Tender No. JP/EN/RE-FL/WC/ROB/102

for

Construction of Two Lane ROB (including approaches and LHS) in lieu of Level Crossing No. 102 at IR chainage 139/0-1, between Shri Madhopur and Ringas stations on Rewari-Phulera Section of JAIPUR Division of North Western Railway.

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FINANCIAL BID
(PACKET-B)

TENDER DOCUMENT
January-2016

Employer:
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
(A GOVERNMENT OF INDIA ENTERPRISE)
Under
MINISTRY OF RAILWAYS

GENERAL INFORMATION / DATA SHEET

TENDER NOTICE NO	**JP/EN/RE-FL/WC ROB/102 Date: 25.01.2016**
Name of the work	**Construction of Two Lane ROB (including approaches and LHS) in lieu of Level Crossing No. 102 at IR chainage 139/0-1 between Shri Madhopur and Ringas stations on Rewari-Phulera Section of JAIPUR Division of North Western Railway.**
(a) Tender Value	**Rs 39,74,36,471/-**
(b) Completion Period	15 months
(c) Earnest Money	**Rs 50,00,000/-**
(d) Date and Time of Issue of Tender	**From 30**.01.2016 **to** 28.02.2016 **on all working days from 10:30 hrs. to 17:00 hrs. against the prescribed fee of Rs. 10000/- which is not refundable.**
(e) Last date and Time of submission of Tender	29.02.2016 **upto 15:00 hrs**
(f) Date and Time of Opening of Tender (Technical bids -Packet A)	On 29.02.2016 at 15:30 hrs
(g) Validity of offer	90 days
(h) Retention Money / Security Deposit	5 % of Contract Value
(i) Performance Bank Guarantee	Performance Guarantee (PG) have to submit 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

TENDER SCHEDULE

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD
NAME OF WORK: Construction of Two Lane ROB (including approaches and LHS) in lieu of Level Crossing No. 102 at IR chainage 139/0-1 between Shri Madhopur and Ringas stations on Rewari-Phulera Section of JAIPUR Division of North Western Railway.
SCHEDULE - A

Item No.	Description of Schedule	Unit	Rate	Gross Qty.	Amount
	Schedule-A- NWR USSOR - 2010 items				
	Schedule-A-1				
011010	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	95.85	4840.55	463966.72
11050	Extra for lead of earth work above initial lead of 50m, in all kind of soils and rocks :				
11051	for every 50m or part thereof - lead over 50m upto 150m	Cum	11.79	4323.3	50971.71
11052	for every 50m or part thereof - lead over 150m and upto 500m	Cum	10.1	4342.05	43854.71
11070	Extra for every additional lift of 1.5m or part thereof, after the initial 1.5m, for earth work in all soils	Cum	8.85	4342.05	38427.14
12050	Supplying and filling sand in plinth and under floors including watering, ramming, consolidating and dressing complete	Cum	438.72	52	22813.44

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	10 sqm	64.2	258.26	16579.97
14030	Felling trees of girth (measured at a height of 1m above ground level) including lead and stacking of material within 100m. Note : 1. When stumps are grubbed up in addition, the rates shall be doubled for trees cut and grubbed. 2. Payment for grubbing shall only be made where specially ordered. 3. Grubbing shall be ordered only where it is essential to remove the stumps, including the roots, as per specification. 4. Grubbing shall include removal of roots of trees and saplings to a depth of 60 cm below ground levelor 30 cm below formation level or 15 cm below sub grade level, whichever is lower				
14031	Girth over 30 cm and upto 60 cm	Each	112.7	14.0	1577.80
14032	Girth over 60 cm and upto 1.5m	Each	308.7	10	3087.00
14033	Girth over 1.5m upto 3 m	Each	597.4	7	4181.80
14034	Girth over 3 m	Each	1004.9	5	5024.50
13120	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	170.35	3405.6	580143.96
13130	Extra for mechanical compaction of earth/blanketing material filled in embankment with contractor’s rollers of suitable capacity, type and size to achieve specified density as per specification, testing as per IS codes	cum	11.46	3405.6	39028.18

	incl. cost of water, T&P consumable material and all labour as a complete job. The work is to be executed as per Latest edition of "Guidelines for Earthwork in Railway Projects" issued by RDSO, Lucknow				
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, re-handling, 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	114.99	3405.6	391609.94
14110	Providing and removing barricading with the help of portable fencing along the running track where the work is to be done in close vicinity of the track. Fencing shall consist of self supporting steel angles of size 50 x50x6mm, 1.5m long provided with hooks etc. and embedded in CC 1:2:4 block of size 0.23x0.23x0.23M placed at c/c distance of 2.0 M along the track. 12 mm dia rods in three horizontal layers tack welded with the angle posts including providing Retro-reflective tapes in Horizontal & vertical direction. Note : Released material will be the property of the contractor after the completion of work. Cost of cement to be paid separately.	Mtr.	178.74	2348	419681.52
21170	Leading miscellaneous materials such as iron work, rails, pipes, wooden logs, stones over pitching stone size, RCC/PCC beams / slabs etc. and all similar articles (each individual article or bundle being more than 3.5 metres long in the longest direction) by truck, trailor, etc including all loading, unloading and stacking, lead over 500m and upto 10 km. Note : Lead under this item is payable when the same exceeds 500m.	MT	144.76	84	12159.84
21171	Additional lead for every subsequent km or part thereof, over 10 km and upto 100 km over item no. 021170	MT/Km	7.07	7200	50904.00

21172	Additional lead for every subsequent km or part thereof, over 100 km and upto 400 km over item nos. 021170 &.021171	MT/Km	5.31	25200	133812.00
31010	Providing and laying in position cement concrete of specified proportion excluding cost of cement, centering and shuttering - All works upto Plinth level :				
31012	1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 40mm nominal size)	Cum	1445.87	126	182179.62
31060	Centering and shuttering including strutting, propping etc. and removal of form for :				
31061	Foundations, footings, bases of columns, raft foundation of washable aprons, Pile caps, Footings of FOB etc.	Sqm	127.89	220	28135.80
31062	Walls (any thickness) including attached plasters, buttresses, plinth and string courses etc.	Sqm	232.54	320	74412.80
61010	Random rubble masonry with hard stone in foundation and plinth including levelling up with concrete as per specifications, upto plinth level with :				
61012	Cement mortar 1:4 (1cement:4 fine sand)	Cum	1475.10	1325.00	1954507.50
61020	Extra for random rubble masonry with hard stone in superstructure above plinth level up to floor two level, including levelling up with concrete as per specifications, at window sills, ceiling level and the like	Cum	446.93	720.00	321789.60
62020	Coursed rubble masonry (2nd sort) with hard stone in foundation and plinth with :				
62022	Cement mortar 1:4 (1cement: 4fine sand)	Cum	1719.35	134	230392.90
62030	Extra for coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level up to floor two level	cum	382.17	38	14522.46
81030	Structural steel work welded in built up sections, trusses and framed work, girders, stagings, racks, etc including cutting, bending, straightening, hoisting, fixing in position, including applying a priming coat of approved steel primer, complete - upto				
81031	In RSJ, Tees, Angles and Channels	KG	70.41	4500	316845.00
081032	In flats, Plates, Round or Square bars	KG	68.79	3000	206370.00
081140	Supplying and fixing Lewis/ holding down bolts of approved design with nuts and washers complete	KG	52.97	500	26485.00

81412	In gratings, frames, guard bar, ladders, railings, brackets, gates and similar works	KG	72.74	600	43644.00
92060	Providing and laying plain cement concrete flooring of specified thickness with mix design concrete over firm, well prepared and well compacted bed including provision of designed expansion joint & finishing manually or mechanical trowel ling & vacuum dewatering complete. Expansion joint to be paid for separately.				
92062	M-25 in Wearing Coat	Cum	2322.93	313.47	728157.25
108160	Providing and fixing on wall face unplasticised - Rigid PVC single socketed rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10mm gap for thermal expansion.				
108162	110mm dia.	metre	182.18	275	50099.50
108170	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised- Rigid PVC rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10mm gap for thermal expansion.				
108171	Coupler, 75mm.	Each	104.88	22	2307.36
108172	Coupler, 110mm	Each	139.90	50	6995.00
108180	Providing and fixing on wall face unplasticised - PVC moulded bend and shoe for unplasticised- Rigid PVC rain water pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS: 5382 leaving 10mm gap for thermal expansion				
108182	Bend 87.5o, 110mm dia bend	Each	160.41	22	3529.02
108184	Shoe (Plain), 110mm dia shoe	Each	261.76	50	13088.00
111110	18 mm cement plaster in two coats under layer 12mm thick cement plaster 1:5 (1cement: 5coarse sand) finished with a top layer 6mm thick cement plaster 1:6 (1cement: 6fine sand)	Sqm	98.62	5651.00	557301.62
114060	Deep grooved pointing on Coarse Rubble masonry 1:3	Sqm	121.63	151	18366.13

