



E-Tender No. MUM/N/EN/ROB/LC-70

**For**

**NAME OF WORK: - Construction of Road Over Bridge in lieu of existing LC No. 70 at KM 152/2-4 between Sanjan - Bhilad Railway station of Mumbai-Delhi - Trunk route of Western Railway.**

**FINANCIAL BID  
(PACKET-B)**

TENDER DOCUMENT

September 2019

**Employer:  
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED  
CGM/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	<b>MUM/N/EN/ROB/LC-70, Dated: 26.09.2019</b>	
Name of work	<b>NAME OF WORK: - Construction of Road Over Bridge in lieu of existing LC No. 70 at KM 152/2-4 between Sanjan - Bhilad Railway station of Mumbai-Delhi - Trunk route of Western Railway.</b>	
(a) Type of Tender	Open Tender (Single stage two packet).	
(b) Type of Contract	Works Contract.	
(c) Tender Value	<b>₹ 46,13,85,413/-</b>	
(d) Completion Period	<b>18 months</b>	
(e) Earnest Money	<b>₹ 50,00,000/- ( 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 10,000/- plus GST (18%) i.e. 11,800/- 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 General 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 11.10.2019 at 11.00 AM at office of Chief General 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>26.09.2019 at 12.00 Hrs.</b>	

Signature of tenderer (s)  
Date:

For CGM/NORTH/MUMBAI/DFCCIL

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Documents download/Sell date (Online)	<b>From 27.09.2019 at 11.00 Hrs.</b>
Bid submission Last date (Online)	<b>29.10.2019 up to 15.00 Hrs.</b>
Last date of submission of originals of statutory documents i.e. EMD & Tender Document Charge	<b>05.11.2019 up to 17.30 Hrs.</b>
Bid Opening date & Time (online)	<b>06.11.2019 at 12.00 Hrs.</b>

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

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Signature of tenderer (s)

Date:

**SUMMARY OF PRICES**

**NAME OF WORK: - Construction of Road Over Bridge in lieu of existing LC No. 70 at KM 152/2-4 between Sanjan - Bhilad Railway station of Mumbai-Delhi - Trunk route 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"	₹ 3,04,22,346.17	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)	₹ 18,24,36,319.93	
3.	Execution of all works as per Schedule "C"	₹ 12,22,29,284.32	
4	Execution of all works as per Schedule "D" (NS Items)	₹ 6,39,99,415.10	
5	Execution of all works as per Schedule "E" (NS Items)	₹ 13,74,662.42	
5	Execution of all works as per Schedule "F"	₹ 1,14,89,233.27	
	<b>GST@ 12%</b>	<b>₹ 4,94,34,151.34</b>	
	<b>Grand Total</b>	<b>₹ 46,13,85,412.55</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

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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

## SCHEDULE OF PRICES &amp; TOTAL PRICES

**Name of work:** - Construction of Road Over Bridge in lieu of existing LC No. 67 at IR chainage KM 146/2-4 between Sanjan - Umbergoan Railway station of Mumbai - Delhi - Trunk route of Western Railway.

SCHEDULE –A						
Sr. No.	Item	Total Qty.	Item of work	UNIT	Rate	Amount
1	26117 C	2	Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared.	Ha	32056.39	64112.78
2	DSR-2014 Item No. 2.33.2, Pg. 75	80	Felling trees of the girth (measured at a height of 1 m above ground (level), Including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 60cm girth upto & including 120cm girth	No.	879.81	70384.80
3	27007A	22402	Excavation for foundation in sand, gravel, clay soft soils and murrum etc. Including shoring, strutting dewatering as necessary and disposing of the excavated stuff as directed (A) Depth upto 3.0 m and lead upto 100 m for 10 cum with all lead and lift.	Cum	318.15	7127196.30
4	27007B	59	Excavation for foundation in sand, gravel, clay soft soils and murrum etc. including shoring, strutting dewatering as necessary and disposing of the excavated stuff as directed (A) Depth 3.0 m to 6.0m with all lead and lift.	Cum	369.00	21771.00
5	27009	146	Excavated in large boulders and soft rock by welding including shoring, strutting and dewatering as necessary and disposing of the excavated stuff as directed.	Cum	445.41	65029.86

