

E-Tender No. MUM/N/EN/ROB/LC 42, 48 & 52

## For

NAME OF WORK:- Construction of ROB excluding approaches in lieu of level crossing No. 42 at IR chainage 76/00, LC no. 48 at IR chainage 95/8-10 & LC no. 52 at IR chainage 102/21-23 between Virar - Surat section of Mumbai division of Western Railway.

## FINANCIAL BID (PACKET-B)

TENDER DOCUMENT
October 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 42,48 & 52 dated 13.10.2017
Name of work	Construction of ROB excluding approaches in lieu of level crossing No. 42 at IR chainage 76/00, LC no. 48 at IR chainage 95/8-10 & LC no. 52 at IR chainage 102/21-23 between 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	₹ 31,97,82,809/-
(d) Completion Period	18 months
(e) Earnest Money	₹ 47,96,750/- ( 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	₹ 10,000 + 18% GST(Total Rs. 11,800/-) To be paid by D.D./Banker's Cheque in favour of DFCCIL payable at Mumbai
(g) Tender Processing Fee	₹ 7,500/- plus GST and other taxes and duties as applicable (non refundable) through e- payment while uploading of tender
(h) Performance Bank Guarantee	Performance Guarantee (PG) have to be submitted within 30(thirty) days from the date of issue of Letter Of Acceptance (LOA), amounting to 5% of the contract value in the form as give in clause 16.4 of GCC
(i) Retention Money / Security Deposit	5% of Contract Value
(j) Officer:	Chief Project Manager (North), Mumbai Dedicated Freight Corridor Corporation of India Limited/Mumbai, 7 <sup>th</sup> Floor, New Administrative Building, D.N. Road, Mumbai-400001
(k) E-Tendering Web Site	E-tendering site- www.tenderwizard.com/DFCCIL
	Help: Please contact Tender wizard helpdesk at 011-49424365
(L)Pre bidding Conference	On 30.10.2017 at 11.00 AM at office of Chief Project Manager(North) Mumbai, 7 <sup>th</sup> Floor, New Administrative Building, DN Road, 400001
DATE & TIME SCHEDULE	1
Date of Uploading of NIT (Online Publishing date)	& Other Documents   14.10.2017 at 11.00 Hrs.

## MUM/N/EN/ROB/LC 42, 48 & 52

Documents download/Sell date (Online)	From 15.10.2017at 11.00 Hrs.
Bid submission Last date (Online)	16.11.2017 up to 15.00 Hrs.
Last date of submission of originals of statutory documents i.e. EMD & Tender Document Charge	22.11.2017 up to 17.30 Hrs.
Bid Opening date & Time (online)	23.10.2017 at 15.00 Hrs.

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

### **SUMMARY OF PRICES**

NAME OF WORK:- Construction of ROB excluding approaches in lieu of level crossing No. 42 at IR chainage 76/00, LC no. 48 at IR chainage 95/8-10 & LC no. 52 at IR chainage 102/21-23 between Virar - Surat section of Mumbai division of Western Railway.

	division of western Ranway.		
SI. No.	Description of works	Cost as per Schedules	Rates to be quoted in figures & words (Clearly mention above / below / at par on Schedules/Items updated DFCCIL Rate / cost given in column 3)
1	2	3	4
1.	Execution of all works as per Schedule "A" (USSOR Item as per Western Railway)	₹ 19962084.94	par as per separately File.
2.	Execution of all works as per Schedule "B" (USSOR Item as per Western Railway)	₹ 2009291.17	/ at ed cel
3.	Execution of all works as per Schedule "C" (USSOR Item as per Western Railway)	₹ 13180297.2	Rates above / below / a schedules shall be filled in Microsoft Excel
4	Execution of all works as per Schedule "D" (USSOR Item as per Western Railway)	₹ 550200.00	Rates above / belovechedules shall be in Microsoft E
5	Execution of all works as per Schedule "E" (USSOR Item as per Western Railway)	₹ 78889475.15	Rates
	Execution of all works as per Schedule "F" (NS Items as per Western Railway etc.)	₹ 150610803.5	
	Grand Total	₹ 31,97,82,809/-	

