



**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**

**November 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**  
**7<sup>th</sup> 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, date-11.11.2017	
Name of work	<b>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.</b>	
(a) Type of Tender	Open Tender ( Single stage two packet ).	
(b) Type of Contract	Works Contract.	
(c) Tender Value	<b>₹ 62,16,48,263.00</b>	
(d) Completion Period	<b>18 months</b>	
(e) Earnest Money	<b>₹ 62,16,490/- ( Paid through Demand Draft/ banker's Cheque, FDR payable in favour of " Dedicated freight Corridor corporation of India Limited, Mumbai")</b>	
(f) Cost of Tender document	<b>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</b>	
(g) Tender Processing Fee	<b>Rs7,500/- plus GST (18%), plus taxes and duties as applicable (non refundable) through e- payment while uploading of tender</b>	
(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:	<b>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</b>	
(k) E-Tendering Web Site	<b>E-tendering site- <a href="http://www.tenderwizard.com/DFCCIL">www.tenderwizard.com/DFCCIL</a></b> Help: Please contact Tender wizard helpdesk at 011-49424365	
(L)Pre bidding Conference	<b>On 24.11.2017 at 11.00 AM at office of Chief Project Manager(North) Mumbai, 7<sup>th</sup> Floor, New Administrative Building, DN Road, 400001</b>	
<b>DATE &amp; TIME SCHEDULE</b>		
Date of Uploading of NIT & Other Documents (Online Publishing date)	<b>11.11.2017 at 11.00 Hrs.</b>	

Signature of tenderer (s)

Date:

For CPM/NORTH/MUMBAI/DFCCIL

**MUMBAI/N/EN/ROB/LC-66**

Documents download/Sell date (Online)	<b>From 11.11.2017 at 12.00 Hrs.</b>
Bid submission Last date (Online)	<b>12.12.2017 up to 15.00 Hrs.</b>
Last date of submission of originals of statutory documents i.e. EMD & Tender Document Charge	<b>18.12.2017 up to 17.30 Hrs.</b>
Bid Opening date & Time (online)	<b>19.12.2017 at 15.00 Hrs.</b>

**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.**

Sl. 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	Rates above / below / at par as per schedules shall be filled separately in Microsoft Excel File.
2.	Execution of all works as per Schedule "B" (NS Items as per State Govt.)	₹ 23,32,11,415.7	
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	
4	Execution of all works as per Schedule "D" (NS Items as per Western Railway )	₹ 9,03,93,191.40	
5	Execution of all works as per Schedule "E" (NS Items as per Western Railway etc.)	₹ 13,57,606.00	
6	Execution of all works as per Schedule "F" (USSOR Items as per Western Railway )	₹ 15,00,000.00	
	<b>Grand Total</b>	<b>₹ 62,16,48,262.80</b> <b>= ₹ 62,16,48,263.00</b>	

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.

**SCHEDULE-1  
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.						
<u>SCHEDULE- A</u>						
Schedule of Approximate quantities						
Sl.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	<b>76935.34</b>
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	<b>4634491.05</b>
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	<b>544516.20</b>
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	<b>14062729.95</b>
5	USSOR 2011 Western Railway		Initial load test above 100 ton capacity up to 250 ton capacity. USSOR 2011 western railway item no.192103			

Signature of tenderer (s)

Date:

For CPM/NORTH/MUMBAI/DFCCIL

**MUMBAI/N/EN/ROB/LC-66**

	192103 & 192104	5.00	Upto 250 tonne	Each	199722.83	<b>998614.15</b>
		75.00	Extra over 50 t	Each	44255.77	<b>3319182.75</b>
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 & 192107	5.00	Upto 250 tonne	Each	280040.14	<b>1400200.70</b>
		35.00	Extra over 50 t	Each	44255.77	<b>1548951.95</b>
7	27072	7483392.00	Providing and laying in position fully moulded restrained elastomeric bearing as per detailed drawings.	Cu.cm	1.11	<b>8306565.12</b>
8	27100A	588.00	Providing PVC. 100 mm. diameter water spouts including necessary iron gratings as per drawings.	Each	187.86	<b>110461.68</b>
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	<b>423607.82</b>
10	23067	2111.00	Providing, laying and jointing in	Rmt	531.26	<b>1121489.86</b>

			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.			
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	<b>445151.44</b>
12	26101B	4.00	Providing & Fixing Village name	Nos	5246.95	<b>20987.80</b>



			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			
13	26103B	8.00	Providing & Fixing sign boards	Nos	6618.53	<b>52948.24</b>

			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			
14	26098A	2.00	Providing and fixing Junction	Each	12273.52	<b>24547.04</b>

**MUMBAI/N/EN/ROB/LC-66**

			Board made out of 2mm aluminium sheet, size 244 x 122 cms rectangle, 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, reflectorized with retro reflective sheeting as per the latest M.O.S.T. specification, Letters and numerals should be as per IRC-30-1968. 3.1 Mt. long (2 nos.) stand post and frame fabricated from suitable size iron angle of 50 x 50 x 5 mm, 75 x 75 x 6 mm; 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 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.			
15	26092A	2.00	Providing and fixing Cautionary	Nos	3182.51	<b>6365.02</b>

