

E-Tender No. MUMBAI/N/EN/ROB/LC - 66

#### For

NAME OF WORK: Construction of one ROB including approaches in lieu of level crossing No. 66 at IR chainage 143/30-32 between Bordi and Umbergaon stations of Vaitarna - Surat section of Mumbai division of Western Railway.

## FINANCIAL BID (PACKET-B)

**TENDER DOCUMENT** 

September 2017

Employer:
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
CPM/NORTH/MUMBAI UNIT
(A GOVERNMENT OF INDIA ENTERPRISE)
Under
MINISTRY OF RAILWAYS

# DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD A Govt. of India (Ministry of railways) Enterprises 7th Floor, New Administrative Building, D.N. Road, Mumbai-400001 NOTICE FOR INVITING BIDS (Online i.e. E-Tender)

Tender No	MUM/N/EN/ROB/LC - 66			
Name of work	NAME OF WORK:- Construction of one ROB including approaches in lieu of level crossing. No. 66 at IR chainage 143/3 32 between Bordi and Umbergaon stations of Vaitarna - Sur section of Mumbai division of Western Railway.			
(a) Type of Tender	Open Tender ( Single stage two packet ).			
(b) Type of Contract	Works Contract.			
(c) Tender Value	₹ 62,16,48,263.00			
(d) Completion Period	18 months			
(e) Earnest Money	₹ 62,16,490/- (Paid through Demand Draft/ banker's Cheque, FDR payable in favour of "Dedicated freight Corridor corporation of India Limited, Mumbai")			
(f) Cost of Tender document	Rs 25,000/- plus GST (18%) i.e. 29500/- To be paid by D.D./Banker's Cheque in favour of DFCCIL payable at Mumbai			
(g) Tender Processing Fee	Rs7,500/- plus GST (18%), plus taxes and duties as applicable (non refundable) through e- payment while uploading of tender			
(h) Performance Bank Guarantee	Performance Guarantee (PG) have to be submitted within 30(thirty) days from the date of issue of Letter Of Acceptance (LOA), amounting to 5% of the contract value in the form as give in clause 16.4 of GCC			
(i) Retention Money / Security Deposit	5% of Contract Value			
(j) Officer:	Chief Project Manager (North), Mumbai Dedicated Freight Corridor Corporation of India Limited/Mumbai, 7 <sup>th</sup> Floor, New Administrative Building, D.N. Road, Mumbai-400001			
(k) E-Tendering Web Site	E-tendering site- www.tenderwizard.com/DFCCIL			
	Help: Please contact Tender wizard helpdesk at 011-49424365			
(L)Pre bidding Conference	On 13.10.2017 at 11.00 AM at office of Chief Project Manager(North) Mumbai, 7 <sup>th</sup> Floor, New Administrative Building, DN Road, 400001			
DATE & TIME SCHEDULE	1			
Date of Uploading of NIT (Online Publishing date)	& Other Documents 28.09.2017 at 11.00 Hrs.			

Documents download/Sell date (Online)	From 29.09.2017 at 11.00 Hrs.
Bid submission Last date (Online)	30.10.2017 up to 15.00 Hrs.
Last date of submission of originals of statutory documents i.e. EMD & Tender Document Charge	06.11.2017 up to 17.30 Hrs.
Bid Opening date & Time (online)	07.11.2017 at 15.00 Hrs.

Chief Project Manager (North), Mumbai Dedicated Freight Corridor Corporation of India Limited/Mumbai, 7<sup>th</sup> Floor, New Administrative Building, D.N. Road, Mumbai-400001

#### **SUMMARY OF PRICES**

NAME OF WORK:- Construction of one ROB including approaches in lieu of level crossing No. 66 at IR chainage 143/30-32 between Bordi and Umbergaon stations of Vaitarna - Surat section of Mumbai division of Western Railway.

	Stations of Valtarna - Surat s		
SI. No.	Description of works	Cost as per Schedules	Rates to be quoted in figures & words (Clearly mention above / below / at par on Schedules/Items updated DFCCIL Rate / cost given in column 3)
1	2	3	4
1.	Execution of all works as per Schedule "A" (Items as per SOR 2015-16 of State Govt. Gujarat R&B Valsad division & WR.)	₹ 3,97,76,426.66	r as per arately in
2.	Execution of all works as per Schedule "B"	₹ 23,32,11,415.7	t pa epa
	(NS Items as per State Govt.)		v/at led s cel F
3.	Execution of all works as per Schedule "C" (Items as per SOR 2015-16 of State Govt. Gujarat R&B Valsad division.)	₹ 25,54,09,623.00	Rat es above / below / at par as per schedules shall be filled separately i Microsoft Excel File.
4	Execution of all works as per Schedule "D"  (NS Items as per Western Railway)	₹ 9,03,93,191.40	s abov lles sh Micr
5	Execution of all works as per Schedule "E"  (NS Items as per Western Railway etc.)	₹ 13,57,606.00	Rat es schedu
6	Execution of all works as per Schedule "F" (USSOR Items as per Western Railway)	₹ 15,00,000.00	
	Grand Total	₹ 62,16,48,262.80	
		= ₹ 62,16,48,263.00	