#### 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.

Date:

## SCHEDULE-1 SCHEDULE OF PRICES & TOTAL PRICES

#### **Schedule of approximate Quantities**

NAME OF WORK:- Construction of ROB excluding approaches in lieu of level crossing No. 42 at IR chainage 76/00, LC no. 48 at IR chainage 95/8-10 & LC no. 52 at IR chainage 102/21-23 between Virar - Surat section of Mumbai division of Western Railway.

	Schedule of Quantity 'A to E' :-(USSOR- ITEMS)									
S. no.	SOR NO	DESCRIPTION OF WORK	Unit	Total Qty	Rate	Amount				
		Schedule 'A' (USS	OR-2011	l Items )						
1	192010	Earth work in excavation for foundations and floors of the bridges, retaining walls etc., including setting out, dressing of sides, ramming of bottom, getting out the excavated material, back filling in layers with approved material and consolidation of the layers by ramming and watering etc. incl. all lift, disposal of surplus soil upto a lead of 300 M, all types of shoring and strutting with all labour and material complete as per drawing and technical specification as directed by Engineer in charge								
	192012	Ordinary rock	Cum	1599.47	345.74	553000.76				
	192014	Hard rock ( blasting prohibited )	Cum	130.00	543.14	70608.20				
2	192020	Extra for the quantity of works, executed in or underwater and/ or liquid mud including pumping out water as required	Cum	300.00	108.63	32588.40				
3	192040	Providing and laying in position machine mixed, machine vibrated and machine batched Design Mix Cement Concrete M35 grade (Cast - in Situ) using 20 mm graded crushed stone aggregate and coarse sand of approved quality in RCC raft foundation & Pile cap including finishing, Using Admixtures in recommended proportions (as per IS 9103), if approved in Mix design to	Cum	999.90	1275.50	1275372.45				

		accelerate or retard setting of concrete and/or improve workability without impairing strength and durability complete as per specifications and direction of the Engineer in charge. Payment for cement, reinforcement and shuttering shall be paid extra				
4	192050	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	102.26	1275.50	130432.63
5	192060	Providing and laying in position machine mixed, machine vibrated and machine batched Design Mix Cement Concrete M35 grade (Cast - in Situ) using 20 mm graded crushed stone aggregate and coarse sand of approved quality for the following Reinforced cement concrete structural elements up to height of 10 M from foundation top level, including finishing, Using Admixtures in recommended proportions (as per IS 9103), if approved in Mix design to accelerate or retard setting of concrete and/or improve workability without impairing strength and durability complete as per specifications and direction of the Engineer in charge. Payment for cement, reinforcement and shuttering shall be paid extra				
	192061	Abutment & Pier	Cum	1163.15	1339.27	1557771.90
	192063	Abutment cap, Pier Cap, Inspection Platform & Pedestal over Pier cap, Fender wall, Diaphragm wall, etc.	Cum	970.23	1466.82	1423152.77