116070	Finishing with epoxy paint (two or more coats) at all location prepared and applied as per manufactures specification including appropriate priming coat preparation of surface. etc complete on concrete.	Sqm	94.47	18051	1705277.97
121050	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade				
121051	Two or more coats on new work	Sqm	46.65	627	29249.55
131150	Providing and fixing medium grade G.I. pipes complete with G.I. fittings including trenching and refilling etc. External Work				
131151	15 mm dia. nominal bore	Metre	127.64	100	12764.00
131152	20 mm dia. nominal bore	Metre	168.20	100	16820.00
131153	25 mm dia. nominal bore	Metre	215.80	100	21580.00
131155	40 mm dia. nominal bore	Metre	288.38	100	28838.00
131156	50 mm dia. nominal bore	Metre	372.53	100	37253.00
131159	100 mm dia. nominal bore	Metre	725.03	100	72503.00
131160	Making connection of medium grade G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete				
131161	25 to 40 mm nominal bore	Each	261.77	10	2617.70
131162	50 to 80 mm nominal bore	Each	466.55	10	4665.50
131163	100 mm to 150 mm dia.	Each	1043.23	5	5216.15
131180	Providing and fixing PP-R Gate Valve fusion welded, having thermal stability for hot & cold water supply and testing of joints complete as per direction of engineer in charge				
131181	25 mm Gate Valve	Each	434.11	5	2170.55
131184	50 mm Gate Valve	Each	1112.14	5	5560.70
131190	Providing and fixing PP-R Brass Ball Valve fusion welded, having thermal stability for hot & cold water supply and testing of joints complete as per direction of engineer in charge				
131191	20mm Ball Valve	Each	753.52	3	2260.56
131192	25mm Ball Valve	Each	834.10	3	2502.30
131194	40mm Ball Valve	Each	1186.91	3	3560.73

133080	Providing and laying S&S Centrifugally Cast (Spun) Ductile Iron Pipes conforming to IS : 8329 of Class K-7 up to 500 mm dia				
133083	200mm dia Ductile Iron Class K - 7 pipes	Metre	1533.91	800	1227128.00
133084	250mm dia Ductile Iron Class K - 7 pipes	Metre	1924.45	500	962225.00
142030	Providing and laying non-pressure NP3 class (medium duty) R.C.C. pipes including bends etc with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1cement: 2fine sand) including testing of joints etc. complete up to 800mm dia.				
142035	600mm dia. R.C.C. pipe	Metre	1149.76	2146	2467384.96
142010	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes including bends etc with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1cement: 2fine sand) including testing of joints etc. complete upto 800mm dia.				
142014	300mm dia. R.C.C. pipe	Metre	381.99	120	45838.80
171520	Drilling of bore well for specified depth in all types of soil and rock mechanically with all contractor's tools, plants, material and labour up to 75 meters				
171523	For 250 mm dia	meter	522.68	75	39201.00
171526	Extra over 75m drilling for 250mm dia	meter	104.54	20	2090.80
193040	Dry/Wet Sinking of Circular Wells (Other than pneumatic method) in all types of strata except hard rock requiring ballasting, including bailing and pumping out water, removal of excavated soil, with all labour and material required for sinking as per drawing and direction of the Engineer in charge, disposal of surplus soil upto 1 Km lead in the adjoining bank/embankment (The compaction to be paid separately under the relevant item)				
193041	From initial level of cutting edge & Up to 3m depth	cum	117.66	29.45	3465.37
193042	From 3m to 10m depth	cum	153.86	68.722	10573.62

193070	Providing and laying in position machine mixed, machine vibrated and machine batched Design Mix Cement Concrete M25 grade (Cast - in Situ) using 20 mm graded crushed stone aggregate and coarse sand of approved quality in the following elements of well 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 drawings and technical specifications as directed by Engineer. Payment for cement, reinforcement and shuttering shall be paid extra				
193072	In Steining of wells, cover for sump	cum	1373.85	40.53	55677.39
193071	Well kerb	cum	1373.85	0.94	1294.82
193030	Supplying, Fabrication, assembly erection & placing in position of cutting edge of well curb with structural steel including M.S sheet/ Plates of specified thickness for pier/abutment complete as per approved plans and as per direction of Engineering In charge including all operations like cutting, bending, straightening, drilling holes, bolting, riveting, welding, threading, jointing of steel sections including outer and inner places liners and skin plates, stiffeners, hooks bottle nuts, bond rods etc as per design including all ascent, descents, leads, lifts, handing, re-handling, all other obstructions whatsoever, diverting channels, pumping / bailing out of water and wherever required including cost of steel such as flats, sheets, angles, steel bars etc. with all labour and material as a complete job	meter	59511.03	2.30	136875.37
259270	Supply of Woven Geotextile made from polypropylene multifilament yarn, having minimum mass of 220 GSM & ultimate tensile strength of 40 kN/m with puncture resistance of 600 N and apparent opening size of 150 microns	sqm	161	14.84	2389.89
252120	Coarse sand (Minimum zone III)	cum	690	7.07	4877.32
252100	Stone Aggregate broken : 10 mm nominal size	cum	546.25	7.07	3861.21
252090	Stone Aggregate broken : 20 mm nominal size	cum	575	7.07	4064.44
171540	Providing supplying, lowering and fixing in bore unperforated MS casing pipe 6 mm thickness up to specified depth below ground level with all contractor's tools, plants, material and labour etc. complete				

171543	200 mm internal pipe	meter	1095.00	75	82125.00
171550	Extra for using slotted or perforated MS casing pipe				
171553	200 mm internal pipe	meter	110.05	10	1100.50
181010	Demolishing lime concrete and disposal of material within 50m lead	Cum	170.09	350	59531.50
181020	Demolishing plain cement concrete including disposal of material within 50m lead				
181021	1:2:4 or richer mix with max. 20 mm coarse aggregate	Cum	494.03	300	148209.00
181022	Mix leaner than 1:2:4 with coarse aggregate larger than 20mm	Cum	302.51	300	90753.00
182030	Demolishing stone rubble masonry including stacking of serviceable material and disposal of unserviceable material within 50m lead				
182032	In lime mortar	Cum	231.86	200	46372.00
182033	In cement mortar	Cum	491.64	400	196656.00
183010	Dismantling cement concrete / terrazzo flooring and/or underlayer excluding base concrete	Sqm	18.15	400	7260.00
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	45.10	481.59	21719.71
183062	Bituminous top layer of road	Sqm	87.88	10114.29	888843.81
184030	Dismantling stone slab roofing including all coverings over wooden karries or R.C.C. battens (dismantling karries and battens to be paid separately) including stacking of serviceable material and disposal of unserviceable material within 50m lead	Cum	723.90	100	72390.00
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 up to 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				
192011	All kinds of soils	Cum	233.79	24859	5811785.61

192030	Providing and laying Plain Cement Concrete 1:3:6 with graded stone aggregate of 40 mm nominal size, in foundation and floors, retaining walls of bridges including mechanical mixing, vibrating, pumping and bailing out water where ever required with all materials and labour complete but excluding the cost of cement and shuttering as per drawings and technical specifications as directed by Engineer. PCC M15 levelling course	Cum	1227.60	1317	1616749.20
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	1373.85	0.00	0.00
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 & bailing out water, with all labour material complete including crossing of tracks if required, as per approved drawing, specification & 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.				
192072	1200mm Dia RCC Pile	metre	8841.15	1298.00	11475812.70

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.	MT	54837.56	43	2358015.08
192100	Conducting load testing of a single pile Up to following capacity in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap & 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				
192103	Initial load test above 100 ton capacity Up to 250 ton capacity pile	Each	85951.00	2	171902.00
192104	Extra for every increase of 50 T in pile capacity or part thereof over 250 T	Each	17683.84	26	459779.84
192107	Routine Load Test above 100 ton capacity Up to 250 ton capacity pile	Each	76908.72	2	153817.44
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				
192113	Piles with lateral load capacity of above 20 ton	Each	46917.29	4	187669.16
192120	Pulse Echo Test (PET) for integrity testing of piles with contractor's men, materials and machines. The rate includes cost of Inspection of site, preparation of pile head and any other unforeseen cost required for the test, submission of reports in triplicate as per satisfaction of the Engineer in Charge at site	Each	29037.50	59.0	1713212.50