#### Notes:

- (i) The above prices are inclusive of all taxes, duties, levies, etc. Except GST.
  - a) GST as applicable from time to time on taxable value of each running account bill shall be paid by DFCCIL.
  - b) The contractor should adhere to anti profiteering provisions as per section 171 of the CGST Act. Where due to change in the rates of GST / Change in law, the contractor gets any credits / benefits, the same shall be passed on to DFCCIL by way of reduction in prices.
- (ii) The tenderer should quote single percentage above / par / below for each schedule.
- (iii) If the uniform percentage quoted by the Tenderer does not clearly indicate whether the rates are above/at par/below the estimated rates then through sign convention it will be considered to be on plus side and evaluated accordingly.
- (iv) Rate of item payable to contractor shall be as per above/below/at par on rates of schedule.

FORM No. 4

#### **SCHEDULE OF PRICES & TOTAL PRICES**

NAME OF WORK:- Construction of one ROB including approaches in lieu of level crossing No. 66 at IR chainage 143/30-32 between Bordi and Umbergaon stations of Vaitarna - Surat section of Mumbai division of Western Railway.

#### **SCHEDULE- A**

#### **Schedule of Approximate quantities**

SI.No.	Item No.	Quantity	Item of work	Unit	Rate	Amount in Rs.
1	26117C	2.40	Clearing and grubbing road land including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials (C) By mechanical means in area of light jungle	Hectare	32056.39	76935.34
2	27007A	14567.00	Excavation for foundation in sand gravel, clay, soft, soils and murrum etc. including soring strutting and dewatering as necessary and dis posing off the excavated stuff as directed (A) up to 3.00 mt depth	Cu.m.	318.15	4634491.05
3	26008	8244.00	Box cutting the road surface to proper slope and camber for making a base for road work including removing the excavated stuff and depositing on the road side slope as directed upto 50Mt.lead.	Cu.m.	66.05	544516.20
4	27039	4185.00	Empty boring through all. sorts of strata for providing 1.20 M dia. R.C.C. bored piles to required depth including providing necessary casting pipe with all plants and equipment's as required complete.	Rmt	3360.27	14062729.95
5	USSOR 2011 Western Railway		Initial load test above 100 ton capacity up to 250 ton capacity. USSOR 2011 western railway item no.192103			

	192103	5.00	Upto 250 tonne	Each	199722.83	998614.15
	8 192104	75.00	Extra over 50 t	Each	44255.77	3319182.75
6	USSOR 2011 Western Railway		Routine load test above 100 ton capacity up to 250 ton capacity pile.USSOR 2011 western railway item no.192107			
	192104	5.00	Upto 250 tonne	Each	280040.14	1400200.70
	& 192107	35.00	Extra over 50 t	Each	44255.77	1548951.95
7	27072	7483392.00	Providing and laying in position fully moulded restrained elastomeric bearing as per detailed drawings.	Cu.cm	1.11	8306565.12
8	27100A	588.00	Providing PVC. 100 mm. diameter water spouts including necessary iron gratings as per drawings.	Each	187.86	110461.68
9	CH 8 NH SOR 8.8	6657.36	Painting two coats after filling the surface with synthetic enamel paint in all shades on crash barrier concrete surfaces.	Sq.m.	63.63	423607.82
10	23067	2111.00	Providing, laying and jointing in true line and level 110 diametre U.P.V.C (Type B) conforming to IS 13592-1992 with one end plain and other end socketed with rubber ring, & fittings conforming to ISI 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 110 mm diametre x 149 mm length x 145 mm height at every 2000 mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc. including testing of pipes and joints and jointed with adhesive solvent cement including cost of all materials.	Rmt	531.26	1121489.86