6	192070	Providing, Driving and installing Bored cast in situ Reinforced Cement Concrete piles of specified diameter and length below pile cap in M- 35 grade Design Mix Cement Concrete, using 20 mm graded crushed stone aggregate and coarse sand of approved quality, to carry a safe working load not less than specified, excluding the cost of casing pipe but including the cost of shoe and length of pile to be embedded in pile cap etc complete, concreting by machine batching, machine mixing, scaffolding, using Admixture in recommended proportion( as per IS 9103), if approved in design Mix, placing with tremie pipe, chipping off of pile top to remove laitance concrete above cut off level etc, pumping and bailing out water, with all labour material complete including crossing of tracks if required, as per approved drawing, specification and direction of the Engineer in charge. Length of the pile for payment shall be measured Up to the bottom of pile cap excluding the mud mat. Payment for cement, casing pipe & reinforcement shall be paid extra				0.00
	192072	1200mm Diameter pile	Metre	1296.00	8966.64	11620765.44
7	192090	Extra for chiselling in addition to boring of piles if chiselling is resorted to in hard rock or big stone boulders larger than 30 cm depth by any means i.e. by chisel or manual chisel and hammer method				
	192091	1200mm Diameter pile	Metre	135.60	2069.79	280663.52
8	195030	Centring and shuttering including strutting, propping etc. and removal of form for :				
	195031	RCC raft foundation & Pile cap	Sqm	508.20	145.30	73841.46
	195032	Abutment, pier, wing walls and return walls	Sqm	1820.90	282.60	514586.34

## MUM/N/EN/ROB/LC 42, 48 & 52

	195033	Abutment cap, Pier Cap, Deck Slab, Inspection Platform & Pedestal over Pier cap, Fender wall, Diaphragm wall, etc.	Sqm	7995.33	303.84	2429301.07
		Total 'A'				19962084.94

1 201010 Providing and laying in position Design Mix Cement Concrete M 40 grade machine mixed, machine vibrated and machine batched using 20 mm graded crushed stone aggregate and coarse sand of approved quality for the Cast in situ Prestressed (Post tensioned) concrete girder / Box girders for spans upto 18.3 M (centre to centre) Including finishing, using Admixtures in recommended proportions (as per IS 9103), if approved in Mix design, to accelerate, retard setting of concrete, improve workability without impairing strength and durability complete as per specifications and direction of the Engineer incharge. Payment for Shuttering, Cement, Admixtures, reinforcement, HTS cables, sheathing, anchorage cones, stressing of cables and grouting of the ducts will be done extra  201012 With Soffit level From 9m above Bed Level to12m above Bed Level  201015 Deduct for casting of Slab instead of Girders ( for any heights)  Total 'B'  2009291.17  Schedule 'C' (USSOR-2011 Items )  1 33062 Ordinary Portland Cement grade- 53 Grade  Total 'C' 13180297.20			Schedule 'B' (USS	OR-2011	Items )		
Bed Level to12m above Bed Level   201015   Deduct for casting of Slab instead of Girders ( for any heights)   Cum	1	201010	Providing and laying in position Design Mix Cement Concrete M 40 grade machine mixed, machine vibrated and machine batched using 20 mm graded crushed stone aggregate and coarse sand of approved quality for the Cast in situ Prestressed (Post tensioned) concrete girder / Box girders for spans upto 18.3 M (centre to centre) Including finishing, using Admixtures in recommended proportions (as per IS 9103), if approved in Mix design, to accelerate, retard setting of concrete, improve workability without impairing strength and durability complete as per specifications and direction of the Engineer incharge. Payment for Shuttering, Cement, Admixtures, reinforcement, HTS cables, sheathing, anchorage cones, stressing of cables and grouting of the ducts will be done				
Of Girders ( for any heights)   2009291.17		201012		Cum	1174.66	1822.52	2140841.34
Schedule 'C' (USSOR-2011 Items )           1         33062         Ordinary Portland Cement grade- 53 Grade         MT         2728.84         4830.00         13180297.20		201015		Cum	1174.66	111.99	-131550.17
1 33062 Ordinary Portland Cement grade- MT 2728.84 4830.00 13180297.20 53 Grade			Total 'B'				2009291.17
53 Grade			Schedule '0	C' (USSC	OR-2011 Ite	ms)	
Total 'C' 13180297.20	1	33062		MT	2728.84	4830.00	13180297.20
			Total 'C'				13180297.20