6	27039	4201	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	14116494.27
7	27004 AA	288	Providing and laying filter media 600mm thick as directed at the back of abutments, returns and wing walls as per detailed specifications.	Sq.m	792.85	228340.80
8	26161	697	Road marking with hot applied thermoplastic compound with reflectorising glass beads on road surface providing and laying hot applied thermoplastic compound 2.5CM thick including reflectorising glass bends @250 gms /sq mt area thickness of surface applied glassbend as per IRC ..35 the finished surface to be level uniform and free from streaks and holes.	Sq.m	298.96	208375.12
9	27050 A	441.5	Providing Weep holes in RCC abutment,Return wall and retaining wall with 100 mm dia AC pipe and non-corrodible grating and geotextile, extending through the full width of the structure with slope of 1V:20H etc. complete as per drawing and technical specification.	Nos.	53.93	23810.10
10	27072	2451460	Providing and Fixing in position fully moulded restrained elastomeric bearings as per detailed drawings.	cu.cm	1.11	2721120.60
11	27087	3	Providing Vertical Joints between retaining walls, abutments, etc. (providing Pre- moulded asphalt filler joints as per drawings 12mm)	Sqm	733.26	2199.78
12	27098A	16	Providing, fabricating and fixing in position GI Drainage Spout arrangements having 100 mm dia. Pipe B class with necessary bend, fixing to GI chamber, GI grating, providing and applying one coat of primer & two coat of anticorrosive paint, etc. complete as per drawing and as per specifications.	Nos.	506.01	8096.16

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13	M664	218	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	878.50	191513.00
14	11003	5700	J type M20 Anchor bolt as per drawing including threading as shown in the drawing for standard octagonal pole type BOP 7030 all complete	Kg	37.05	211185.00
15	11001 A	45	Structural Steel :- Base plate of 225 x 225 x 16 mm thick with adjustment of hole. MS plate 6mm thick 20mm wide 150mm long including welding to the base plate all complete	Quintal	6026.67	271200.15
16	M942	950	50 mm Dia PVC pipe for entry cable pipe	Rmt	133.32	126654.00
17	M942	1920	50 mm Dia PVC pipe for crash barrier	Rmt	133.32	255974.40
18	14006	374	Providing and laying chequered precast cement with aggregate of sizes upto 6mm in floors, treads of steps and landings on 20mm thick bed of C.M. 1:6 (1-cement : 6-sand) or L.M. 1:1.5 (1-Limeputty: 1.5 coarse sand) joint with neat cement slurry with pigments to match the shade of the tiles.	Sqm	474.70	177537.80
19	27100 A	160	Providing PVC 100 mm diameter water spouts including necessary iron gratings as per drawings.	Each	187.86	30057.60
20	CH 8 NH SOR 8.8	2880	Painting two coats after filling the surface with synthetic enamel paint in all shades on crash barrier concrete surfaces.	Sq.m.	63.63	183254.40
21	26048	1	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	841.33

Signature of tenderer (s)

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For CGM/NORTH/MUMBAI/DFCCIL



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22	27101A	2	Providing and fixing marble slab including engraving and painting complete.(A) size 75 cm x 60 cm x 4 cm	Nos	955.46	1910.92
23	26089EA	10	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. .	R.M.	3954.15	39541.50
24	27004AA	3432	Providing and laying Fitter Media 600mm thick at the back of RE walls as per detailed specifications.	S.qm	792.85	2721061.20
25	27001A	170.9	Dismantling the existing structure including removing and stacking the dismantled materials as and where directed. (Chipping and dressing of the RCC piles upto cut-off level (Min. 1 D) including cleaning of reinforcement and removal of dismantled materials, etc. for providing pile caps as directed by Engineer and as per specification. for 1000 & 1200 mm dia. pile.)	Cum	572.00	97754.80
26	23067	1437	Providing, laying and jointing in true line and level 110 diameter 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	Rmt	531.26	763420.62

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27	26101B	4	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
28	26103B	8	Providing & Fixing sign boards 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	Nos	6618.53	52948.24