11	26161	1489.00	Providing and laying Road marking with hot applied thermo plast compound reflecting glass bends on bituminous surface. Providing and laying Hot applied thermoplastic compound 2.5 cm thick including reflectorizing glass bends 250 gms/sqmt area, thickness of surface applied glass bends as per IRC 35 the finished surface to be level uniform and free from streaks & holes.	Sq.m.	298.96	445151.44
12	26101B	4.00	Providing & Fixing Village name boards made out of 2mm. Aluminium sheet size 90 x 60 cms rectangle per the design of IRC - 67 - 2015 Pre treated with phosphating process & acid etching: coated with one coat of epoxy primer and two coats of best quality epoxy paint reflectorised with retro reflective sheeting as per latest M.O.S.T Specification :Letters and numerals sound be as per IRC-30-1968, 3.1 M long (2 no's) Stand post and frame fabricated from suitable size iron angle of 50 x 50 x 5mm: painted with best quality epoxy coating in black and white bends the details of symbol or inscription / numerals for each board shall be as per the instruction for of Engineer-in-charge, The fixing at site shall be in 1;2;4 CC block of size 45 x 45 x 60cms. for each leg. including excavation curing etc. comp. under the supervision of engineer in charge.(B) High intensity Grade	Nos	5246.95	20987.80
13	26103B	8.00	Providing & Fixing sign boards	Nos	6618.53	52948.24

14 2	26098A	2.00	made out of 2mm. Aluminium sheet size 1 Meter x 1 Meter cms as per the design given by engineer in charge, Pre treated with phosphating process & acid etching: coated with one coat of epoxy primer and two coats of best quality epoxy paint reflectorised with retro reflective sheeting as per latest M.O.S.T Specification, Letters and numerals should be as per IRC - 30-2015, 3.1 M long (2 nos) Stand post and frame fabricated from suitable size iron angle of 35 x 35 3mm & 50 x 50 x 5mm 75 x 75 x 6mm: painted with best quality epoxy coating in black and white bends the details of symbol or inscription / numerals for each board shall be as per the instruction for of Engineer-in-charge, The fixing at site shall be in 1;2;4 CC block of size 45 x 45 x 60cms. for each leg. including excavation curing etc. comp. under the supervision of engineer in charge.(B) High intensity Grade	Each	12273.52	24547.04
14 2		/ 1111	PLOVICION AND HISTOURING HINCHON			

	1	1	T	1	I	
			Sign Board made out of 2mm			
			aluminium sheet, size 90 x 90 x			
			90 cms equilateral triangle, as			
			per the design of IRC-67-2015.			
			Pre treated with phosphating			
			process and acid etching coated			
			with one coat of epoxy primer			
			and two coats of best quality			
			epoxy paint, refloctrorized with			
			retro reflective sheeting as per			
			the latest M.O.S.T. specification,			
			3.1 Mt. long stand post and			
			frame fabricated from suitable			
			size iron angle of 35 x 35 x 3 mm,			
			75 x 75 x 6 mm; painted with			
			best quality epoxy coating in			
			black and white bends. The			
			details of symbol for each board			
			shall be as per the instruction of			
			engineer in charge. The fixing at			
			site shall be in 1:2:4 CC block of			
			size 45 x 45 x 60 cms for each			
			leg, including excavation curing			
			etc. complete under the			
			supervision of Engineer-In-			
			Charge (A) Engineer grade.			
16	26092B	4.00	Providing and fixing cautionay	Nos.	3272.40	13089.60
			warning sign board made of		0272110	
			2mm aluminium sheet size			
			90X90X90 cms. Equilateral			
			traingle as per the design of IRC-			
			67-2015 pretreated with			
			phospheting process & acid			
			catching with one coat of epoxy			
			primer and two coats of best			
			quality epoxy paint reflectioned			
			with retro reflective sheeting as			
			per latest MOST specification 3.1			
			mt. long stand post and frame			
			fabricated from suitable size iron			
			angle of 35X35X3mm.			
			75X75X6mm as required			
			.painted with best quality epoxy			
			coating in black and white bends,			
			the details of symbol for board			
			shall be as per the instruction of			
			engineer-in-charge. the fixing at			
			site shall be in 1;2:4 cc block of			
			size 45X45X60 cms for each leg			
	]		including excavation curing etc.			
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			_			
			complete under the supervision			
			_			

18	26048 27101A	2.00	Providing & fixing ordinary Kilometre stone of precast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design in C.C. 1:4:8 including letter & paints etc. complete (For N.H., S.H. & M.D.R.)  Providing and fixing marble slab including engraving and painting complete.	Each Nos	955.46	3365.32 1910.92
			(A) size 75 cm x 60 cm x 4 cm			
19	26163	1707.00	Supplying and fixing cat eye (Stimsonite) made out from Acrylic butyle styrene high compression injection moulding with reflector made of MMC (prismatic type of size 12cm x 6cm x 2.5cm) provided with bituminous adhesive 100g. with each unit for fixing. (High Intensity grade)	Each	375.72	641354.04
20	27123	5.40	Providing and fixing in position steel bar reinforcement For Approach slab of steel grade FE-500 D (TMT) including cutting ,bending, hooking, tying, welding etc. complete as per detailed drawing and specification.	M.Tonne	44298.60	239212.44
21	14023	3440.00	Providing and fixing pre-cast concrete kerb stone of gray cement based concrete block 30cm length,30cm height and 15cm thick of M250 grade concrete as per approved design and including excavation for fixing in proper line and level, filling the joint with C:M 1:3 (1cement:3 fine sand) etc. complete.	Rmt	241.39	830381.60
22	27097A	258.00	Providing and fixing post and pipe railing as per detailed drawing including 3 coats of painting to steel works complete.	RMT	1073.63	276996.54