201040	Design, manufacturing, Supplying and fixing in position elastomeric bearing pads under prestressed concrete girder, for Pre-cast as well as cast-in-situ girders as per approved drawing. The rate shall include cost of load test of one No. bearing from Railway approved firms and all fixing materials, equipments, machineries, labour, taxes, loading, unloading, leading, lifting etc. complete. Rates include getting the drawing approved from Railway and cost of inspection during manufacturing from railway approved organization. (Note : 1. The rate is for finished item complete and paid only after fixing in position below the girder. 2. The volume shall be given in the drawing and no deduction shall be made for inserted steel plates etc.)	cu cm	1.76	489600.00	861696.00
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	Metre	22535.29	97.7	2201697.83
201060	Load testing of one or more spans of bridge as selected by the Engineer as per approved load test procedure following relevant IS/IRC/Railway codes with contractor's labour, deflection measuring instruments, loading materials, recoding and analysing the load testing results including all lead & lift, etc. complete as required. The rates are all inclusive and will be paid after load test is finished and girder is cleared of the kentledges /loading material etc. The load shall be 1.25 times the stipulated design load Based on Design load & not span				
201061	For Span design load upto 100 MT	Each	89674.17	1	89674.17
201062	Extra for every increase of 100 MT or part thereof in the span load capacity upto 800 MT	Each 100m	87487.54	3	262462.62

201070	Providing, fabricating & fixing in position to exact design profiles, prestressing H.T.S. cables of all classification made from Low Relaxation strands conforming to IS 14268 – 1995 in Prestressed Concrete girders/slabs etc. including supplying, cutting, making into cables with necessary spacers, colour coding, protecting with water soluble oil at all time, anchoring of cables, supplying and placing spiral corrugated type galvanized metal steel ducts sheathing made up of Cold Rolled Cold Annealed (CRCA) mild steel conforming to IS 513 of required diameter/thickness, vent pipe, placing, bending, routing, fixing, stressing & grouting of cable ducts with cement grout, Anchorage sets in required number with provision for future prestressing, if any, including all lead and lift with contractor's own materials, labour, equipments, etc. complete as per drawings & specifications. Rate also includes covering anchorage pads with epoxy mortar of approved quality to avoid corrosion. Cement for grouting to be paid separately.	Mt	133930.24	26	3482186.24
211060	Providing and fixing 65/50 mm nominal dia B class G.I. pipe railing used in rows for footpath or anti-crash barrier railing incl. cost of M.S. angle and channels in vertical posts, riveting, welding / riveting, priming painting two coats, at all heights labour and material as a complete job	Kg	59.31	13023	772394.13
211090	Providing, cutting, fabricating, treating, fixing & painting structural steel conforming to IS:2062 in access ladders, inspection platforms, Trolley refugee, railing, etc. joints welded to neat finish including one coat of primer & two coats of synthetic enamel paints	MT	52941.57	4	211766.28

211140	Supplying, fitting and fixing in position true to line and level POT-PTFE bearing consisting of a metal piston supported by a disc or un reinforced elastomer confined within a metal cylinder, sealing rings, dust seals, PTFE surface sliding against stainless steel mating surface, complete assembly to be of cast steel / fabricated structural steel, metal and elastomer elements complete as per IS 2062, IS:1030, AISI:304, AISI:316, IS:6911, BS:3784, IS:3400, IS:226, BS-5400, Bridge code and as per drawing and approved Technical Specifications. The design of the bearings shall be submitted by the manufacturers/contractor and got approved from Railway before fixing. Test report of the bearings should be got approved before the materials are lifted from the manufacturer premises. Payment is based on 250 MT capacity of Bearing				
211141	POT-PTFE Bearing	MT Bearing Capacity	210.45	4000	841800.00
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				
192062	Wing wall and Return wall	cum	1511.23	132	199482.36
195030	Centering and shuttering including strutting, propping etc. and removal of form for :				
195032	Abutment, pier, wing walls and return walls	Sqm	232.60	334	77688.40

221050	Providing and laying Pitching with stone boulders weighing not less than 35 kg each with the voids filled with spalls on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications (Filter media to be paid separately under the relevant item)	Cum	844.34	1659.92	1401536.85
222160	Providing weep holes by making suitable opening or drilling in existing Brick masonry/Plain/ Reinforced concrete abutment, wing wall/ return wall with 100 mm dia AC pipe, extending through the full width of the structure complete	Metre	269.03	2700	726381.00
222170	Providing and fixing of Drainage Spouts of 100 mm UPVC complete as per drawing and Technical specification	Metre	235.77	475	111990.75
221080	Providing & laying of a Permeable geotextile filter between pitching and embankment slopes on which pitching is laid to prevent escape of the embankment material through the voids of the stone pitching / cement concrete blocks as well as to allow free movement of water without creating any uplift head on the pitching as per RDSO guide lines.				
221083	With GJT-Type 3 (For moderate conditions)	Sqm	48.47	30	1454.10
222180	Providing and laying of filter media consisting of granular materials of GW, GP, SW groups as per IS 1498-1970 in required profile behind boulder filling of abutments, wing walls / return walls etc above bed level with all labour and material complete job	Cum	1439.19	229.9752	330978.01
231010	Preparation of subgrade by excavating earth upto 22.5cm depth, dressing to camber and consolidating with power road roller of 8 to 12 tonne capacity including making good the undulations etc. and disposal of surplus earth with lead upto 50 Metres	Sqm	42.01	11352	476897.52
231020	Consolidation of sub grade with power road roller of 8 to 12 tonne capacity including making good the undulation etc. with earth or quarry spoils etc. and re-rolling the sub grade	Sqm	1.24	12446	15433.04
231040	Providing and laying water bound macadam with specified stone aggregate, stone screening and binding material including screening, sorting, spreading to template and consolidation with power road roller of 8 to 10 tonne capacity etc. complete.				

231041	Sub-base with stone aggregate 90mm to 45mm including stone screening 13.2mm size	Cum	949.62	1866.80	1772750.62
231042	Base course with 63mm to 45mm size including stone screening 13.2mm size	Cum	934.29	2434.40	2274435.58
231043	Base course with 53 mm to 22.4 mm size including stone screening 11.2 mm size	Cum	902.34	350.00	315819.00
233010	Providing and applying tack coat using bitumen emulsion (Rapid setting) complying with IS: 8887-1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the existing road surface as per specification				
233011	On W.B.M @ 0.4kg/sqm	sqm	18.92	5175.00	97911.00
233012	On bituminous surface @ 0.25kg/ sqm	Sqm	13.41	13099.5	175664.30
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	237.53	1747.5	415083.68
236010	Cement concrete Grade M15 of coarse aggregate 40mm nominal size, in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete	cum	1480.18	133.00	196863.94
236020	Providing and laying design mix cement concrete in roads, having a cube strength of M-25/30 using cement, coarse sand and graded stone aggregate of 40mm nominal size as per approved design. mechanically vibrated, steel form work, curing, providing and filling	cum	1994.28	386.00	769792.08

238010	Providing and laying dense Bituminous macadam on prepared surface with specified graded crushed stone aggregate for profile corrective base / binding course, mixing of stone aggregate, filler and bitumen in hot mix plant, transporting the mixed material and laying with paver finisher fitted with electronic sensing device to the required level and grade and rolling by road roller as per specifications, to achieve the desired density, but excluding the cost of primer / tack coat.				
238011	75mm average compacted thickness with bitumen of 60/70 grade @ 5% by weight of total mix and lime filler @ 2% by weight of Aggregate. (For very heavy traffic condition).	sqm	446.43	16527	7378148.61
238020	Providing and laying Dense Bituminous concrete on prepared surface with specified graded stone aggregate for wearing course, mixing of bitumen, filler & stone aggregate in hot mix plant, transporting the mixed material and laying with mechanical paver finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per specification, to achieve the desired density and compaction but excluding cost of primer /tack				
238022	40 mm/50 mm compacted thickness with bitumen of grade CRMB (Crumb rubber Modified Bitumen) 60 @ 5.5% and lime @ 3% by weight of total mix	cum	6589.28	1291	8506760.48
237030	Supplying and laying Kerb stone 30cm X 20cm (In Section / including chamfering as per design if any) chisel dressed on top and sides including fixing in 1:6 cement sand mortar and pointing with 1:2 cement mortar (1cement:2 Sand ordinary) including all excavation / refilling, ramming and other incidental works as required	meter	470.10	2080	977808.00
237010	Providing and fixing Cat's Eye (Glow studs) heavy integral stem, reflective, aluminium die cast with elegant finish of size 100x100mm and 20mm high having a stem of 50mm (or 12mm dia. 90mm long) screwed and nailed to fix into the road surface or at the nosing of the central verge. The road studs should have reflectors fitted on one side of the studs (3Nos. 7 element or 1No. 29 element reflector) complete	each	483.33	616	297731.28

