



E-Tender No.MUMBAI/N/EN/ROB/LC -137

For

Construction of one ROB including approaches complete in lieu of existing LC no. 137 at KM 250/0-02 between Maroli - Sachin Railway station of Virar – Surat Section of Mumbai Division of Western Railway

**FINANCIAL BID
(PACKET-B)**

TENDER DOCUMENT
October 2016

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

MUMBAI/N/EN/ROB/LC-137**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 – 137, date 26.10.2016
Name of work	Construction of one ROB including approaches complete in lieu of existing LC no. 137 at KM 250/0-2 between Maroli - Sachin Railway station of Virar – Surat 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	Rs.35,74,71,987/-
(d) Completion Period	18 months
(e) Earnest Money	Rs. 50,00,000/- (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 10000/- To be paid by D.D./Banker's Cheque in favour of DFCCIL payable at Mumbai
(g) Tender Processing Fee	Rs7,500/- 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, 7th 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 17.11.2016 at 11.00 AM at office of Chief Project Manager(North) Mumbai, 7th Floor, New Administrative Building, DN Road, 400001

Signature of tenderer (s)

Date:

For CPM/NORTH/MUMBAI/DFCCIL

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DATE & TIME SCHEDULE	
Date of Uploading of NIT & Other Documents (Online Publishing date)	27.10.2016 at 11.00 Hrs.
Documents download/Sell date (Online)	From 29.10.2016 at 11.00 Hrs.
Bid submission Last date (Online)	02.12.2016 up to 15.00 Hrs.
Last date of submission of originals of statutory documents i.e. EMD & Tender Document Charge	09.12.2016 up to 18.00 Hrs.
Bid Opening date & Time (online)	12.12.2016 at 15.00 Hrs.

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

Signature of tenderer (s)

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SUMMARY OF PRICES

Name of work:-Construction of one ROB including approaches complete in lieu of existing LC no. 137 at KM 245/0-2 between Maroli- Sachin Railway station of Virar – 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 Surat division.)	Rs. 3,38,82,565.00	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.)	Rs. 14,88,20,146.00	
3.	Execution of all works as per Schedule "C" (Items as per SOR 2015-16 of State Govt. Gujarat R&B Navsari division.)	Rs. 12,12,38,917.00	
4	Execution of all works as per Schedule "D" (NS Items as per Western Railway)	Rs. 5,25,54,594.00	
5	Execution of all works as per Schedule "E" (NS Items as per Western Railway etc.)	Rs. 9,75,765.00	
	Grand Total	Rs.35,74,71,987.00	

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Notes:

- (i) The above prices are inclusive of all taxes, duties including Excise duty, Sales Tax, Octroi, Local levies, Works Contract Tax etc.
- (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 complete in lieu of existing LC no. 137 at KM 250/0-02 between Maroli - Sachin Railway station of Virar – Surat Section of Mumbai Division of Western Railway.

Schedule- A

Schedule of Approximate quantities

SN	Item No.	Total Qty.	Item of work	Rate	UNIT	Amount in Rs.
1	26117C	1	Clearing and grubbing site/road/land including uprooting all vegetation, grass, bush shrubs, saplings and trees with girth, removal of stumps of trees of girth of all sizes including removing stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable materials as directed by Engineer with all leads and lifts etc. complete as per specification. before commencement and after completion of the work.	32056.39	Hectare	32056.00
2	27007A	11723	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	318.15	Cum	3729673.00
3	27039	4317	Empty boring through all sorts of strata for providing 1.20m dia RCC bored piles to required depth including flushing necessary casting pipe with all plants and equipments	3361.28	RMT	14510646.00

