin	Tosiba	Samsung
68	VRF/VRV Syatem	Mitsubishi Electric	Midea	
69	Copper Refrigerant Pipe	Camipro	Rajco	Mandev
70	Chilled Water Hi- Wall & Cassette	Midea	Caryaire	Edgetech
71	AHU / FCU Motor	ABB	Cromption	Siemens
72	PACs	Stuluz	Emerson	BlueBox
73	Flexible Duct	UP Twiga	Caryaire	Atco
74	Aluminium Sheet	Nalco	Hindalco	Balco
/4	Aluminum Sheet	Virgo		

	7. PLUMBING & SANITARY				
S. No.	Material	Approved Makes / Brands			
	Somitomy Eittings &	Hindware	Kohler	Cera	
	Sanitary Fittings & Accessories	Jaquar	Somany	Roca, Grohe	
		Hindware	Kohler	Roca	
1.	Concealed cistern	Geberit	Cera		
	WC connector	Geberit	Kohler	Cera	
	Auto Urinal Flush System	Cera	Kohler	Roca	
		Grohe			
2	CP Brass Fittings	Jaquar	Kohler	Parryware	
2		Hindware	Grohe	Cera	
2		Tata	Jindal (Hissar)	Surya Prakash	
3	G.I. / M.S. Pipe	APL Apollo			
4	G I Fittings	Unik	KS	Zoloto	

		R-Brand	Surya	
5	SS Pipes (316 Grade)	Jindal	Tata	VIGA
		Reliance	Jain Irrigation	Oriplast
6	HDPE Pipes	Vertex	West Well, APL	G
		Vectus	<mark>Apollo</mark>	Supreme
7	DI Pipes	Electrosteel	Jindal	Tata Ductura
8	DI Fittings	Kartar	Electrosteel	Kalinga
9	CI Fittings	Neel	Kartar	Electrosteel
10		IVC	Leader	Zoloto
10	Float Valve	KSB		
		Astral	Supreme	Finolex
11	UPVC Pipe and Fittings	Prince	AKG	Surya Roshni
	r nungs	Vectus	PKS Export	<mark>APL Apollo</mark>
12	PVC Pipe & Fittings	AKG	Supreme	Finolex
12		Surya Prakash	Vectus	APL Apollo
		AKG	Astral	Supreme
13	CPVC Pipes & Fittings	Finolex	Surya Prakash	Vectus
10		SFMC	APL Apollo	
14	Centrifugally Cast	NECO	SKF	Electrosteel
14	(Spun) Iron Pipes & Fittings	Saint Gobain	BIC	
15	Centrifugally Cast (Spun) Iron (Class LA)	NECO	Electro Steel	ΤΑΤΑ
15	Pipes	BIC		
16	Centrifugally Cast (Spun) Ductile Iron Pipes & Fittings	Electro Steel	Jindal (Hissar)	Kalinga
17	C.I. Manhole covers,	NECO	RIF	BIC
17	Frames & GI Gratings	SKF	Jain Spun Pipe Co.	
18	SFRC Manhole covers&	KK	OCR	Pargati
10	gratings	T-CON		
	RCC manhole Covers&			
19	Frames	KK manhole	Grating Co. Pvt Ltd	
20	D.I. Manhole Covers & Frames	Neco, RPMF		Kartar
21	Gun Metal Valves, Globes	Kartar	Sant, Castles	Zoloto

22	NRV - Ball type - Sewage application	Danfoss	ZALOTO AUDCO	Castle
23	Bellow Type, Pressure Reducing Valve	CIM	Danfoss	Honey well Castle
24	Floor Taps	Jayna	Chilly	Nirali
		Prima	Zoloto	Leader
25	Water Meter	Capstan		
	Brass Stop & Bib Cock	Zoloto	Sant	L&K
26		Leader	Astral	
	Non Return Valve	Zoloto	Sant	Leader
27	(Check valve) 1/2" to 11/4"	Kartar	Advance	Castle
28	Brass Ferrules	Dhawan Sanitary Udyog	Kalsi	Annapurna
29	Polythylene water	Sintex	Polycon	SPL
2)	storage tank	Vectus		
20	Insulation for hot water	Kaiflex	Armaflex	Careflex
30	pipes	Lloyd		
31	Insulation for external/	Kaiflex	Armaflex	Careflex
	exposed hot water pipe	Lloyd		
32	Pipe protection for external water supply pipes	Pypkote	Armaflex	Makpolyko
33	GI/MS Pipe Protection Wrapping & Coating	IWL – Pypkote	Rustech - Coatek	
		Neelkanth	Nirali	Jayna
34	Stainless Steel Sink -316	Cera	Anupam	Franke Fab
	-	Franke	Kingston	APL Apoll
		Perfect	Hind	Burn
35	Stoneware Pipes	RK		
		Perfect	Hind	Burn
36	Gully Traps	RK		
		Lakshmi	Sood&Sood	Jain & Co
37	RCC Pipes (NP-2)	Pragati Concrete		
		STP	HTL	Hydro Tec

8. FIRE FIGHTING				
S. No. 1	Material M. S Pipe	Approved Makes / Brands		
		Tata	Jindal Hissar	Prakash Sury
		SAIL	APL Apollo	
2	G. I Pipes	Jindal Hissar	Prakash Surya	SAIL
		TATA	<mark>APL Apollo</mark>	
3	Forged Fittings	SS	VS	True Forge
4	ERW / butt Welded Fittings	MEC (Jainsons)	Unik	
5	Groove Fittings (UL listed)	Victaulic	Jainson	New
6	Ball Valve / Gate Valve (Gunmetal)	Sant	Leader	Zoloto
		CIM		Castle
7	Butterfly Valve	Zoloto	Kirloskar	Leader
		Audco		Castle
8	Motorized Butterfly Valve	Advance	AUDCO	L&T
		Zoloto		Castle
9	Balancing Valve	Advance	Utam& VTM	L&T, Castle
10	Non Return Valve	Advance	Utam& VTM	L&T, Castle
		Emerald	AUDCO	kirloskar
11	Y-Strainer	Zoloto		Castle
12	Pot Strainer	Rapidcool	Emerald	Sant
		AUDCO	Zoloto	Castle
13	Thermometer	Emerald	Anergy	Honeywell
14	PICB Valve	Danfoss	Frees	Ovenrop
		Spirotech	Reflex	
15	Control Valve	HD	Viking (VL Listed)	Castle
16	Airvent	Anergy	Siemens	Emerald
		CIM	Advance	Castle
		Honeywell		