238030	Providing and laying bitumen mastic wearing course (as per specifications) with industrial bitumen of grade 85/25 conforming to IS : 702 prepared by using mastic cooker and laid to required level and slope including providing antiskid surface with bitumen precoated fine grained hard stone chipping of approved size at the rate of 0.005 cum per 10 sqm and at approximate spacing of 10cm centre to centre in both directions, pressed into surface protruding 1mm to 4mm over mastic surface, including cleaning the surface, removal of debris etc. all complete. (Considering bitumen using 10.2% as per MORTH specification)				
238032	40 mm thick	Sqm	1005.49	5550	5580469.50
238040	Manufacturing supplying and fixing retro reflective sign boards made up of 2mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type-IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bi-lingual), symbols and borders etc as per IRC: 67:2001, pasted on substrate by adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 3x35x5 mm to a vertical post made up of M.S. Tee section ISMT 50x50x6mm- Welded with base plate of size 100x100x5 mm at the bottom end and including making holes in pipes, angles flats, providing & fixing M.S. message plate of required size steel work to be painted with two or more coats of synthetic enamel paint of required shade and of approved brand & manufacture over priming coat of zinc chromate yellow primer (Vertical MS-Tee support to be painted in black and white colours). Backside of aluminium sheet to be painted with two or more coats of epoxy paint over and including appropriate priming coat including all leads and lifts, etc. complete as per drawing, specification				

	and direction of Engineer in charge. (Note: Concreting for fixing may be done as per site requirement and paid for separately.				
238041	Cautionary/warning sign boards of equilateral triangular shape having each side of 900mm with support length of 3650mm)	Each	3268.95	33	107875.35
238050	Providing and applying 2.5mm thick road marking strips (retro-reflective) of specified shade/colour using hot thermoplastic material by fully/semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater driven by experienced operator on road surface including cost of material, labour, T&P cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer in charge and in accordance with applicable specifications	Sqm	513.03	319	163656.57
238060	Providing and fixing of raised pavement markers made of polycarbonate moulded body and reflective panels with micro prismatic lens made of polycarbonate with abrasion resistant coating. The length, weight and width of body shall not exceed 95 mm, 18mm and 105 mm respectively. The lower surface of the RPM shall be supported with two nylon shanks, each of length not less than 25mm. Fixed to the road by using twin nylon shanks using bituminous adhesive on bitumen roads or without nylon shanks with epoxy resin adhesive on concrete roads as per directions of Engineer incharge. the RPM should conform to the quality standards as laid down in IR standard specifications	Each	662.06	291	192659.46
	Miscellaneous cost of Any Other USSOR item to Complete the Work		L.S		2000000.00
	TOTAL USSOR A-1				**82829393.27**
	Add Escalation on USSOR 2010 (17% As per NWR HQ Letter No-Survey & Nirman/W/-623/0 Dated 22-05-2012)		17.00%	82829393.27	14080996.86
	Total 'A-1' with escalation				96910390.13
	Add - Average LAR of similar nature of work in June 2015 is 9.252%				
	updated average % from June 2015 to Jan 2016=9.252-0.958=8.294%		8.294%	96910390.13	8037747.76
	Total updated cost of Schedule A-1				**104948137.89**
33060	**Supply and using cement at worksite :**				
33061	OPC 43 grade	Tonne	5060.00	4711.88	23842123.74

33062	OPC 53 grade	Tonne	5060.00	0.00	0.00
33063	PPC grade	Tonne	4830	82.23	397161.24
	Total A-2 (Cost of Cement)				24239284.98
	Add Escalation on USSOR 2010 (30% As per NWR HQ Letter No-Survey & Nirman/W/-623/0 Dated 22-05-2012)		30.00%	24239284.98	7271785.50
	Total 'A-2' with escalation				31511070.48
	Add - Average LAR of similar nature of work in june 2015 is 9.252%				
	updated average % from June 2015 to Jan 2016=9.252-0.958=8.294%		8.294%	31511070.48	2613528.19
	Total updated Cost of schedule A-2 (Cost of Cement)				**34124598.66**
	Steel:				
45010	Supplying Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
45016	Thermo Mechanically Treated bars(TMT) Note - The Contractor Shall Quote The Rate for (TMT) Bar of Grade Fe-500	Kg	45.54	1454232.29	66225738.59
	Total Cost of schedule A-3 (Cost of Steel)				66225738.59
	Add Escalation on USSOR 2010 (57% As per NWR HQ Letter No-Survey & Nirman/W/-623/0 Dated 22-05-2012)		57.00%	66225738.59	37748671.00
	Total 'A-3' with escalation				103974409.59
	Add - Average LAR of similar nature of work in June 2015 is 9.252%				
	updated average % from June 2015 to Jan 2016=9.252-0.958=8.294%		8.294%	103974409.59	8623637.53
	Total updated Cost of schedule A-3 (Cost of Steel)				**112598047.12**
	GROSS UPDATED AMOUNT SCH.'A' (USSOR-2010)(A-1+A-2+A-3)				**251670783.67**

Schedule-B - (Non Schedule items)					
NS/1	Casting and transporting precast reinforced cement concrete boxes and U-Type/L-Type retaining wall segments in M30/35 design mix near LHS site with machine batched, machine mixed and machine vibrated design mix concrete, including the cost of centering, shuttering, finishing, admixture, if required, as per IS: 9103 to retard setting of concrete/improve workability without impairing strength and durability as per direction of Engineer-in-charge. Only machine mixed and automatic weigh batched concrete/ concrete produced by Fiori shall be used during entire work. The concrete shall be placed with the help of mechanical means only. Rates are inclusive of all the materials, labour, transporting to bridge sites including loading & unloading with contractor's own labour and equipments, curing, machinery, tools, plants, taxes etc. complete in all respect except cost of reinforcement & cement which will be paid separately under relevant USSOR items.				
	Design mix M- 30 / 35 - In RCC box etc.	Cum	5426.01	220.00	1193722.816
NS/2	Casting, transporting and launching of precast reinforced concrete slabs in M-25 design mix for RCC boxes including launching during traffic block or without traffic block etc. as per approved drawings & design with contractor's own materials such as sand, water, 6mm to 20mm well graded machine crushed stone aggregate, admixtures etc. including machine mixing of all gradients, placing, mechanical vibrating, curing etc. and providing shuttering, centering, formwork and handling, transporting to bridge sites including loading & unloading and launching including supplying , laying and levelling of required layer of sand underneath RCC slab as per approved drawing with contractor's own labour and equipments, all lead, lift, royalties, taxes etc. complete in all respect except cost of reinforcement & cement which will be paid separately under relevant USSOR items				
(a)	Pre cast RCC Slab in M:25	Cum	4178.78	54.00	225654.012

NS- 3	Providing and laying precast 100mm thick inter locking pavers rubber moulded of M:30 concrete with top layer of 8 mm thick in ordinary Portland cement in colour red & grey, with hardener etc on 50mm thick base of sand as a complete job to the entire satisfaction of engineer in charge. (This will include all the cost of labour, material, lead, lift, loading, unloading & taxes etc. Northing shall be paid extra on any account).	Sqm	756.02	1156.00	873959.12
NS/4	Placement of precast reinforced cement concrete components (RCC box/U-Type/L-Type segments of retaining walls) with the help of suitable capacity road crane at desired location during traffic block of short duration with all contactor's labour, tools, material, cranes, machinery, preparation of surface including cost of filling of joints by epoxy mortar, cutting of lifting hooks by gas cutting, all lead, lift, taxes etc complete in all respect.				
(a)	In traffic block of short duration	MT	3671.81	239.00	877563.068
(b)	Without Traffic Block	MT	1790.62	559.00	1000958.592
NS/5	Supply of pea gravel 2mm to 4mm size for srounding of tube well assembly according to rly. Specification based on ISI specification of tube well	Cum	2728.76	20.00	54575.136