23	14006A	343.00	Providing and laying chequered terrazzo tiles 22mm thick for R.C.C Staircase with marble chips of size up to 6mm in floors on 25mm thick bed of lime mortar 1:1.5 (1 - lime putty: 1.5 coarse sand) or C.M. 1:6 jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing & polishing complete. (A) Light shades using white cement.	Sqm	474.70	162822.10
24	M664	490	Providing and fixing 100 dia runner and downtake GI pipe to drain water from drainage spout with necessary fixtures including cost of all materials, labours, bends, fixtures, specials ec. Complete as per drawing and Sp. And as per direction of engineer.	RMT	878.5	430465.00
25	26089EA	20	Supplying and fixing reinforced concrete heavy duty non-pressuree pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specifications including setting the pipes in C.M. 1:2 watering and laying (to level or slopes) of class NP3 of following internal diameters . (vii) 900mm dia. (vi) 900 mm dia.	R.M.	3954.15	79083.00
			TOTAL AMOUNT OF SCHEDULE-A			39776426.66

	SCHEDULE -B									
	Schedule of Approximate quantities									
SN.	Item No.	Total Qty.	Item of work	Unit	Rate	Amount in Rs.				
1	State NS/1	2.00	Marking out the centre line of the bridge and various other components structures and complete lining out and levelling with theodolite, level including construction necessary masonry pillars for lines and levels and establishing necessary benchmark etc. complete as directed.	LS	21462.50	42925.00				
2	State NS/2	8230.81	Earth work for embankment including breaking clods dressing With all lead and lift and including watering, rolling, and consolidation of subgrade in layers at O.MC. to required dry density including filling the depressing which occur during the process using Vibratory roller 8.T. to 10 T (from borrow area within 5 km lead).	Cu.m.	243.41	2003461.46				
3	State NS/3	993.60	Providing & filling in foundation with ordinary cement concrete M 15 mix and providing necessary vertical pin headers including formwork vibrating ramming & curing complete.	Cum	2622.57	2605786.00				
4	State NS/4	4080.00	Providing and laying controlled cement concrete M 35 for R.C.C.bored piles of 1.20 M dia. Including ramming, vibrating and finishing Excluding T.M.T Reinforcement complete.	Cum	3947.08	16104086.40				

5	State NS/5	3948.40	Providing and casting in-situ controlled cement concrete of M35 grade for RCC work for Pile cap,	Cum	3942.97	15568423.00
			foundation for pier, abutment, RCC Stair Case and retaining walls with 20/40mm down coarse aggregate of the required size for any depth including dewatering, scaffolding centring, shuttering, mixing, placing in position, consolidating with mechanical vibrators, curing, deshuttering carefully, making good the damages, fixing embedment, inserts, pockets, wherever necessary as per specification and drawing.			
6	State NS/6		Providing and casting in situ controlled cement M-35 for R.C.C. work For Piers, Abutments, Return walls and Box culvert as per drawing including centring shuttering scaffolding where necessary laying vibrating curing and finishing complete. exposed concrete finish and form mark as directed by Engineer-in-charge, etc. complete as per specification.			
		2893.00	0.0M TO 5.0M	Cum	4004.25	11584295.00
		638.00	5.0M TO 10.0M	Cum	4226.45	2696475.00
7	State NS/7	3215.00	Providing and casting in situ controlled cement concrete M35 for RCC work on pier cap, abutment cap, dirt wall and M40 for pedestals including controlled cement concrete or pedestals of required drawings, centering shuttering, scaffolding whever necessary laying vibrating curing and finishing complete.	Cum	4057.07	13043480.00