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For CGM/NORTH/MUMBAI/DFCCIL

29	26098A	2	Providing and fixing Junction 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. High intensity Grade	Each	12273.52	24547.04
30	26092B	2	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	6544.80
31	26008	5500	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.	Cum	65.40	359700.00

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32	26163	615	Supplying and fixing cat eye with nail less surface (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)	Nos.	372.00	228780.00
<b>TOTAL AMOUNT OF SCHEDULE- A</b>						<b>30422346.17</b>
<b>SCHEDULE -B</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Total Qty.</b>	<b>Item of work</b>	<b>UNIT</b>	<b>Rate</b>	<b>Amount</b>
1	State NS/1	1	Marking out the center line of the Bridge and various other component structures and complete lining out and leveling with theodolite, levels, including constructing necessary masonry pillars for lines and levels and establishing necessary bench marks etc. complete as directed.	L.S	14601.14	14601.14
2	State NS/2	2200	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.	246.94	543266.78
3	State NS/3	4402	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	5573.59	24534951.92

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For CGM/NORTH/MUMBAI/DFCCIL

4	State NS/4	1998	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	5344.49	10678285.93
5	State NS/5	1778	Providing & filling in foundation with ordinary cement concrete M 15 mix and providing necessary vertical pin headers including formwork vibrating ramming & curing complete	Cum.	3747.05	6662263.15
6	State NS/6	4071	providing and casting in sit controlled cement M35 for RCC work in piers and abutment return wall as per drawing including centering shuttering scaffolding where necessary currying vibrating curing and finishing complete. A)height from 0.0 to 5.0 m	Cum.	5760.07	23449231.25
7	State NS/7	460	providing and casting in situ controlled cement M35 for RCC work in piers and abutment return wall as per drawing including centering shuttering scaffolding where necessary laying vibrating curing and finishing complete.A) heightAbove 5.0m.	Cum.	5646.01	2597166.69
8	State NS/8	810	Providing and casting in situ controlled cement concrete M35 for RCC works on pier cap, abutment cap and dirt wall including controlled cementconcrete or pedestals of required drawings, centering shuttering, scaffolding wherever necessary laying vibrating curing and finishing complete.	Cum.	5983.84	4846908.86

9	State NS/9	839	Providing and casting in situ controlled cement concrete M40 for RCC works for Pedestal, Seismic Arrestor, Wearing Coat and Deck Slab including controlled cement concrete or pedestals of required drawings, centering shuttering, scaffolding wherever necessary laying vibrating curing and finishing complete .	Cum.	8293.41	6958169.97
10	State NS/10	1355	Providing and casting in situ controlled cement concrete M35 for R.C.C. work in superstructure including centering, shuttering scaffolding, ramming, vibrating curing and finishing complete. (I) Deck slab	Cum.	5753.65	7796192.61
11	State NS/11	1800	Providing and casting in situ controlled cement concrete M-35 for R.C.C. work in superstructure including centering, shuttering scaffolding, ramming, vibrating curing and finishing complete. ((II)Main and cross Girder	Cum.	6052.44	10894384.79
12	State NS/12	1707	Providing and casting in -situ controlled cement concrete of M 40 grade for RCC crash Barrier & Parapet with 20 mm down coarse aggregate of the required size including formwork, shuttering, placing in position, consolidation with mechanical vibrators curing finishing, deshuttering carefully, marking good the damages, fixing embedment, inserts, pockets, wherever necessary as directed and as per drawing with F3 type exposed concrete finish and formwork as directed by Engineer - in -charge, etc.complete as per specification.	Cum.	8512.87	14531476.36
13	State NS/13	2836	Reinforced earth Retaining wall(Reinforced Earth Retaining 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	5958.52	16898373.27

14	State NS/14	32484	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	670.10	21767448.49
15	State NS/15	3807	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	806.81	3071531.61
16	State NS/16	5506	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. complete.	Cum	926.17	5099492.02
17	State NS/17	4559	Providing and laying 90 mm DBM in single layer 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 40 kg/MT)by total weight of mix hot laid process using hot mix plant including heating and mixing asphalt & materials by hot 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.	MT	2536.11	11562125.49