NS/6	Removing of existing any type of track for insertion of RCC boxes, laying, linking & lifting of any type of track on newly laid RCC box on either side of LHS including cutting of rails, drilling of holes, subsequent through packing to make track fit for 75Kmph & de-stressing of LWR/CWR of any type of track and picking up of stone ballast (new or retrieved) including loading & leading of ballast from stacks Various activities involved in this work along with their tentative scope are: (i) Removing of existing track - 39.0mtr(ii) Removing ballast from track & keeping it away from site of work.(iii) After insertion of RCC boxes, putting back existing ballast at (ii) above and supplying& putting in track additional quantity of ballast so as to provide minimum ballast cushion of 300mm to 350mm in compacted condition.(iv) Re-laying & linking of track - 39.0mtr(v) Lifting of track in stages of 50/75mm for required length to ensure ballast cushion of 300mm to 350mm as per site conditions minimum ballast supply 50.0cum on each LHS.(vi) Cutting of any type of rails – 4 to 8 nos.(vii) Drilling of 31.75mm/26.5mm or similar dia holes in rails of any section- 16 nos (viii) Subsequent through packings to make track fit for 75Kmph-50.0mtr either side of LHS (ix) Local de-stressing of LWR/CWR 100.0m on either side of LHS.(x) AT welding of rail joints on any type of rail on single rail/SWP/LWR with Railway prefabricated moulds and railway portions as per IRS specifications T-19-2012 (amended up to date) • Qty. and scope of work shown above at S.No. (i) to (x) are tentative only. The scope of these items may vary as per site conditions & as per direction of Engineer-in-charge for completing the work of LHS safely and successfully. The quoted rates are for complete job. Nothing extra shall be paid on any account.	Each	72747.16	1.00	72747.16

NS-7	Insertion and taking out of temporary service girder of required length as per need of site below track in short duration traffic block as per Railway approved drawing to provide temporary arrangement for casting of box/excavation of hard/rocky strata to make space for launching of RCC Box/for launching of RCC components in subsequent blocks, including making and laying sleeper cribs, bearing plate, dismantling & laying of track, cutting/filling of earth etc. as per standard drg. to make track fit for 20 Kmph speed, with contractors own labour, crane, tools and plants etc. Nothing extra will be paid to the contractor except the accepted rate, whatsoever	Per Job	102574.48	1.00	102574.48
NS/8	Laying of new BG/MG track at level crossings as per RDSO approved drawing with Railway's New/SH rails for check rails and special sleepers laid truly square at required spacing over the compacted ballast bed with contractor's own labour and T & P. The rates include fabrication of check rails as per standard drawing, fixing them on the special sleepers with the help of MS brackets, bolts, washers, plate screws etc; applying two coats of anti-corrosive paint of approved quality on running as well as check rails, marking sleeper spacing, cleaning and greasing of the MCI insert and ERCs as per Para 1411 (5) of IRPWM (second reprint 2004 corrected up to date), raising of track in stages by not more than 75mm at a time to achieve clean ballast cushion of 300mm to 350mm, two rounds of packing manually to bring the longitudinal and transverse level to desired standard, dressing and boxing of ballast, providing wooden blocks between the check rails on both the ends and filling up the space between the wooden blocks by ballast to facilitate smooth movement of road traffic and any other incidental work to the entire satisfaction of the Engineer in charge. (i) Level Crossings with 7.00 (+0.50) m long check rails. (Use this NS item only when a Temporary LC is required to be commissioned before construction of LHS)	Each LC	5165.15	1.00	5165.1468

NS-9	Supply, installation testing and commissioning of lifting barrier (for level crossing gate) Drawing No.SA-7974/M (Adv) Alt-3 with Gate lamps, levers with lever locks, boom locks arrangement and winch to Drg. No.SA-8132DC (Adv), complete 10 meters to spec. No. IRS-S-1078. **Both side of level crossing (1 set = 02 Barriers.)**.	per set	220084.28	1.00	220084.2768
	(Use this NS item only when a Temporary LC is required to be commissioned before construction of LHS)				
NS-10	Earthwork in approach roads of level crossings with contractor's own earth of approved quality and spreading the same in layers not more than 300mm in loose state and compacting the same layers by layers to achieve desired compaction using contractor's own suitable rollers to make the roads to correct profile as per Railway requirement specifications and special condition of contracts. The rates are inclusive of contractor's own machineries and equipments , labours, procurement of earth , loading, leading and transporting to the site, breaking clods, spreading, mechanical compaction watering dressing of all slopes and top surfaces to required levels with all taxes royalties etc.	Cum	96.47	1500.00	144706.8
NS-11	Providing reinforcement cement concrete of mix design **M-35/M-40** Grade with clean well graded 6mm to 20mm size broken stone aggregate cast-in-situ complete including batching, mixing, handling, placing, vibrating, compacting, curing as per specifications, cost of fixing and removing of centering and shuttering as per approved drawings in pile caps, piers, pier caps, pedestals, crush barrier, parapet, median, kerb, etc. complete.				

	The rate includes the cost of all materials such as stone aggregate, sand, water, shuttering and centering, all labours, handling, batching, mixing, vibrating etc, equipments and machinery such as mechanical mixer, vibrator etc. finishing smooth of exposed surfaces after removing centering and shuttering. The rates inclusive of providing temporary staging arrangements with contractor's material. The rates also include transportation of all materials with all lead, lift, all taxes & royalties etc. but excluding the cost of cement & reinforcement steel, which will be paid separately under relevant NS items.				
(i)	In Pile Cap	Cum	2550.56	869.00	2216436.64
(ii)	Sub structure-pier, pier cap, padestals & abutments etc.	Cum	5749.39	2048.78	11779216.94
(iii)	In super structure, deck slab, parapet, wearing coat, crash barrier etc.	Cum	6913.35	1506.00	10411505.1
NS-12	Supply, fabrication, (with MS IS 2062:2006 Gr.B killed & Normalised structural steel) transportation of steel Girders to sites, including testing of welded, revitted steel girder as per Indian Railway standard specification for Steel Bridge Girders SI.No. B1-2001 and as per RDSO Drawing No. RDSO-B -11755 R , RDSO-B -11756 R (as corrected upto date) IRC loading standard including supply and fixing in position of shop rivets, bolts ,HSFG Bolt, nuts, washer, welds, electrodes etc. required for complete fabrication of girders and transportation of fabricated Girders to the construction site as per direction of engineer in charge including loading & unloading at site and stacking of same at place(s) as directed by Engineer incharge including applying shop paint of approved quality over the structural members complete in all respect and including cost of labour, MS bolts nuts, rivets, welds all consumables, tools and plants etc. and all taxes.	MT	103373.27	158.00	16332975.87
	NOTE -				

(i)	The rates shall also include assembling at shop yard or at site as directed by Engineer. all structural steel section such as Angles, Channels, Flats, Plates etc. required for complete work including its transportation shall be arranged by the Contractor on his own cost, all steel shall be approved quality as per specification. For testing / inspection and charged thereof refer additional Special Conditions and Specifications for fabrication and erection of steel structure.				
(ii)	The rate also includes NDT and other testing as per Railway Specification for the fabricated girder.				
(iii)	The fabrication work / cost includes preparation and approval of fabrication (shop) drawings / scheme welding of components, all structural steel welding consumables, cutting, shaping, holing, welding by fillet or butt welds, post weld treatments, inspection and testing, construction of all types of ties, stiffeners, packing, diaphragm, H.D. Bolt steel drifts, shop welding, shop rivets, jigs, fixtures, back up supports, accessories etc. and marking each number for site identification and transporting various components from fabrication yard to bridge site in package bundles and other means with due care and safeguards as described in the specifications, and as directed by Engineer including loading, unloading, sorting, number-wise systematic matching etc. complete with contractor's own labour, material, tools & plants including all lead, lift and taxes complete.				
(iv)	The rate also includes apply one coat of base shop paint and finish two coat paint of approved sample after launching and casting & finishing of deck slab with all respect works. The paint sample should be got approved from the Engineer and application should also be as per instruction of Engineer.				
(v)	The rate also includes cost of inspection testing of girder in stages by consignee from railway.				
NS-13	Assembling, erection and launching of fabricated steel girders (with MS IS 2062:2006Gr.B killed & normalised structural steel) in proper position, line, Level, alignment including erection of staging and scaffolding, dismantling the same after completion of work under	MT	23510.34	158.00	3714633.72