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			as required as per detailed specifications for Abutment and Piers (Excluding Concrete & Reinforcement)			
4			Carrying out load test on any pile as per standard procedure laid down in the IS:2911 specification including construction of test cap, dismantling the cap after test and cleaning the site and maintaining complete records of load settlement as directed by Engineer and as per specification, and submission of records.			
4(a)	27044	2	Load testing of foundation piles including loading with necessary kentledge or any other suitable method as directed. (Initial load Test).	39654.62	Each	79310.00
4(b)	27044	2	Load testing of foundation piles including loading with necessary kentledge or any other suitable method as directed. (Routine load Test).	39654.62	Each	79310.00
5	27001A	291	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.)	577.72	Cum	168117.00
6	27004AA	9909	Providing and laying filter media 600mm thick as directed at the back of abutments, returns and wing walls as per detailed specifications.	792.85	Sqm.	7856351.00

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7	26161	4542	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. (As per Government letter no. SOR 102003/94/S-1, dated 20.07.2004)	298.96	Sqm.	1357876.00
8	26163	4800	Supplying and fixing cat eye (stimsonite) made out from Acrilo beaultile sterine injuction high compressed molding with reflector made of MMC (prismatic type of size 12cm*6cm*2.5cm) providing with bituminous adhesive 100 g. with each unit for fixing. (High intensity grade).	375.72	No.	1803456.00
9	27050A	9909	Providing and laying weep holes in abutment, and return by using AC pipe of 100 mm dia. Including laying in proper grade and jointing the completed as per detailed specification.	53.93	No.	534392.00
10	27072	2304000	Providing and Fixing in position fully moulded restrained elastomeric bearings as per detailed drawings.	1.11	cu.cm.	2557440.00
11	27101B	2	Providing and fixing marble slab including transporting,engraving and paintingall complete. (ii) Size 60cm x 60cm x 4cm	955.46	No.	1911.00
12	27100A	160	Providing PVC 100 mm diameter water spouts including necessary iron gratings as per drawings.	187.86	No.	30057.00

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13	M664	793	providing and fixing 100 dia runner and down take GI pipe to drain water from drainage spout with necessary fixtures including cost of all materials, labours, bends, fixtures, specials etc. Complete as per drawing and Sp. And as per direction of engineer.	808.00	RMT	640744.00
14	26093B	12	Providing and fixing sing boards made from 2mm aluminium sheet; size 80 x 60cms. rectangle as per the design of IRC-67-1977 pre-treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint; reflectorized with retro reflective sheeting as per latest MOST Specifications; 3.1m long stand post and frame fabricated from suitable size iron angle of 35 x 35 x 3mm75x75x6mm as required; painted with best quality epoxy coatings in black and white bends. the details of symbol for each board shall details of symbol for each board shall be as per the instruction ofengineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x45 x 60cms. for each leg. including excavation curing tec. complete under the supervision of engineer in charge.	3214.83	No.	38578.00
15	26098B	12	Direction sign (Junction board):- Providing and fixing sing boards made out of 2mm aluminium sheet; size 244 x 122cms. rectangle as as per the design of IRC-67-1977 pre treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint; reflectorized with retro reflective sheeting as per latest MOST	12274.53	No.	147294.00

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			Specifications; Letters and numerals should be as per IRC-30-1968, 3.1m long (2 no.) stand post and frame fabricated from suitable size iron angle of 50 x 50 x 5mm 75x75x6mm as required; painted with best quality epoxy coatings 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 60cms. for each leg. including excavation curing etc. complete under the supervision of engineer in charge.			
16	14018A	127	Providing and laying chequered terrazzo tiles 22mm thick for R.C.C Staircase with marble chips of size upto 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.	366.63	Sqm	46562.00
17	26102A	12	Providing and fixing Hazard marker sing made from 2mm aluminium sheet; size 100 x 100cms. rectangle as per the design of IRC-67-1977 pre-treated with phosphating process & acid etching; coated with one coat of epoxyprimer and two coats of best quality epoxy paint; reflectorized with retro reflective sheeting as per latest MOST Specifications; 3.1m long stand postand frame fabricated from suitable sizeiron angle of 35 x 35 x 3mm & 50x50x5mm painted with best quality epoxy coatings. The fixing at site shall be in 1:2:4 CC block of size 45 x45 x 60cms. for each leg.	2022.02	No.	24264.00