8	State NS/8	9399.00	Providing and casting in situ controlled cement M 35 for R.C.C. work in superstructure including centring shuttering scaffolding, ramming, vibrating curing and finishing complete	Cum	4399.32	41349209.00
9	State NS/9	76.00	Providing and casting in situ controlled cement concrete M40 Mix for R.C.C. works in pedestals of required drawings, centring shuttering, scaffolding wherever necessary laying vibrating curing and finishing complete.	Cum	4537.93	344882.68
10	State NS/10	10305.00	Providing and laying 25 mm thick mastic asphalt wearing course with paving grade bitumen meeting the requirements given in table 500-29, prepared by using mastic cooker and laid to required level and slope after cleaning the surface, including providing antiskid surface with bitumen precoated finegrained hard stone chipping of 13.2 mm nominal size at the rate of 0.005cum per 10 sqm and at an approximate spacing of 10 cm center to center in both directions, pressed into surface when the temperature of surfaces is not less than 1000C, protruding 1 mm to 4 mm over mastic surface, all complete as per clause 515.	Sqm	398.95	4111179.75

	I	I		I _		
11	State	3437.00	Reinforced Cement Concrete Crash	Rmt	4018.22	13810622.00
	NS/11		Barrier (Provision of an Reinforced			
			cement concrete crash barrier at			
			the edges of the road, approaches			
			to bridge structures and medians,			
			constructed with M-40 grade			
			concrete with TMT reinforcement			
			conforming to IRC:21 and dowel			
			bars 25 mm dia, 450 mm long at			
			expansion joints filled with pre-			
			moulded asphalt filler board, keyed			
			to the structure on which it is built			
			and installed as per design given in			
			the enclosure to MOST circular No.			
			RW/NH - 33022/1/94-DO III dated			
			24 June 1994 as per dimensions in			
			the approved drawing and at			
			locations directed by the Engineer,			
			all as specified) & Provide 150 mm			
			dia PVC pipe for utility services etc			
			complete (A) Only crash barrier			
			,			
12	State	3623.00	Reinforced earth Retaing	Sqm	5848.12	21187738.76
	NS/12		wall(Reinforced Earth Retaing Walls			
			for have for main components as			
			under: a)Excavation for			
			foundation,Foundation concrete &			
			cement concrete grooved seatingin			
			the foundation for facing elements			
			(facia material) ,b)Facia material &			
			its placement c)Assembling, joining			
			with facing elements and laying of			
			the reinforcing elements, d)			
			earthfill with granular material			
			which is to be retained by the wall.			
			Facing elements of RCC			

13	State	232.00	Providing and casting in-situ	Cum	4153.73	963665.00
13	NS/13	232.00	controlled cement concrete of M-35 grade with minimum cement content 420kg/cumt without admixture as per IS-456-2000 cement concrete for wearing coat with 10mm & 20mm downgraded crushed stone aggregates of required size in super structure including required formwork, shuttering and supporting arrangement (excluding cost of reinforcement) and transporting concrete from batching plant by transit mixture, placing it in position etc. compacting with needle vibrator including curing with all labour, material, machinery all lead, lift etc. complete as per drawing and technical specification of MORTH 2702 (P. No. 492 MORTH 2702)	Cum	4153./3	963665.00
14	State NS/14	606.00	Providing and fixing in position Strip Seal Type Expansion Joint (for movement upto 60mm) as per detailed drawing MORTH specification.  The rate is inclusive of supplying, fixing with contractor's own materials, equipments, machineries, labour, transport, testing, bolts, socket tubes, neoprene sheet/cap etc. complete. The rate is finished item complete and will be paid after fixing in all respect.  The Contractor shall procure Strip Seal Expansion Joint, confirming to relevant MORTH specification from M/s.Sanfield (India) Ltd. / METCO or from reputed manufactures of Strip Seal Expansion Joint with prior approval of Engineer-in-charge.	RMT	9065.42	5493645.00

1 [	Stata	13603.00	Droviding Sand & filling in approach	Cum	615.00	26210760 27
15	State NS/15	43603.00	Providing Sand & filling in approach portion of RE Wall (as per MORTH section 3100) including laying of earth as per specification for compaction in 250 mm thick loose layers and dressing(MORTH specification Cl. by mechanical means using motor grader including 305.3.5) watering the earth to bring the earth upto required OMC including rolling with the use of vibratory roller when earth is at suitable moisture content with desired field density not less than 97% of maximum dry density (modified proctor test). The material for filling shall conform to IRC Highway Research Board's special report No. 16.	Cum	615.09	26819769.27
16	State NS/16	12947.83	Construction of compacted coarsed granular subbase (Grade-I crushed B.T materials of 53 mm to 26.5 mm @ 35 %,26.5 mm to 4.75 mm @ 45% ,Below 2.36 mm @ 20 %) by providing close graded material , mixing in a mechanical mix plant at OMC,carriage of a mix material to work site, spreading uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve desire density , complete clause as per 401.	Cum	852.44	11037248.21
17	State NS/17	10195.13	Providing and laying wet mix base course macadam 250 mm in Two layer using machine crushed chips as per required gradation mixing with required optimum quantity of water conveying the mix to site and spreading to grade and camber with mechanical paver consolidation by vibratory roller including material, labour, plant and machinery and equipment etc.	Cum	926.17	9442423.55