	traffic block. The rate shall be inclusive grouting of sleeve bolts on the bed block complete in all respect with all materials, labour, tools and plant lead, lift and taxes.				
(i)	Erection work includes preparation and approval of erection / assembly / launching scheme.				
(ii)	Erection work includes Contractor's own cranes of sufficient capacity and boom length, steel trestles as per site conditions of safe and adequate capacity or other manual / mechanical methods of erection and launching of truss members / girders. It also includes the work of battens, lacings, ties, Stiffeners, packing, diaphragm, T&F bolts, HSFG Bolt, steel drifts, field riveting, templates, jigs, fixtures, back up supports, accessories, temporary staging of CC Cribs of sufficient quantity for flooring and camber jacks, mechanical and hydraulic jacks, steel wire ropes and winch crabs, launching nose of steel for cantilever launching (if any), dead anchorages and any other suitable material such as small cranes for field assembly, shifting of leaves of steel girders from horizontal position to vertical position and vice-versa, scaffolding and air compressors welding plants, pneumatic tools and mini workshop facilities at site etc.				
(iii)	The job of erection also includes transport of already led materials (vide relevant item) to assembly platform or to nearby site location, lifting of truss components to required staging, assembly of truss members on drifts / bolts, field riveting and welding with the Contractor's own labour, material, tools & plants etc. complete job as required for the work.				
(iv)	This also includes cost of material, fabrication, erection and dismantling of all temporary components like gap structure, tower, high tensile cables (including anchorages), truss strengthening members, sway restraining devices such as sway rope restraining cables, counter weights, dead anchorages and other preliminary arrangements used for launching truss members etc. to suit the site requirements as required for the work for which no extra payment shall be made.				

(v)	Provision of all accessories such as inspection ladder, trolley refuge, pipe line, fixing arrangements, cable fixing arrangement and railings etc. of steel is also covered under above item which shall be paid as per actual weight.				
NS/14	Providing controlled reinforcement concrete in M-45 grade with clean well graded 6mm to 20mm size broken stone aggregate cast-in-situ in **PSC I/Box Girder with diaphragm & deck slab** super-structure including handling, placing, vibrating, compacting, curing, fixing and removing centering and shuttering as per Railway's approved drawings and MORT&H (IRC) specifications. The rate includes cost of erection of temporary steel staging including strutting, propping, wedging, easing, striking, & removal etc. complete and casting of platform for staging if required, providing required clearance for safe movement of trains duly observing all safety precautions making provision for fixing overhead equipments, road lights arrangements, cable ducts, drainage spouts, etc. Rate also includes the cost of all materials such as coarse aggregates, fine aggregates, water, admixtures etc. including transportation with all lead lift taxes and royalties. The rate inclusive of all labours, tools and plants, machinery and equipments to complete the work in all respect.				
	NOTE:- The rates are exclusive the cost of cement, reinforcement steel, HTS wires which will be paid separately under relevant NS items.				
	PSC Grade M-45 (Girder, pedestal)	Cum	12584.15	1085.00	13653797.33
NS-15	Designing, providing and erection of specified grade precast RCC facia panels of thickness 180 mm made with M:35 Grade concrete batching plant, transit mixer, concrete pump and vibrator for retaining earth with all elements and accessories including reinforcing element complete as per approved drawing and clause 3100 of MoRT&H specification including all material, labour, machinery etc (Scope of work includes designing, getting approval, casting in yard curing storing, transporting, lifting, placing in position, erection with all necessary fasteners etc. complete)	Sqm	5488.25	6848.00	37583536

NS-16	Providing, laying, spreading (with paver finisher only) and compacting etc mix macadam (WMM) base course comprising of graded stone aggregate and granular material conforming to MORT&H specification (Table 400-II) in layers of equal compacted thickness each consolidated, including pre-mixing the material with water at OMC in mechanical mixer (Pug Mill), carriage of mixed material by tipper to site, laying in uniform layers in base course and compacting with power vibratory-roller to achieve the desired density complete as per MoRT &H specification clause -406 including all material, labour, machinery, lighting, guarding,.	Cum	1459.01	4958.00	7233771.58
NS-17	Providing, laying, spreading and compacting of granular sub-base by providing close graded material, mixing in mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per MoRT&H specification clause - 401 including all material, labour, machinery, lighting, guarding Grade - I material.	Cum	1234.55	4958.00	6120898.9
NS-18	Providing and laying of filter media with granular materials / crushed aggregates satisfying the requirements laid down in clause 2504.2.2 of MORT&H specifications with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to the firm condition complete as per drawing and technical specification including all material, labour machinery as per clause 710.1.4 of IRC:78 and clause 710.1.4 of IRC:78 and clause 2200 of MORT&H specification.	Cum	1260.20	4109.00	5178161.8

NS-19	Providing, placing and compacting to desired density approved backfill material in layers as per approved methodology including testing of reinforced fill portion in approaches between the reinforced soil (RS) wall panels as per approved drawings as per clause 3103 of MoRT&H specification. The soil should be predominantly course grained. Not more than 10% of particle should pass 75 micron sieve. The item shall be measured and paid for the finished volume of backfill and subgrade placed in position excluding the volume of filter media at base and behind the RS / RE walls.	Cum	367.56	23246.00	8544299.76
	Total of Schedule-B				**127540944.24**
	SCHEDULE "C"- Misc. NS Items				
NS-20	Providing vehicles of SUV category INNOVA/ SCORPIO or equivalent with Driver and POL for requirement of Employer/ client as directed for any single day purpose. No other payment will be admissible except Toll tax and that will be reimbursable separately as per actual receipts.	Vehicle Per Day	2500	180.00	450000
NS-21	Providing vehicles of category BOLERO/ INDIGO/SWIFT or equivalent with Driver and POL for requirement of Employer/ client as directed limited to 3000 kms per month & 12 hours/day average duty complete. (No other payment will be admissible except Toll tax and that will be reimbursable separately as per actual receipts). This item is additional to supply of vehicle mentioned in the tender document anywhere as incidental to the work.	Vehicle Per Month	40626.89	15.00	609403.35
	Extra Charges for running of Vehicle per Km over assured mileage per month average in quarter as mentioned in items as above.	Per Km	10.622	10000.00	106220
	Total of Schedule-C				**1165623.35**
	Total cost of work for Railway bridge proper (A+B+C)				**380377351.26**

ABSTRACT OF ELECTRICAL WORK & EXISTING UTILITY					
	Schedule -D				
S N	**Item description**	**Quantity**	**Rate**	**Unit**	**Amount**
	ELECTRICAL PART				
1	Supply and erection of hot dipped galvanised steel swaged tubular pole conforming to IS: 2713-1980 (part I to II) with galvanised base plate of size 400mm x 400mm x 7mm in position including excavation of the pit and filling the same with C.C. of M-10 grade (1:3:6) from base plate to 50cm above ground level, with the help of steel frame not less than 40 cm dia up to 114.3mm outer dia and 50 cm beyond 114.3mm outer dia around the pole. Duly finished with cement plaster, earthing terminals, cable entry, GI cable sleeve complete as required. The pole shall be galvanised using ISI mark tube for structural purpose.				
	10 Mtr Long	70.00	16700.00	Each	1,169,000.00
2	Supply, Erection and Fixing of hot dipped galvanised Overhang (60 X 3.25 mm) with cap (250 x 137.9 x 4.05 mm) over the existing poles (Double arm overhang)	70.00	1240.00	Each	86,800.00
3	P/ F IP-65/ IP-66 protected street light luminaries on existing bracket. Fixture made from powder coated single piece pressure die cast aluminum housing with heat dissipation fins on housing with high power LEDs of CREE/ NICHIA/ OSRAM/ PHILIPS make. Diffuser /glass cover for ensuring IP-65 protection for lamp and control gear compartment, system lumen output of 1500—8500 high power LED. Integrated driver shall be high efficiency having efficiency more than 85 % and in compliance to IEC standards. System life of 25000				

	burning hours with 70 % of initial lumens maintained. Fixture shall be in CE compliance.				
	IP-65 protected LED street light luminaries				
	LED street light fixture 110-120 watt	200.00	43000.00	Each	8,600,000.00
4	Supply and erection of P.C.C./R.C.C. pole as per REC manual no 15/1979 conforming to IS: 2905/1966 as per requirement of sec3 in alignment, including excavation of pit and back filling with stone aggregate/boulders and soil in 0.45m consolidating each deposited layer of 0.45m by ramming and watering etc complete in all respect				
a	9.0 Mtr long as per Discom specification	20.00	3220.00	Each	64,400.00
5	P/F testing & commissioning of kiosk type weather proof out door main cubical panel size 750 mm X 1250 mm X 500 mm (app.) made out of 14 gauge MS sheet front and back both side openable duly hinged door with locking arrangement by providing both side held draft and all required hard wares. The cubical should be dust and vermin proof followed by coat of zimpholite primer and finally two coats of enamal grey paint. The cubical should be mounted with hard ware on angle iron frame size 50 X 50 X 6 mm and 1500 legs duly painted framed be grouted 750 mm below ground level with cement concrete 1:3:6 in 1000 X 500 X 600 mm and providing brick masonry along angle iron frame above G.L. They shall be in two section comprising as follows:				
	(i) Providing & Fixing 415 V, TP combination double break HRC switch fuse unit, 100 Amp. Rating for incoming supply with HRC fuse 100 Amp rating and BCH/L&T/EE/ Siemens/ ABB.				
	(ii) Providing fixing timer switch TSQ 100 series 240 Volts, and full running service standard mounting with base of L & T or equivalent make including the cost of contactor and 63 amp. 50 Hz. 440/400 volt.				
	(iii) P/F open busbars 25mmX3mm of required length duly covered by heat shrinkable sleeves with busbar supporters				