		Schedule 'D' (USS	OR-201	1 Items )		
1	81420	Providing and fixing hand rail by welding etc. to steel ladders railing, balcony railing and staircase railing including applying a priming coat of approved steel primer				
	81423	G.I. pipes 40mm nominal bore (class B)	Kg	6000.0	91.7	550200.00
		Total 'D'				550200.00
		Schedule 'E' (USS	OR-201	1 Items )		
1	11010	Earth work in excavation as per approved drawings and dumping at embankment site or spoil heap, within railway land, including 50m lead and 1.5m lift, the lead to be measured from the centre of gravity of excavation to centre of gravity of spoil heap: the lift to be measured from natural ground level and paid for in layers of 1.5m each, including incidental work, as per specifications-in				
	11011	All kinds of soils	Cum	600.00	109.36	65616.00
2	13140	Removal of excavated/slip earth/debris/ malba from the site of works to any other place outside Railway land/premises, including all excavations, handling, rehandling, loading, unloading and leading, etc. all labour and material as a complete job. Removal of Earth (all kinds of soils)/ROCKS, BOULDERS including mud/slush, slipped earth in catch water drains, side drains, over berms in cutting, water way of bridges, over coping of toe/breast/retaining walls etc. including crossing of nallah, railway tracks, making/repairing approach roads if required, all lead, lift, ascent, descents, or any other obstruction. Earth spoils to be dumped outside the cutting or railway embankments as per direction of Engineer in charge	Cum	600.00	121.38	72828.00

3	14010	Dressing Surface (average excavation or filling upto 15 cm) including removing vegetation in all kind of soil. Payment against this item is to be made only if it is not included in earth work item	10sq m	120.00	71.60	859.20
4	45020	Supplying anti corrosive reinforcement bars with fusion bonded epoxy coating after sand blasting, cleaning, induction, heating etc. of the reinforcement bars complete as per specification. Including cutting, bending, placing in position and binding all complete.				
	45021	Upto 16mm dia bars	Kg	263667.1 6	77.46	20423658.21
	45022	More than 16mm dia bars	Kg	615223.3 8	74.41	45778771.71
5	94060	Providing & fixing Precast Chequered tiles conforming to IS:13801:1993, manufactured under mechanical vibration & hydraulic pressing machine in double layer; top layer of 10 to 12 mm thickness of Dolomite Powder, graded chips, fibre and UV stabilised iron oxide Lanexess colour and bottom layer of 1:3 CC mixed with galvanised steel fibre of approved quality, jointed with neat cement slurry mixed with pigment to match shade of tiles including rubbing and cleaning etc. complete on 20mm thick bed of cement mortar 1:4 of sizes:				
	94061	250mm x 250mm x 25mm thick	Sqm	788.04	397.46	313214.38
6	98020	Supplying and laying interlocking pre-cast CC block pavers of approved design factory manufactured of specified grade cement concrete on passenger platform, foot paths, circulating area, etc, including setting in position over 25mm thick bedding layer of fine sand, filling the joints with fine sand, leveling including compaction as per IS 15658				
	98021	60 mm thick blocks of M30 grade for light traffic	Sqm	150.00	503.8	75570.00

7	181023	Dismantling concrete kerb stones/rail level platform stones /concrete beams / slabs or similar light structural parts/ stones without appreciable damage including stacking	Cum	45.00	495.90	22315.50
8	181030	Demolishing R.C.C. work including cutting and stacking of steel bars and disposal of unserviceable material within 50m lead. (Extra payment for scraping, cleaning and straightening of bars to be made separately)	Cum	45.00	903.09	40639.05
0	183060	Dismantling including stacking of serviceable material and disposal of unserviceable material within 50m lead				
	183061	Under layer of road of water bound macadam/ stone soling etc.	Sqm	150.00	53.23	7984.50
	183062	Bituminous top layer of road	Sqm	75.00	104.14	7810.50
10	192080	Providing, fabricating and installing of casing pipe for bored piles for all diameters with specified thickness of steel plate including all labour, materials, pumping and bailing out water where ever required, complete as per technical specifications as directed by Engineer in charge. This will include the weight of plate only and no cognizance will be given for the fittings i.e. rivets and welding etc.  Conducting load testing of a single pile Up to following capacity in	MT	62.82	68433.54	4298994.98
	192103	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 & plants, equipment, machinery, etc complete as per drawing and specification, as directed by the Engineer  Initial load test above 100 ton	Eac	5.00	197745.38	988726.90
		capacity Up to 250 ton capacity pile	h			
	192104	Extra for every increase of 50 T in pile capacity or part thereof over 250 T	Eac h	5.00	43817.59	219087.95
	192107	Routine Load test above 100 ton capacity upto 250 ton capacity pile	Eac h	11.00	277267.47	3049942.17
	19113	Piles with lateral load capacity of above 20 ton	Eac h	11.00	73699.74	810697.14