18	State NS/18	1586	Providing and laying 30 mm Bitumen concrete using crushed stone aggregate BT chips as per required gradation and the VG-30 grade asphalt at 54 kg/MT)by total weight of mix hot laid process using hot mix plant including heating and mixing asphalt & materials by hot 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.	MT	2755.28	4369874.08
19	State NS/19	22023	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.	Sq.m	25.25	556080.75
20	State NS/20	18	Providing and casting in situ controlled cement concrete concrete M-30 for approach slab including formwork curing and finishing complete.	Cum	5142.80	92570.49
21	State NS/21	1902	Providing and applying one coat of Epoxy phenolic primer of DFT 50 microns and two coats of Epoxy phenolic coating of DFT 100 microns each for RCC Element or any other equivalent epoxy coating system to all concrete surfaces exposed to atmosphere in substructure and superstructure including cost of material labour, transportation, scaffolding and preparing the surface by cleaning, washing, brushing, sand/grit blasting etc complete and as directed by engineer and as per specification. ( Paint shall be approved from Engineer and tested from approved Laboratory) (Total DFT = 50+100+100 = 250 microns)	Sqm.	181.79	345769.94
22	State NS/22	168	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	R.mt	10283.07	1727556.10

Signature of tenderer (s)

Date:

For CGM/NORTH/MUMBAI/DFCCIL



			Engineer-in-charge.			
23	State NS/23	0.2	Providing Pylon consist of cast-in-situ concrete of M30grade exposed finish as per drawing and as directed by engineer incharge. Rate includes providing required shuttering and form work but excluding stone slab & carving. (Reinforcement shall be paid in respective item.)	Nos.	4771.71	954.34
24	State NS/24	90	Providing and casting in situ reinforced cement concrete M30 grade controlled cement concrete in kerb, protection wall around pier, etc. using 6mm to 20mm machine crushed well graded stone aggregate, sand of approved quality, OPC 53 grade cement with contractor's own concrete mix design as approved by client etc complete as per specification. The rate is inclusive of all materials, including necessary mixing in fully automatic batch mix plant, transportation, curing, vibrating, placing in position, shuttering, formwork,deshuttering carefully , making good the damages, fixing embedment, inserts, pockets, wherever necessary, with all lead & lift with contractors labour, tools & plants machinaries, as required with F3/U3 type exposed concrete finish and form mark	Cum.	4795.63	431607.01
25	State NS/25	11933	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	179.02	2136257.62

26	NS/26	144	Conducting Pile low strain integrity test as per ASTM D 5882- 96 code of American Society for Testing on cast -in situ RCC pile of 1200 mm diameter inclusive of analysis with all contractor's equipment, manpower, site preparation, lead and lifts etc. complete as per standard procedure, and as directed by the Engineer in charge. Note:- Rate is inclusive All equipment, All labour and consumable required & Mobilization of equipment.	Each	1453.39	209288.16
27	State NS/27	339.05	labour charges for fabrication and erection in position steel in columns, roof girders, bracings , base plates, holding down bolts, nosing angles, MS grills, MS jallies, chequered plates, chequered tiles, MS bearing plates etc	Qtl	1830.18	620522.53
28	State NS/28	38	refixing of old check rails in track of LC making of 4"x4" notches to accommodate pandrol clips as site spacing of sleepers. Fixing of check rails with running using distance block and bolts ( so that desired gaps in between 51 to 57mm after overhauling of LC). The rate is inclusive of hauling, all labour, T&P, crossing of track, lead, lift, taxes etc. complete.	RMt	632.93	24051.34
29	State NS/29	38	Preparation & fixing of check rail work includes cutting of one side flange of supplied rail by gas cut, making of 4"x4" notches to accommodate pandrol clips as site spacing of sleepers. Fixing of check rails with running using distance block and bolts. The rate is inclusive of hauling, all labour, T&P, crossing of track, lead, lift, taxes etc. complete. All works to be finished in all respect as per site supervisors instructions and as per IRPWM only. P.Way material shall be given to be work at Railway store. All released material to be handed over to CPWI's depot or nominated locations as per direction of engineer incharge.	RMt	31.15	1183.70