	(iv) Provision for residual current operated 63 Amp. 1 Pole ELCB of MA to 300 MA sensitively as required including making connections etc.(EE/Load stop make)				
	(v) P/F Nos. 415 Volts Tpn combination double break switch fuse unit,63 Amp. Rating with HRC fuses (EE/mds/ SCHNEIDER bch/Siemens) for outgoing cable and making connection etc. also to have a provision for two nos. above switches.				
	(vi) P/F of 3 nos. RYB phase indicator resistance type complete with lamp (Takaic/ac.). P/F HP danger plate of size 200 X 150 mm made of aluminium sheet 20 gauge.				
	(vii) P/F cable glands double compression type and Al. lugs duly crimped for incoming cable and out going up to 5mm Cables.				
	(viii) Providing 2 Nos. earth terminals including lugs and H/W duly inter connected with 8 SWG bars copper wire.				
	(ix)Inter connection of main busbar to each outgoing switch and swathes to cable terminal shall be with 4 sqmm PVC copper conductor duly crimped with AL lugs.				
	(x) Cable termination shall be fixed at backside of the panel with H/W and spring washers				
	xi) Light control switch with photo sensor complete unit as required	2.00	55000.00	EACH	110,000.00
6	P/Laying XLPE insulated / P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor Armoured of IS:7098-I/1554-1 approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.				
	10.0 Sq.mm				
a	4 core	800.00	165.00	Mtr.	132,000.00

	16.0 Sq.mm				
b	4 core	800.00	175.00	Mtr.	140,000.00
7	Providing & Laying GI pipe 125mm dia B- Class	250.00	798.00	Mtr.	199,500.00
8	Providing & Laying PVC pipe 125mm dia	600.00	185.00	Mtr	111,000.00
a	6 SWG G.I. Wire	600.00	12.00	Mtr.	7,200.00
b	25mm x 3mm G.I. Strip	100.00	53.00	Mtr.	5,300.00
7	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, copper lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt grade as required of size.				
a	4 x 10.0 sq.mm	400.00	75.00	SET	30,000.00
b	4 x 16.0 sq.mm	125.00	126.00	SET	15,750.00
8	S & Laying following size' A' class G.I. Pipe with accessories for laying earth conductor/strip in ground/surface/recess as required				
	40mm dia	100.00	274.00	Mtr.	27,400.00
9	Providing and Fixing of marshalling box on street light pole with 2 mm CRCA sheet steel ,6 amp two nos MCB, bakelite sheet ,insulators , connectors, etc as required size200mm x100mmx375mm	100.00	600.00	Each	60,000.00
10	P & Laying XLPE insulated IS:7098/II/85 of approved make H.T. cable for working voltage 11 K.V. Earthed direct in ground including excavation of 30cmx100cm size trench, 25cm layer of river sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc.as required of size.				
A	3 core 185.0 Sq.mm	200.00	1280.00	Mtr	256,000.00
11	Providing & making heat shrinkable type indoor/outdoor/straight through terminations/joint kit of approved make suitable for XLPE insulated 11 KV cable, with required components, preparation of cable ends, testing etc. as required of following sizes .				
A	3 core 300 Sq.mm				

(a)	Indoor	12.00	3460.00	nos	41,520.00
(b)	Outdoor	12.00	3660.00	nos	43,920.00
(c)	straight Through	8.00	8810.00	nos	70,480.00
B	3core185 sq mm				
(a)	indoor	8.00	3265.00	nos	26,120.00
(b)	Outdoor	8.00	3465.00	nos	27,720.00
(c)	straight Through	6.00	8160.00	nos	48,960.00
12	P/Laying XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor Armoured of IS:7098-I approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand,IInd class bricks cover make (Gloster, polycab, Havells,RPG,ICL,Rallison,paramount,)				
(a)	6.0 Sq.mm, 2 core	800.00	121.00	Mtr	96,800.00
(b)	25.0 Sq. mm, 4 core	1000.00	221.00	Mtr	221,000.00
(C)	185.0 Sq.mm, 3.5 core	400.00	834.00	Mtr	333,600.00
13	Supply and erection of RS joist of 116 x 100 mm, 11Meter long with the welded/ bolted top hamper 65 x 65 x 6mm (0.7 Mtr long) making necessary arrangement for fixing 11 kV 'V' cross arm, LT bracket and guard wire bracket, grouted in ground 1/6 th of its length and fixed with cement, coarse and grit in 1:3:6 ratio in 1/5th of its length (40cm dia) from the bottom including two coats of aluminium paint over the complete length of joist.	6.00	12700.00	No's	76,200.00
14	Supply and fixing double pole structure for 11/0.4 Kv substation as per Discom specification complete in all respect as required including nuts and bolts etc (excluding the cost of poles) made of MS channel of 4 nos 100 x 50 x 6mm and 4 nos 75 x 40 x 6mm and MS flat 50 x 6mm as per Discom specifications.	4.00	8570.00	No's	34,280.00

15	Supply and fixing of 11kV, 400 Amp 3pole, central pot rotating double break type isolator (IS:9921 part I toV) without earth blade operating mechanism with GI spring loaded reverse loop type fixed contact, solid hard drawn electolytic copper tubular moving contact with silver/ nickel plated at end points, 9 nos post insulator of 12 kV (IS:2554 & IS 5350 part III), hot dipped galvanising hard ware, nut, bolts etc complete in all respect as per specification of Discom.(Type tested by ERDA/CPRI.)	4.00	13200.00	No's	52,800.00
16	Supply and fixing of distribution type Lightening arrestor 9 kV, 5 kA (IS:3070) with mounting breaking to be installed on existing DP structure. (Type tested by ERDA/CPRI.)	4.00	2390.00	No's	9,560.00
17	Supply and fixing of pillar box made of 2mm CRCA MS sheet of 415 volts 3 phase 4 wire triple pole and neutral type, complete in all respect as required. Including knife switch, HRC fuses with copper one piece U contacts base, brass studs and nuts, copper busbar for main and interconnection, MS angle frame of 50 x 50 x 6 mm grouted with C.C. of M-10 grade to achieve the height of 1.5 feet above the road level suitable for four outgoing.(400 Amp capacity)	4.00	42500.00	No's	170,000.00
18	Supply and fixing 100 Amp, 11kV Horn gap fuse set IS 9385 on existing DP structure with 6 nos 24kV/22kV post insulator (IS:5350 part III), hot dipped hard ware, fuse wire of required size etc. complete in all respect as per specification given by Discom. (Type tested by ERDA/CPRI)	4.00	6050.00	No's	24200.00
19	Dismantling and re - erection of P.C.C./R.C.C. pole as per REC manual no 15/1979 conforming to IS: 2905/1966 as per requirement of sec3 in alignment, including excavation of pit and back filling with stone aggregate/boulders and soil in 0.45m consolidating each deposited layer of 0.45m by ramming and watering etc complete in all respect				
	9.0 Mtr long as per Discom specification	8.00	813.00	No's	6,504.00