			complete.			
18	State NS/18	7370.00	Providing and laying DBM using crushed stone aggregate BT chips as per required gradation and using emulsion asphalt as a tack coat @ 2.5 kg / 10 sqmt and the VG-30 grade asphalt at 45 kg/MT)by total weight of mix hot laid process using drum mix plant including heating and mixing asphalt & materials by drum mix process transporting the mix and laying by paver finisher including consolidation with vibratory roller including cost of material, labour, machinery equipment and fuel, oil, lubricant for plant and machinery using contractor's own plant and machineries etc. complete	M.T.	2536.11	18691130.70
19	State NS/19	4397.00	Providing and laying 40 mm Bitumen concrete using crushed stone aggregate BT chips as per required gradation and using emulsion asphalt as a tack coat @ 2.5 kg / 10 sqmt and the VG-30 grade asphalt at 55 kg/MT)by total weight of mix hot laid process using drum mix plant including heating and mixing asphalt & materials by drum mix process transporting the mix and laying by paver finisher including consolidation with vibratory roller including cost of material, labour, machinery equipment and fuel, oil, lubricant for plant and machinery using contractor's own plant and machineries etc. complete .D28	M.T.	2755.28	12114966.16
20	State NS/20	36.00	Providing and casting in situ controlled cement concrete concrete M-30 for approach slab including formwork curing and	Cum	3991.52	143694.72

			finishing complete			
			finishing complete.			
21	State	44228.50	Providing and applying priming coat	Sqm	32.32	1429465.12
	NS/21		with emulsion SS1 grade at the rate	- 4		
	,		of 7.50 kg/ 10 Sq.mt. including cost			
			of asphalt and preparing the			
			surface heating, and applying etc.			
			complete.			
			complete.			
22	State	7559.00	PRIMER & PROTECTIVE COATING-	SQM	182.81	1381861.00
	NS/22		providing and laying the external			
			decoative waterproff & Protective			
			coating system for concrete and			
			masonary shall be MASTERSEAL			
			200H , a single component			
			elastomeric crack bridging acrylic			
			coating applied at an average			
			thickness of 50 micro DFT in two			
			coat the product shall be applied on			
			ssuitability primed substate using			
			MASTERSEAL 399 as primer . The			
			product must be crack bridging			
			elongation type with elongation at			
			break , exceeding 200% & tensile			
			strength exceeding 2 MPa The			
			system shall exhibit exellant bond			
			strength with the substrate at least			
			exceeding 1.0 MPa, when tested as			
			per ASTMD 4541.			

23	State	8302.00	Providing & laying 37.5 mm thick	Sqm	149.48	1240982.96
	NS/23		compacted built up sprey grout			
			base course in single layers for			
			bringing the road surface in to			
			camber and gradient over existing			
			road surface with bitumen grade			
			VG-30 for tack coat at the rate of			
			2.50 kg/10 sq. mt. Of road surface			
			area and using 0.50 cum of stone			
			aggregate per 10 sqm with asphalt			
			for grouting @ 15 kg per 10 sqm of			
			road surface and using 0.13 cmt of			
			key aggregate per 10 sqm of road			
			surface including heating and			
			consolidation in both layers by			
			vibratory rollers as per MORTH			
			specification clause No. 506			
			including cost of all materials fuels			
			labours, tools etc. completed.			
			TOTAL AMOUNT OF SCHEDULE-B			₹ 2332,11,415.74

			SCHEDULE -C							
	Schedule of Approximate quantities									
Sr. No.	Item No.	Total Qty.	Item of work	UNIT	Rate	Amount in Rs.				
1	27020A	247.20	Providing Steel Liner 6 mm thick for pile including Fabricating and Setting out as per Detailed Drawing.	MT	44690.48	11047487.00				
2	27047A	1753.00	Providing and fixing in position steel bar reinforcement of steel grade Fe- 500D (T.M.T) for R.C.C. Pile Cap, foundation including cutting, hooking, tying, welding etc. complete as per detailed drawing and specification.	MT	38781.45	67983882.00				
3	27111	1530.50	Providing and fixing in position steel bar for abutment cap & dirt wall, pier, abutment, pier cap, pedestal, seismic arrester, staircase & retaining wall reinforcement of steel grade FE-500D (TMT) including cutting, bending, hooking, tying, welding etc., complete as per detailed drawing and specification.	MT	45575.24	69752905.00				
4	27084	38.00	Providing and fixing to exact high tensile steel wires of required ultimate strength including bending, cutting, tying providing necessary standard & anchorages, sheathing stressing, grouting, duct as per detailed drawing including necessary plant & machinery complete.	MT	68367.91	2597981.00				