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			including excavation curing tec. complete under the supervision of engineer in charge.			
18	NH SOR 16.2	250	Removal of existing asphaltic wearing coat comprising of 50mm thick asphaltic concert laid over 12mm thick mastic asphalt including disposal with all lift and lead	67.67	Cum	16918.00
19	27097A	212	Providing and fixing post and piperailing as per detailed drawing including 3 coats of painting to steel works complete.	1073.63	Rmt	227610.00
			Total Amount of Schedule – A			3,38,82,565.00

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For CPM/NORTH/MUMBAI/DFCCIL

Schedule- B**Schedule of Approximate quantities**

Sr. No.	Item No.	Total Qty.	Item of work	Rate	UNIT	Amount in Rs.
1.	State NS/1	1	Marking out the centre line of the Bridge and various other component structures and complete lining out and levelling with theodolite, levels, including constructing necessary masonry pillars for lines and levels and establishing necessary bench marks etc. complete as directed.	12625.00	L.S.	12625.00
2.	State NS/2	513	Providing & filling in foundation with ordinary cement concrete M 15 mix and providing necessary vertical pin headers including formwork vibrating ramming & curing complete.	2622.57	Cum.	1345378.00
3.	State NS/3	4598	Providing and casting in situ controlled cement concrete M-35 for RCC bored pile from 1.00 & 1.20 m. dia. using Tremie Pipe including necessary flushing, dewatering, formwork, mixing in mechanised batch mix plant, transporting, compacting, and finishing including all leads & lifts complete as per detailed specifications. (Excluding Reinforcement).	3934.96	Cum	18092946.00
4.	State NS/4	2221	Providing and casting in-situ controlled cement concrete of M35 grade for RCC work for Pile cap, foundation for pier/abutment/Stair Case/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, de-shuttering carefully, making good the damages, fixing embedment,	3942.64	Cum.	8756603.00

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			inserts, pockets, wherever necessary as per specification and drawing.			
5.	State NS/5	3033	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) height from 0.0 to 5.0 m	4004.25	Cum.	12144891.00
6.	State NS/6	671	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) height from 5.0 to 10.0 m	4226.45	Cum.	2835948.00
7.	State NS/7	1168	providing and casting in situ controlled cement concrete M35 for RCC works on pier cap abutment cap and dirt wall including controlled cement concrete or pedestals of required drawings, centering shuttering, scaffolding wherever necessary laying vibrating curing and finishing complete	4056.77	Cum.	4738307.00
8.	State NS/8	471	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. (A) T-Beam and Deck slab type of superstructure. (II) Main and cross Girder (III) Approach slab	4056.77	Cum.	1910739.00

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9.	State NS/9	2186	Providing and casting in situ or precast controlled cement concrete M-45 for prestressed concrete work in superstructure including centering, shuttering scaffolding, ramming, vibrating curing and finishing complete. (A) T-Beam and Deck slab type of superstructure. (II) Main and cross Girder	5386.33	Cum	11774517.00
10.	State NS/10	817	Providing and casting insitu controlled cement concrete of M 40 grade for RCC crash Barrier & RCC pedestal with 20mm down coarse aggregate of the required size including formwork, shuttering, placing in position, consolidation with mechanical vibrators curing finishing, deshuttering carefully. marking good the damage, 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 specifications.	4169.28	Cum.	3406302.00
11.	State NS/11	38570	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).	182.81	Sqm.	7050981.00

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12.	State NS/12	262	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.	9063.74	R.mt	2374699.00
13.	State NS/13	5211	<p>Reinforced Earth Retaining Wall (Reinforced Earth retaining wall is having following main component</p> <p>1. Excavation for foundation, foundation concrete (CC grade M15) with cement concrete grooved seating in foundation for fascia panel.</p> <p>2. Fascia panel in concrete grade M 35 and reinforcement FE 500D with hooks, tackles and placement thereof.</p> <p>3. Assembling & joining with non oven geotextile at facial panel joints with fascia elements and laying of the PP Geosynthetic reinforcement element alongwith 600mm thick filtermedia conforming to the specifications and inaccordance to the design as approved.</p> <p>4. RCC coping(M 35) at top of facial panel and levelling pad (PCC M 15) at bottom of fascia panel as per approved layout.</p>	5858.15	Sqmt.	30526820.00