	19112	Piles with Lateral Load capacity of above 10 ton & upto 20ton	Eac h	11.00	58702.21	645724.31
12	201050	Providing and fixing in position of standard preformed sealed and slab type or strip seal elastomeric type expansion joints for Railway bridge or Road Over Bridges as per approved drawings and latest MOST/IRC specifications. The rates 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 & lifts, transport, testing, surface preparations, Complete				
	201051	For 80 mm expansion	Metr e	130.90	10959.03	1434537.03
13	234020	4cm thick bitumastic sheet with hot bitumen of approved quality using stone chippings (60% 12.5mm nominal size and 40% 10mm nominal size) 2.60cum and coarse sand 2.60cum of road surface and with 478kg bitumen per 100sqm of road surface over a tack coat including consolidation with road roller of 8 to 10tonne etc. complete (tack coat to be paid separately)				
	234021	With paving bitumen 80/ 100 heated and then mixed with solvent at the rate of 70grams per kg. of asphalt	Sqm	1791.00	289.75	518942.25
14	31010	Providing and laying in position cement concrete of sspecified proportion excluding cost of cement, centering and shuttering-All work up to plinth level				
	31023	1:2:4 (1 cement : 2 Sand : 4 graded stone aggregate 20mm nominal size) (cement quantity to be used 3.2 qtl/cum)	Cum	69.00	1645.73	113555.37
		Total 'E'				78889475.15

	Schedule 'F' ( NS Items)									
1	NS/1	Earthwork in excavation for foundation of piers, abutments, return walls, columns, Toe wall, Protection wall etc in all categories of soils such as sand, clay, moorum with or without stones, boulders (Excluding rock) as per	Cum	1599.4 7	117.39	187761.78				

		specifications and special conditions of the contract and as directed by Engineer.				
		The rates are inclusive of Contractor's own machinery and equipments, labour, taxes, materials, leading & lifting, shoring, structing, timbering and buttressing with sand/clay bags and all such measures necessary to retain in position the sides of the foundation pit and including refilling the excavated soil, clearing and disposing the unwanted earth to low lying area within railway boundary and leveling the site, dewatering by manual or mechnical means etc. (No claim will be entertained on any account and payment will be made after finishing the item).				
2	NS/2	Supplying, manufacturing, fabrication, testing and welding with stud guns etc. of normal headed/ round studs shear connector 25mm dia. And 200 mm length are confirming to IS 3935-66 as per specification of RDSO Drg. No. B11553, 52, 51 & RDSO B 11557-1 along with ferrules on top flange of girder for deck slabs as per the direction/approval of Engineer in charge. In case shear connectors/studs of other sizes are required, then payment/recovery on prorata basis of weight shall be made. The rate is inclusive of all taxes, service charges, transportation, lead, lift, wastage etc. Complete in all respect. Nothing extra shall be payable against any breakdown of machines. Site facilities shall be provided by the contractor at site. The facility of required Electricity of 400/440 V power source k/380 KVA DG set, cable 400A switch fuse, loading & unloading the machine from truck and to carry to site shall be done by the contractor.	No.	20580. 00	265.70	5468106.00