			TOTAL AMOUNT OF SCHEDULE	-C	1	₹ 2554,09,623.00
5	27115	2312.21	Providing and fixing in position steel bar reinforcement For Super Structure of steel grade FE-500D (TMT) including cutting, bending, hooking, tying, welding etc.,complete as per detailed drawing and specification.	M.T.	44990.45	104027368.00

	SCHEDULE -D									
			Schedule of Approximate	quantitie	<u>!S</u>					
Sr. No.	Item No.	Quantity	Description of Work	UNIT	Rate	Amount in Rs.				
1	NS/1	745.00	Supply & Fabrication of steel girder spans including its components (Stiffeners, Bracings, Splices, Studs etc.) as per the approved drawings for composite construction of superstructure of the Road Over Bridge with contractor's own Steel confirming to IS: 2062 Grade 250(B) with all welds, HSFG Bolts, nuts bolts, rivets etc. with contractor's own materials, fabrication, machinery, templates, fixtures, equipments tools and plants transportation, skilled/unskilled labour, excise duty., Octroi, sales tax and other taxes, all leads lifts, descent, loading, unloading, crossing one or more Railway track if required etc. complete and as per technical specifications. The rate is inclusive of transportation of fabricated girder parts to site by contractor's own means at his cost. The rate shall also be inclusive of cold straightening of deformed and bent girder parts before their assembly. Work has to be done as per drawings and specifications approved by Railway. High	MT	94629.73	₹704,99,148.85				

	1	T				
			quality superior brand of paint			
			should only be used. For			
			Painting prior approval for			
			superior brand / make of the			
			paint should be taken from			
			engineer in charge. Note:1.			
			The fabrication of girders			
			must be got done from RDSO			
			approved firms only. 2. The			
			rate is inclusive of assembly of			
			girder with service bolts as per			
			approved drawing in shop			
			for checking by Engineer's			
			representative and dismantling			
			the same after checking for			
			transportation to the site. 3.			
			Weight of HSFG bolts, Rivets,			
			Welds shall not be considered			
			for payment. Nominal weight			
			of the girder spans including			
			its components (Stiffeners,			
			Bracings, Splices, Studs etc.) as			
			per drawing will only be			
			considered for payment.			
2	NS/2	4400.00	Metalizing girder /	Per	607.09	₹ 26,71,196.00
			girder components such as	Sq.m.		
			cross girders, top chord			
			channels, bracing etc. of Steel			
			Girder as directed by Engineer			
			with aluminium spray not less			
			than two layers after preparing			
			surface by sand/grit blasting as			
			per provision laid in Appendix			
			VI of IRS B 1179 code (latest			
			· ·			
			alteration) including one coat			
			wash primer (IS-5666) one			
			coat zinc crome primer (IS-			
			104) and two coats of			
			aluminium paint (IS-2339) with			
			approved paint conforming to			
			IS specification for fabrication			

		& erection of steel girder	
		bridge (RS B 1-79) as	
		corrected up to date with	
		contractor's own materials,	
		tools, plants labour,	
		loading/unloading,	
		transportation, handling, re-	
		handling if any including all	
		lead, lifts descents, crossing of	
		track/obstruction etc.	
		complete in all respect and as	
		per direction of the Engineer.	
		per direction of the Engineer.	
3	NS/3	Assembling, Welding, Erecting,	
		Bolting by HSFG bolts, Riveting	
		if any as per approved	
		drawings and Launching of	
		girder spans including its	
		components on running line	
		/ Non- Running line /Running	
		electrified line / under block	
		period with the help of road	
		crane of required capacity as	
		per Railway's approved	
		drawings & Scheme with other	
		ancillary steel structures fixed	
		to the girder, where	
		necessary, in proper level and	
		alignment and as per technical	
		specifications. The rate shall	
		be inclusive of supply, erection	
		and dismantling of staging and	
		scaffolding and other	
		temporary arrangements	
		required for the purpose of	
		assembly, erection and	
		launching of girders. The rate	
		shall also be inclusive of cold	
		straightening of deformed and	
		bent girder parts before/after	
		their assembly. Work has to be	
		done as per drawings and	