			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, reflectorized 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 cautionary warning sign board made of 2mm aluminium sheet size 90X90X90 cms. Equilateral triangle as per the design of IRC-67-2015 pretreated with phosphating 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. complete under the supervision of engineer in charge (high intensity grade).	Nos.	3272.40	<b>13089.60</b>

Signature of tenderer (s)

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For CPM/NORTH/MUMBAI/DFCCIL

**MUMBAI/N/EN/ROB/LC-66**

17	26048	4.00	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.)	Each	841.33	<b>3365.32</b>
18	27101A	2.00	Providing and fixing marble slab including engraving and painting complete.	Nos	955.46	<b>1910.92</b>
			(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	<b>641354.04</b>
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	<b>239212.44</b>
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	<b>830381.60</b>
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	<b>276996.54</b>

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For CPM/NORTH/MUMBAI/DFCCIL

**MUMBAI/N/EN/ROB/LC-66**

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	<b>162822.10</b>
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	<b>430465.00</b>
25	26089EA	20	Supplying and fixing reinforced concrete heavy duty non-pressure 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	<b>79083.00</b>
			<b>TOTAL AMOUNT OF SCHEDULE-A</b>			<b>39776426.66</b>

**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

**MUMBAI/N/EN/ROB/LC-66**

5	State NS/5	3948.40	Providing and casting in-situ controlled cement concrete of M35 grade for RCC work for Pile cap, 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.	Cum	3942.97	15568423.00
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 wherever necessary laying vibrating curing and finishing complete.	Cum	4057.07	13043480.00

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**MUMBAI/N/EN/ROB/LC-66**

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 100C, protruding 1 mm to 4 mm over mastic surface, all complete as per clause 515.	Sqm	398.95	4111179.75

**MUMBAI/N/EN/ROB/LC-66**

11	State NS/11	3437.00	Reinforced Cement Concrete Crash 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	Rmt	4018.22	13810622.00
12	State NS/12	3623.00	Reinforced earth Retaing wall(Reinforced Earth Retaing Walls for have for main components as under: a)Excavation for foundation,Foundation concrete & cement concrete grooved seating in 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	Sqm	5848.12	21187738.76

**MUMBAI/N/EN/ROB/LC-66**

13	State NS/13	232.00	Providing and casting in-situ 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	4153.73	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

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For CPM/NORTH/MUMBAI/DFCCIL

**MUMBAI/N/EN/ROB/LC-66**

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

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			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

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For CPM/NORTH/MUMBAI/DFCCIL

			finishing complete.			
21	State NS/21	44228.50	Providing and applying priming coat with emulsion SS1 grade at the rate of 7.50 kg/ 10 Sq.mt. including cost of asphalt and preparing the surface heating, and applying etc. complete.	Sqm	32.32	1429465.12
22	State NS/22	7559.00	PRIMER & PROTECTIVE COATING- providing and laying the external decoative waterproff & Protective coating system for concrete and masonry 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.	SQM	182.81	1381861.00

**MUMBAI/N/EN/ROB/LC-66**

23	State NS/23	8302.00	Providing & laying 37.5 mm thick compacted built up spray 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.	Sqm	149.48	1240982.96
			<b>TOTAL AMOUNT OF SCHEDULE-B</b>			<b>₹ 2332,11,415.74</b>

<b><u>SCHEDULE -C</u></b>						
<b><u>Schedule of Approximate quantities</u></b>						
<b>Sr. No.</b>	<b>Item No.</b>	<b>Total Qty.</b>	<b>Item of work</b>	<b>UNIT</b>	<b>Rate</b>	<b>Amount in Rs.</b>
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



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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
			<b>TOTAL AMOUNT OF SCHEDULE-C</b>			<b>₹ 2554,09,623.00</b>

**SCHEDULE -D****Schedule of Approximate quantities**

<b>Sr. No.</b>	<b>Item No.</b>	<b>Quantity</b>	<b>Description of Work</b>	<b>UNIT</b>	<b>Rate</b>	<b>Amount in Rs.</b>
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

Signature of tenderer (s)

Date:

For CPM/NORTH/MUMBAI/DFCCIL

			<p>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.</p>			
2	NS/2	4400.00	<p>Metalizing girder / girder components such as 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 chrome primer (IS-104) and two coats of aluminium paint (IS-2339) with approved paint conforming to IS specification for fabrication</p>	Per Sq.m.	607.09	₹ 26,71,196.00

			<p>&amp; 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.</p>			
3	NS/3		<p>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 &amp; 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</p>			

			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.			

**MUMBAI/N/EN/ROB/LC-66**

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
			<b>TOTAL AMOUNT OF SCHEDULE-D</b>			<b>₹ 903,93,191.40</b>

**SCHEDULE -E****Schedule of Approximate quantities**

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	500000.00
			LS			

Signature of tenderer (s)

Date:

For CPM/NORTH/MUMBAI/DFCCIL



**MUMBAI/N/EN/ROB/LC-66**

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
			<b>TOTAL AMOUNT OF SCHEDULE-E</b>			<b>₹ 13,57,606.00</b>

**SCHEDULE-F****Schedule of Approximate quantities**

Sr.No.	Item 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

<b>Total of Schedule A, B, C, D, E &amp; F</b>	<b>₹ 62,16,48,263.00</b>
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**END OF TENDER DOCUMENTS**