3	NS/3	Fabrication of steel girder spans as per the approved drawing for composite construction i.e. (Steel + RCC) of superstructure of the Road over bridge with contractor's own mild structural steel confirming to IS: 2062-1992 with all welding, rivets, nuts bolts etc. with contractor's own materials, fabrication, machinery, templates, fixtures, equipment's tools and plant, transportation skilled/unskilled labours, excise duty, Octroi, sales and tax and other taxes, all leads, lifts, desent, loading, unloading, crossing one or more Railway track if required etc. complete and as per technical specifications section 1900 of MORTH. 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 and painting. After fabrication in workshop first printer coat zinc chrome yellow (IS: 104 latest revision) will be applied to all parts excepts flooring system. The 2nd primer coat of zinc chrome red oxide IS 2074 and 1st finishing coat of Aluminium paint to IS: 2339 will be applied on the girder parts before transportation of girder parts to the site with the contractor's paint and primer of approved quality. (Attached notes applicable to this item)	MT	1120.2	94806.37	106210628.25
		a) Fabrication agency for Fabrication of steel Plate girder (Composite girder) shall be on the current APPROVED VENDERS list of Steel Girder Bridge of RDSO Lucknow, at the time of execution. Inspection of girder shall be done by the nominated representative of the consignee (CPM/NORTH/DFCCIL/MUMBAI). The assembly and erection shall be done by specialized agency whose competency is certified by the manufacturer.		0.00		0.00

RDSC appro	welds are to be made by approved welder using ved welding procedures with erged are welding.	0.00	0.00
cost c rivetin appro	e rates are deemed to include of rivets, drifts, bolts and nuts g/welding etc. shown in ved drawing for stud bolt ent will be made in another	0.00	0.00
streng requir launcl contra	ning of girders shall be at actors cost including restoring ck as per original standard	0.00	0.00
e) O contra stagin obstru	n completion of work the actor shall clear all temporary g and other arrangements, action and restore it to its all position.	0.00	0.00
prope	ontractor's has to ensure r camber as per drawing, ective of launching scheme.	0.00	0.00
includ equip all lea etc.	he rates are deemed to es all labours, tools, plants, ment, machinery, cranes etc. ads, lifts, fuel electric charge complete for all materials specified otherwise.	0.00	0.00
h) A examiother radiog destruequal also penet by ma	Il butt welds are to be ined radio graphically. All wells may be examined by graphic or any other non-uctive methods which are ly effective. All the welds shall be examined by liquid rant flaw detection method or agnetic particle flaw detection od as per IS 3658 and IS	0.00	0.00
separ Engin	layers of painting should be ately got approved by eer or his authorised sentative.	0.00	0.00
j) All to Gra rolled Section	structural steel shall conform ade B specification except for section (angles, channels, Ions). For rolled section as A steel may be used.	0.00	0.00

		k) Structural steel should be procured from SAIL/TISCO/RINL/JINDAL/ESSAR/ ISSCO only. If all these firms do not manufacture any steel section. On submission of the documentary proof and its verification, the contractor may be permitted to procure steel from other approved manufacturer. The Engineer's decision in this regard shall be final and binding on the contractor.		0.00		0.00
		Galvanizing of steel bridge girder will be done for which extra payment will be paid under item no. 4/NS of schedule D		0.00		0.00
		After assembling of girder till launching it is responsibility of the contractor for securing the steel girder (fabricated girder) at site.		0.00		0.00
		Note for stage payment terms / conditions against addl. Item no. 2/NS for fabrication of steel of composite girder"		0.00		0.00
		1) Fabrication & assembling of steel element & bringing each girder to the work site.		0.00		0.00
		2) After satisfactory launching of the composite girder at proper location		0.00		0.00
		3) Payment will be released on completion & erection in line and level and completion of painting as specified.		0.00		0.00
		Note:- Contractor has to make his own arrangement for transportation of fabricated steel. No extra payment will be made on this account.		0.00		0.00
4	NS/4(a)	Lanching of Steel girder span 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 drawing with other ancillary steel structure fixed to the girder where necessary in proper level and alignment and as per technical specification.	MT	649.18	19,843.15	12881776.12
	NS/4 (b)	Lanching 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 drawing with other ancillary steel structure fixed	MT	406.58	3,181.19	1293408.23