			specifications approved by Railway.  Note: Weight of HSFG bolts, Rivets, Welds shall not be considered for payment. Nominal weight of the girder spans including its			
			components (Stiffeners, Bracings, Splices, Studs etc.) as per drawing will only be considered for payment.			
	(a)	745	Launching of Steel girder spans Launching of Steel girder spans including its components on running line /Running electrified line / under block period with the help of road crane of required capacity as per Railway's approved drawings with other ancillary steel structures fixed to the girder where necessary in proper level and alignment and as per technical specifications.	MT	16825.91	₹ 125,35,302.95
4	NS/4	20	Fabricating, supplying and erecting in position standard structural steel sections manufactured from IS approved manufacturers only ,conforming to IS :2062 - 1992 (including latest amendments) including welding with approved quality welding rods, supply and fixing of correct size turn bolts including one primer coat of red lead paint conforming to IS:102 or Zinc chromate paint conforming to IS:104 followed	MT	71620.22	₹ 14,32,404.40

			by tow coats of Aluminium paint as per IS: 2339 with all contractor's materials, labour, tools and plants etc in bolted/welded construction as directed by Engineer in charge. Work shall be carried out as per IS:800-1984 (with latest amendments), IRS specification No. B3-61 part 2 and IS 816 for welding.			
5	NS/5		Providing and fixing in position true to line and level POT cum PTFE bearings including cost of all materials, fixtures, preparing surface for receiving bearing, grouting of sleeves with non shrink high strength groute, loads testing of bearing, transporting and fixing in position including all lead and lifts etc. complete as per approved design & drawing and as directed by Engineer-in-charge under prestressed concrete girders as per approved drawings and special condition. Specification of contract. The contractor will supply design & drawing for this item.			
		28	Fixed bearing	Nos.	53550	₹ 14,99,400.00
		28	Sliding bearing	Nos.	53550	₹ 14,99,400.00
			Note: The rate is for finished item complete and paid only after fixing in position below the girder.			

6	NS/6	1.00	Load testing of one composite steel /Span Designing and Load testing of one composite girder/ Span as selected by the Engineer confirming to Rly. Standard's with loads to be applied and removed incrementally etc. complete as per special condition and specification of contract, as per relevant IS/IRC codes with all contactors labour supervisor, T & P's all taxes, equipment, leading materials instruction of load test jacks etc., dial gauges, including all lead and lift.	Each	256339.20	₹ 2,56,339.20
			TOTAL AMOUNT OF SCHEDULE	-D		₹ 903,93,191.40

	SCHEDULE -E						
			Schedule of Approximate qua	antities			
Sr. No.	Item No.	Quantity	Description	UNIT	Rate	Amount	
1	NS/1	100000	Autocad Drawings: Preparation / Alternation and submission of drawings such as general arrangement drawings, phase drawings, scheme plan, structural drawings etd. On Auto Cad as per details and directions given by the Engineer in charge including plotting and submitting in standard inklet film of 50 micron and CD, submitting check prints on A3/A2/A0 size papers and final rint complete and as per insturctions of Engineer in charge.	Per Sqcm	0.4	40000.00	
2	NS/2	1	Site Office Providing, arranging, managing and maintaining 500 sq.ft. well-furnished AC office and well equipped Laboratory with 3 tables, 10 chairs, 2 steel almirah, one computer with printer & operator, sufficient number of display etc. to the satisfaction of the Project Manager including Electrical, Water expenses etc. For execution of this item the date of start shall be considered only when the Contractor has actually rented/constructed the required premises established the office & Laboratory as per requirement. This item shall remain valid only for original contact period; no additional payment shall be made for whatsoever reason even if time extension if provided or date of completion is extended. This office and laboratory including furniture and all other equipment shall be property of contractor after completion of Project.	LM	500000	50000.00	

3	NS/3	612.6	Providing & fixing Safety Screen as per RDSO Drg. No. EL / C / 0068 MOD " E " , on the Parapet with necessary fixtures etc. as per detailed drawing including contractor's own materials, labours, tools and plants, etc. complete.	Sqm	1179.8	722745.00
4	NS/4	4	Making and supplying of check rails of 52 kg/60 kg rails of various lengths for level crossing as per approval drawings.	Each LC	2997	11988.00
5	NS/5	250	Providing, fixing and maintaining MS fabricated traffic barricading of 2.50m height on either side of the carriage way / portion of the carriage way closed to the traffic including provision of all sign boards/ bollards and warning lights etc. as per the Engineer in charge.	Meter	331.49	82873.00
			TOTAL AMOUNT OF SCHEDULE-E			₹ 13,57,606.00

SCHEDULE-F								
	Schedule of Approximate quantities							
	Item							
Sr.No.	No.	Item of work	Unit	Quantity	Rate	Amount (Rs.)		
1	USSOR	USSOR of W.Rly. Items requiring for successful completion of the work as advised by in-charge of the work.	No.	1	1500000	1500000		
		Total Amount of Schedule-F				₹ 15,00,000.00		

Total of Schedule A, B, C, D, E & F ₹	62,16,48,263.00
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## **END OF TENDER DOCUMENTS**