30	State NS/30	95	Fixing of the serviceable pavers blocks over a bed of 50 mm thick compacted (compaction to be done with contractor own plate compressor compacted) sand/stone dust including preparation of thr sub grade, including excavation asa required and the levelling to proper level as directed by the Rly enginner representative. 50 mm thick (consolidation depth), pavers blocks shall be arranged on the compacted layer sand and fine sand spread over to cover the joints. The rate also includes compactio with plate compressor, concrete to be provided at free ends for preventing movements of sand as well as pavers blocks. The rate is inclusive of all labour, T&P, crossing of track, lead, lift, taxes etc.complete.	Sqm	155.09	14733.55
<b>TOTAL AMOUNT OF SCHEDULE- B</b>						<b>182436319.93</b>
<b>SCHEDULE -C</b>						
Sr. No.	Item	Total Qty.	Item of work	UNIT	Rate	Amount
1	27111		Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500D grade) conforming to IS 1786 of all categories for foundation of pier, abutment & retaining wall including cutting, bending, hooking and tying with 18 gauge mild steel binding wires, supporting in position to ensure lines and levels during concreting, maintaining proper cover / spacing etc. complete as per specification and detailed drawing.			
		660.3	FOR PILE FOUNDATION	MT	39934.54	26368776.76
		308.75	FOR PILE CAP	MT	45575.24	14071355.35

2	27115	550.45	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500D grade) conforming to IS 1786 of all categories for super structure including cutting, bending, hooking and tying with 18 gauge mild steel binding wires, supporting in position to ensure lines and levels during concreting, maintaining proper cover / spacing etc. complete as per specification and detailed drawing.	MT	44990.45	24764993.20
3	27110	136.71	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500D grade) conforming to IS 1786 of all categories for Seismic Arrestor, Pedestal and Dirt Wall.	MT	44770.27	6120543.61
4	27109	645.8	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500D grade) conforming to IS 1786 of all categories for piers, abutments, returns and retaining wall, Drain including cutting, bending, hooking and tying with 18 gauge mild steel binding wires, supporting in position to ensure lines and levels during concreting, maintaining proper cover / spacing etc. complete as per specification and detailed drawing.	MT	45575.24	29432489.99
5	27123	293.2	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500D grade) conforming to IS 1786 of all categories for approach slab, Crash barrier, Friction Slab and Wearing Coat.	MT	44298.60	12988349.52
6	27111	41	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500D grade) conforming to IS 1786 of all categories for pier cap, abutment cap, dirt wall and pedestal including cutting, bending, hooking and tying with 18 gauge mild steel binding wires, supporting in position to ensure lines and levels during concreting, maintaining proper cover / spacing etc. complete as per specification and detailed drawing.	MT	45575.24	1868584.84

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7	27020A	148	Providing Steel Liner 6 mm thick for pile including Fabricating and Setting out as per Detailed Drawing.	MT	44690.48	6614191.04
<b>TOTAL AMOUNT OF SCHEDULE- C</b>						<b>122229284.32</b>
<b>SCHEDULE -D</b>						
<b>Sr. No.</b>	<b>Item</b>	<b>Total Qty.</b>	<b>Item of work</b>	<b>UNIT</b>	<b>Rate</b>	<b>Amount</b>
1	NS/1	477	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(B0) 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 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.)	MT	101622.62	48473991.43

Signature of tenderer (s)

Date:

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			as per drawing will only be considered for payment			
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2	NS/2	6000	<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 &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>	Per Sq.m.	689.95	4139717.40
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 specifications approved by Railway.</p>			

			Note: Weight of HSEFG 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)	217	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	21218.56	4604428.40
	(b)	260	launching of steel girder span including its components on non- running line 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	8979.22	2334597.41
4	NS/4	18	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 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.	MT	73008.05	1314144.82



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.			
		12	Fixed bearing	Nos.	64761.55	777138.54
		32	Sliding bearing	Nos.	64761.55	2072369.44
			Note: The rate is for finished item complete and paid only after fixing in position below the girder.			
6	NS/6	1	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	283027.66	283027.66
<b>TOTAL AMOUNT OF SCHEDULE- D</b>						<b>63999415.10</b>
<b>SCHEDULE-E</b>						
Sr. No.	Item	Total Qty.	Item of work	UNIT	Rate	Amount