		to the girder where necessary in proper level and alignment and as per technical specification.				
5	NS/5	Extra for metalizing for item 3/NS with sprayed aluminium followed by protective coating painting with all contractors labour, materials, tools, Plants and Machinery scaffolding etc. complete in all respect.	M2	21598. 50	576.14	12443759.79
6	NS /6	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 equipments, manpower, site preparation, lead and lifts etc complete as per standard procedure, and as directed by the Engineer in Charge. Note: - Rate is inclusive 1 All equipment. 2 All labour and consumable required3 Mobilization of equipments, staff etc.4 Preparation and submission of Reports in 3 copies.5 Site preparation	Eac h	72.00	1,259.54	90686.88
7	NS/7	Epoxy painting. Supplying and applying epoxy paint of approved quality on surfaces of abutment, abutment caps, returns, piers, pier caps, PSC girders/slabs, deck slab, parapet walls, crash barriers etc. confirming to the specifications laid down in the special conditions of contract.  The rate inclusive of contractor's own paint, material, equipments, machineries, labour, taxes, with all lead, lift, scaffolding staging, etc. complete. (Rates are for finished item and will be paid after application as per specification.	Sqm	11077. 87	327.15	3624125.17
8	NS/8	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	955.20	984.15	940060.08
9	NS/9	Making and supplying of check rails of 52 kg/ 60 kg rails of various lengths for level crossing as per	Eac h LC	14.00	2997	41958.00

		approval drawings.	-			
10	NS/10	Site Office Providing,	LS	3.00	500000	1500000.00
		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.				
11	NS/11	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. transportating and fixing in				
		position including all lead and lift				
		etc. complete as per approved				
		designs and drawing and as				
		directed by engineer				
		i) Capacity upto 250MT	Nos	108.00	50802.93	5486716.44
12	NS/12	Transportation of PSC sleepers,				
		other P. way materials including rail				
		pieces up to 4.50m length from				
		Sleeper factory & other places to				
		any yard in connection with construction of ROB at LC no-				
		55,60& 64 of Mumbai Division of				
		Western Railway including loading				
		transporting, unloading, stacking				
		etc by using road cranes, if				
		necessary for unloading PSC				
		sleepers and other P. way				
		materials as directed by Engineer				
		in charge at site. Rate including all				

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		incidential charges and taxes like transportation, labour, T&P, royalty, Octroi etc complete.				
		i) First one KM	KM MT	45.00	335.33	15089.85
		ii) Extra for additional lead above 1 Km upto 200 km approx.	KM MT	90.00	4.49	404.10
13	NS/13	Load tesing of one composite steel/span - Designing and Load testing of one composite girders/span as selected by Engineer confirming to Rly. Standard's with test loads to be applied and removed incrementally etc. complete as per special conditions and specifications of contract, as per relevant IS/IRC codes with all contractors labour supervisors, T&P's all taxes, equipments, leading materials instruction of load test jacks etc, dial gauges, including all lead and lift, preparation and submission of test reports in the desired format etc. complete as required for successful completion of work of this item. The rates are inclusive of everything required for this item and will be paid only after load test is finished and the girder is cleared of the Kent ledge/loading material etc. Railways Kent ledge will be supplied free of cost to contractor, if available. Contractor to arrange for transportation of this material from where it is available and returning safely back at place of issue in original condition with all loading, un-loading transportation etc complete at his cost. Damage to material if any will be recovered at the double price of procurement  Total for Schedule 'F'	Eac h	3.00	142107.62	426322.86 15,06,10,803.55
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## **END OF TENDER DOCUMENTS**