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14.	State NS/14	1373	Providing & laying DENSE GRADED BITUMINOUS MACADAM with batch type Drum Mix Plant (DMP) using crushed aggregates of specified grading, premix with bitumen grade 60/70 , bituminous binder @ 5.0 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete,including providing & laying tack coat 2.5kg /10sqm all as per MORTH specification.	4653.07	Cum	6388665.00
15.	State NS/15	6000	Providing and laying 6mm thick in two layer Mastic asphalt wearing course with paving grade bitumen meeting the requirements given in the table 500-29 prepared by using mastic cooker and laid to required level and slope after cleaning the surface with bitumen precoated fine grained hard stone chipping of 13.2mm nominal size at the rate of 0.005cum per 10sqm and at an approximate spacing of 10cm center to center in both directions pressed into surface when the temperature of surface is not less than 1000c , protruding 1mm to 4mm over mastic surface, all complete as per clause 515.	201.87	Sqm.	1211220.00
16.	State NS/16	18	Providing and casting insitu controlled cement concrete M 30 for approach slab including form work curing and finishing complete	3991.22	Cum	71842.00
17.	State NS/17	4575	Construction of 300 mm thick compacted coarse Granular Sub Base (GSB) (Grade- I crushed B.T materials of 53mm to 9.5mm @ 50% 9.5mm to 2.36 mm @ 20%, below 2.36mm @ 30%)by providing coarse graded material mixing in a	1123.12	Cum	5138274.00

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			mechanical mix plant at OMC, carriage of a mix material to work site spreading in uniform layers with motor grader on prepared surface, and compacting with vibratory roller to achieve the desired density, complete as per MORTH specification 401.			
18.	State NS/18	4575	Providing and laying Wet Mix Macadam (WMM) 300 mm in two layer using 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 paverconsolidation by vibratory roller including material, labour, paint, and machinery and equipment etc. complete as per MORTH & specifications.	1191.8	Cum	5452485.00
19.	State NS/19	15249	Providing and applying priming coat with emulsion (SS1) at the rate of 7.50kg/ 10 sq.mt including cost of emulsion and preparing the surface and applying etc. Complete.	21.21	Sqm	323431.00
20.	State NS/20	739	Providing & laying 40 mm Bitumen concrete using crushed stone aggregate BT chips as per required gradation and using emulsion asphalt as a track coat 2.5kg/ 10 sqmt and VG 30 grade asphalt at 55 kg/MT by total weight of mix hot laid process using drum mix plant including heating mixing asphalt & materials by drum mix process , transporting the hot mix to work site, laying with a hydrostatic paver finisher including consolidation with vibratory roller including cost of material, labour, machinery equipment and fuel oil, lubricant for plant and machinery using	4968.19	Cum.	3671492.00

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			contractor own plant and machineries etc. complete, all as per MORTH specification.			
21.	State NS/21	29589	Backfilling, grading and compaction with selected backfill soil in layers in soil Reinforced works with peak internal angle of friction as per adopted design parameters, complete as per drawings and Technical Specifications or as directed by Engineer.	729.23	Cum	21591981.00
			Total Amount of Schedule – B		14,88,20,146.00	

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Schedule- C

Schedule of Approximate quantities

SN	Item No.	Total Qty.	Item of work	Rate	UNIT	Amount in Rs.
1.	27020A	121	Providing and installing 6 mm MS liner for bored-cast-in-situ concrete piles including applying protective coating as per drawing and specification and as directed by Engineer.	44690.48	MT	5407549.00
2.	27043C	603	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500D grade) conforming to IS 1786 of all categories for Pile 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.	44549.08	MT	26863095.00
3.	27047A	64	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500D grade) conforming to IS 1786 of all categories for Pile cap, foundation 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.	38606.24	MT	2470799.00
4.	27111	1032	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, pier cap, abutments, abutment cap, returns and retaining wall	45575.24	MT	47033648.00