1	NS/1	99924	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 Print complete and as per instructions of Engineer in charge.	Per Sqcm	0.46	45565.34
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 is 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.	LS	573675.00	573675.00
3	NS/3	299	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	1365.77	408364.63
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	4040.41	16161.65

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5	NS/5	870	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	380.34	330895.80
<b>TOTAL AMOUNT OF SCHEDULE-E</b>						<b>1374662.42</b>
<b>SCHEDULE-F</b>						
Sr. No.	Item	Total Qty.	Item of work	UNIT	Rate	Amount
1	USSOR 2011 Western Railway		Conducting load testing of a single pile upto following capacity in accordance with IS 2911 (Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc with all labour material, tool & plant , equipment, machinery etc complete as per drawing and specification as directed by the Engineer.			
			Initial load test above 100 ton capacity up to 250 ton capacity. USSOR 2011 western railway item no.192103			
	192103 & 192104	5	Upto 250 tonne	Each	197745.00	988725.00
		100	Extra over 50 t	Each	43817.59	4381759.00
2	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	Upto 250 tonne	Each	277267.47	1386337.35
		50	Extra over 50 t	Each	43817.59	2190879.50

Signature of tenderer (s)

Date:

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3	USSOR 191050	4	Conducting in situ size Plate Load Test (PLT) at selected location as per IS : 1888 including making loading arrangements & casting of RCC/cast in situ concrete footing as per codal provisions including excavation and refilling of trial pit.	Each	10453.50	41814.00
4	USSOR 192110		Lateral Load Testing of single pile in accordance with " IS Code of practice IS: 2911 (Part IV) for determining safe allowable lateral load of pile" with all labour, material, tool & plants, equipment, machinery, etc complete as per drawing and specification as directed by the engineer.			
	192111	6	Piles with lateral load capacity of up to 10 ton	Each	174625.72	1047754.32
	192112	6	Piles with lateral load capacity of above 10 ton & up to 20 ton	Each	58702.21	352213.26
5	USSOR 201051	36	Providing and fixing in position of standard performed sealed and slab type or Strip Seal elastomeric Type Expansion Joints (80 mm expansion) for railway bridge or Road over Bridge as per approved drawing and latest MORTH/IRC 69 specification. The rate are inclusive of supplying, fixing with contractor's own materials e.g. inserts, bolts, socket tubes, neoprene sheet/cap etc. equipments, machineries, labour, all taxes,royalty,all lead and lift, transport, testing, surface preparations, complete.	Rmt	10959.03	394525.08
6	4/132050	181.25	Providing and laying in position machine mixed, machine vibrated and machine batched Design Mix Cement Concrete M20 grade (Cast - in Situ) using 20 mm graded crushed stone aggregate and coarse sand of approved quality in Abutment, pier, wing walls and return walls of Mass cement concrete above RCC raft Including finishing complete as per specifications and direction of the Engineer in charge. Payment for cement, reinforcement and shuttering shall be paid extra	cum	1275.50	231184.38

7	31023	76	1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size)	cum	1645.73	125075.48
8	183061	830	Rubble filling under layer of road of water bound macadam/ stone soling etc.	sq m	53.23	44180.90
9	13120	2250	Earthwork in filling in embankment, guide bunds, around buried type abutments, bridge gaps, trolley refuges, rain bunds if provided, platforms etc. with earth excavated from outside railway boundary entirely arranged by the contractor at his own cost as per RDSO's latest guidelines and specifications and special condition of contract including all leads, royalty, lifts,ascents, descents, crossing of nallahs or any other obstructions. The rates shall include all dressing of bank to final profile, demarcation and setting out of profile, site clearance, removing of shrubs, roots of vegetations growth, heavy grass, benching of existing slope of old bank, all handling/re-handling. taxes, octroi and royalty etc. as a complete job. Cut trees shall be property of railways and to be deposited in the railway godown unless specified otherwise in the Special conditions of contract	cum	135.46	304785.00
<b>TOTAL AMOUNT OF SCHEDULE-F</b>						<b>11489233.27</b>
<b>TOTAL AMOUNT OF SCHEDULE A, B, C, D, E &amp; F</b>						<b>411951261.20</b>

**END OF DOCUMENTS**