20	Dismantling of existing electric poles/towers along with the ACSR conductors, guard wires, stay wire, insulators and other electrical items of the pole coming along the alignment of the road or in the plant premises and removal and transportation as well				
(iv)	Dismantling of LT line /joist/rail pole (PCC 8/9 mtr height) with existing street light fixtures, brackets, top hamper, earth guarding bracket, insulators, stay etc with ACSR conductor, 3 phase/ single phase, one neutral one earthwire and one street light	15.00	1200.00	No's	18,000.00
(v)	Dismantling of LT line pole (PCC - 8/9 mtr height) single phase/3 phase & 5 wires bracket, top hamper, insulators(pin or disc) earthwire and conductors.	10.00	800.00	No's	8,000.00
(vi)	Dismantling of 33KV conductor any type	250.00	10.00	Mtr	2,500.00
(vii)	Dismantling of 11KV conductor any type	250.00	8.00	Mtr	2,000.00
(viii)	Dismantling of LT conductor /cable any type	250.00	5.00	Mtr	1,250.00
(xii)	Dismantling of Telephone pole (Tubular Type).	10.00	500.00	No's	5,000.00
(xiii)	Dismantling of the structure with two pole, mounted transformers along with distribution boards G.O, D.O, street light panel, stays, earthing wire pipe, cabling, etc & installing the same transformer on the structure newly erected along with distribution b	1.00	5000.00	No's	5,000.00
21	Supplying and fixing H.T. Pillar Box. Made out of 3.2mm (10 gauge) thick CRCA/ MS sheet, suitable for 11000 Volts, with box size 1000 x 750 x 1500mm with a taper of 75mm at top, front and back side openable, duly hinged doors with locking arrangement by providing both side hold drafts and all required hardware for box, the cubical panel should be dust and vermin proof treated with two coats of enamel paint & primer. The cubical panel should be mounted with hardware on angle iron frame sizes 100 x 50 x 6 mm and 750 mm legs duly painted. The box should be duly supported by angle 50 x 50 x 6mm and MS strip 50 x 6mm internally to support jointing kits/ HT cable and there should be provision for two extra supports for angle s for T-off H.T. cable. The frame be grouted with cement concrete 1:3:6	4.00	18000.00	No's	72,000.00

	ratio in 1000 x 500 x 600mm to achieve the height 2.5 feet above the road and providing brick masonry along angle iron				
22	Providing and fixing testing and commissioning of Kiosk type weather proof distribution feeder pillar box of size 600 x 450 x 1000mm with a taper of 75mm at top (for protection from rain water) and made out of 3.2 mm (10 gauge) thick CRCA MS Sheet, front and back both side openable, duly hinged doors with locking arrangement by providing both sides hold drafts and all hardware for fabrication of box. The cubical panel should be dust and vermin proof followed by two coats of enamel paint and primer. The cubical panel should be mounted with hardware on angle iron frame 40 x 40 x 6m and 600mm long legs duly primer and black painted. Frame be grouted with cement concrete 1:3:6 ratio in 150 x 150 x 750mm and providing brick masonry along angle iron frame above ground level. The panel should comprise of as per following :	6.00	40000.00	No's	240,000.00
	(a) P/F of 2 Nos. knife switch 400 amp. with U contacts studs and washers etc.				
	(b) P/F of 10 Nos. of 32 amp double pole. MCB,& 5 nos TPN MCB Category-I make.(Hpl/mds)				
	(c) P&F of connecting strips of 63 amp. 4 pole.				
	(d) Backelite sheet 10mm thick and size 3'x2'.				
	(e) Epoxy insulators 40mm: 2 nos.				
	(f) PVC copper wire 10 sq.mm. flexible connecting to bus bars to MCB's and MCB to connecting strips in proper manner.				
	(g) copper bus bar double and D-Type of size 30 x6mm strip approx. 1.5' long, 8 no. with hardware.				
	(h) Provision of cable clamps at side of box and base plate with cable glands of suitable size				
	(i) P/F of 3 nos. RYB phase indicator resistance type com. with lamp(Takaic/ac.				
23	Providing fixing RS joist as Stud Support 116x100x6mm	4.00	10000.00	No's	40,000.00

24	Providing and laying underground cable IS:7098 Part-II as per JVVNL specifications enclosed and of approved make suitable for working voltage upto and including 33 KV in aluminium conductors XLPE armoured category-I including excavation of 30cm x 150cm size trench as per IS:1255, 24cm thick under layer, refill earth in the remaining portion, making necessary connections including testing etc. as required of size given below and providing & making heat				
	3 corex300Sqmm approved make	250.00	6600.00	Mtr	1,650,000.00
25	Providing & making heat shrincable type cable jointing kit for 33KV XLPE Cable				
	Outdoor type 3 Core 95/120/150//185 sqm	8.00	5620.00	No's	44,960.00
	straight Through 3 core 240/300/400 sqm	9.00	22400.00	No's	201,600.00
26	supplying and fixing protective Screen made of MS angle, tee flat, xpm GI plain sheet etc. and fixing by welding/J hook Bolts, nuts, clamps making Cement, mortar strip to fill up the gap between slab and bottom of screen or as suitable to site condition including one or more coats of zinc Cromate over a coat of red Oxide on FOB/ROB between section as directed by engineer in charge. red Oxide confirming to IS 104 and Covering Coat of Aluminium Confirming to IS 2339 to Approved quality with all taxes , Octroi, Contractors labours materials , tools and plants lead, lift transportation etc.	262.89	108.79	Kg	28600.00
Total cost of electrical items					**14,616,924.00**
	Add - Average LAR of similar nature of work in June 2012 is 9.55% and up dated Rate of LAR as on dated Jan 2016 by PVC index 7.158%= 9.55+7.158=16.708%	% increased @ 16.708%			**24,42,195.66**
	Updated Total cost of electrical items				**17,059,119.66**
	Total cost of Schedule A + B + C + D				**39,74,36,470.92**

Explanatory Notes for BOQ:

(i) Contractor shall quote rates of shuttering and curing for all heights.

(ii) The rates of reinforcement item mentioned in the above schedule includes placing of reinforcement under running traffic conditions.

(iii) All NWR USSOR items contain item nos., if any discrepancy is found in nomenclature, schedule nomenclature will prevail.

(iv) Tenderer must quote their rates for supply and erection of fabricated girders with their own material including loading, transportation and unloading at site. DFCCIL shall not provide any assistance for procurement of raw material for manufacturing the girders tendered for.

(v) The rates shall also be inclusive of all taxes legally leviable and / or any other taxes, license fee and royalty charges etc. if any.

(vi) The above quantity is approximate:-The DFCCIL reserve the right to increase / decrease the same.

(vii) The contractor has to submit launching scheme and detailed drawing of each component of the Railway safety and nothing extra shall be paid for this activity.

(viii) In Schedule 'D', electrical items (except item No. 26) are taken from RUIDP SOR 2013.

SUMMARY OF PRICES

Name of work:- Construction of Two Lane ROB (including approaches and LHS) in lieu of Level Crossing No. 102 at IR chainage 139/0-1 between Shri Madhopur and Ringas stations on Rewari-Phulera Section of JAIPUR Division of North Western Railway.

Sl. No.	Description of works	Amount of Schedule (Rs.) (updated DFCCIL Rate / cost)	Rates to be quoted in figures & words (Clearly mention above / below / at par on updated DFCCIL Rate / cost given in column 3)
1	2	3	4
1.	Execution of all works as per Schedule **"A"** **(items as per USSOR 2010 of NW Rly)**	**25,16,70,783.67**	..... % age (in figures) ..... (In words)
2.	Execution of all works as per Schedule **"B"** **(Non-schedule items)**	**12,75,40,944.24**	..... % age (in figures) ..... (In words)
3.	Execution of all works as per Schedule **"C"** **(Misc. Items)**	**11,65,623.35**	..... % age (in figures) ..... (In words)
4.	Execution of all works as per Schedule **"D"** **(Electrical works)**	**1,70,59,119.66**	..... % age (in figures) ..... (In words)
	Grand Total	**397436470.92 Say Rs 397436471/-**	

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 following example**:-

For Schedule A-1 (Updation is 17% above the rates of USSOR 2010 of NW Railway, After adding 17% in USSOR rate further updated by adding 8.294% for escalation), if the rate of any item of USSOR - 2010 of NW Railway / Schedule A-1 is "X" and

(a) If percentage quoted by the contractor is 5 % above (+5%),

Rate payable to contractor (R) will be (X) x 1.17 = (Y) ; (Y) x 1.08294 = (Z) ; (R) = (Z) x 1.05

i.e. (R) = [{(X) x 1.17} x 1.08294] x 1.05

(b) Similarly, If percentage quoted by the contractor is 5 % below (-5%), Rate payable to contractor (R) = [{(X) x 1.17} x 1.08294] x 0.95

(c) If percentage quoted by the contractor is at par, Rate payable to contractor = (R) = [{(X) x 1.17} x 1.08294]

(d) In case of NS items i.e. Schedule B & C, Updation factor shall be 1. Rate Percentage above/ below quoted by the contractor would be considered.

(e) Similarly updation factor for Schedule D is 1.16708. Rate Percentage above/ below quoted by the contractor would be considered.