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			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.			
5.	27119	98.8	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500Dgrade) conforming to IS 1786 of all categories for super structure (deck slab) 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.	44298.60	MT	4376701.00
6.	27121	547	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 500Dgrade) conforming to IS 1786 of all categories for super structure(Girders, Diaphragm or cross girder) 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.	44990.45	MT	24609776.00

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7.	27084A	143	Providing and fixing in position to exact profile high tensile wires of required ultimate strength including cutting, bending, hooking, tying providing necessary standard and anchorages, sheathing, stressing, grouting, ducts as per detailed drawing including necessary plant and machinery complete.	68367.91	MT	9776611.00
8.	NH SOR 8.23B	200	Providing and erecting a "Thrie" metal crash barrier comprising of 3mm thick corrugated sheet metal beam rail, 85cm above road, fixed on ISMC series channel vertical post 15 x 75 x 5 mm spaced 2 m center to center, 2m high with 1.15m below ground level, all steal parts and filaments to be galvanized by hot dip process, all fittings to conform to IS: 1367 and IS: 1364, metal beam rail to be fixed on the vertical post with a space of channel section 150x75x5 mm, 546mm long complete as per clause 810	3503.69	Rmt.	700738.00
			Total Amount of Schedule-C			12,12,38,917.00

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Schedule-D

Schedule of Approximate quantities

SN	Item No.	Description	UNIT	Quantity	Rate	Amount in Rs.
1	NS/1	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.(The Structural Steel to be used Should be manufactured by SAIL/RINL/TISCO/ESSAR/JINDAL Only.)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	MT	442	94629.73	41826341.00

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		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	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 & 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, crossing of track/obstruction etc. complete in all respect and as per direction of Engineer.	Sq.m	5877	607.09	3567868.00
3	NS/3 (a)	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	MT	109	16825.91	1834024.00

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		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. 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.				

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NS/3 (b)	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.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	333	3181.19	1059336.00
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4	NS/4	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 two 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	20	71620.22	1432404.00
5	NS/5	Providing and fixing POT -PTFE bearing as per IRC 83 in position true to line and level including cost of all materials fixtures surface for receiving bearing, grouting of sleeves with non shrink high strength grout, load testing of bearing, transporting and fixing in position including all lead and lift etc. complete as per approved designs and drawing and as directed by Engineer.				
		Fixed bearing (Capacity up to 250 MT)	No.	20	53550.00	1071000.00
		Sliding bearing (Capacity up to 250 MT)	No.	20	53550.00	1071000.00
		Note: The rate is for finished item complete and paid only after fixing in position below the girder.				

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6	NS/6	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 contractors labour supervisor, T & P's all taxes, equipment, leading materials instruction of load test jacks etc., dial gauges, including all lead and lift.	Each	2	256339.2	512678.00
7	NS/7	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	150	1199.62	179943.00
		Total Amount of Schedule – D			5,25,54,594.00	

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Schedule of Approximate quantities

Sr. No.	Item No.	Description	UNIT	Quantity	Rate	Amount in Rs.
1	NS/1	AutoCAD Drawings: Preparation / Alternation and submission of drawings such as general arrangement drawings, phase drawings, scheme plan, structural drawings etc. On Auto Cad as per details and directions given by the Engineer in charge including plotting and submitting in standard inkjet 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	100000	0.4	40000.00
2	NS/2	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.	LM	1	500000	500000.00

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3	NS/3	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	303	1179.80	357479.00
4	NS/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	4	2997	11988.00
5	NS/5	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	200	331.49	66298.00
		Total Amount of Schedule – E				9,75,765.00
	Total of Schedule A, B, C, D, &E		Rs. 35,74,71,987.00			

END OF TENDER DOCUMENTS

Signature of tenderer (s)

Date:

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