

**WPO-HQ-MECHANICAL/WPO
TENDER DOCUMENT**

Tender No: 2021WPMechAnaraMEMUWT-21

Closing Date/Time: 16/11/2021 13:00

CAO/WPO/PATNA acting for and on behalf of The President of India invites E-Tenders against Tender No **2021WPMechAnaraMEMUWT-21** Closing Date/Time 16/11/2021 13:00 Hrs. Bidders will be able to submit their original/revised bids upto closing date and time only. Manual offers are not allowed against this tender, and any such manual offer received shall be ignored.

Contractors are allowed to make payments against this tender towards tender document cost and earnest money only through only payment modes available on IREPS portal like net banking, debit card, credit card etc. Manual payments through Demand draft, Banker cheque, Deposit receipts, FDR etc. are not allowed.

1. NIT HEADER

Name of Work	Composite Work (Civil, Electrical & Mechanical) involving Construction of Industrial shed with Pre- Engineered Building (PEB), Sick line pit, Service building, Community Hall, Road, Overhead Tank, Electric Sub Station (ESS),Septic Tank, Drainage, Water Supply arrangement, Track works etc., Electrification and illumination works, Procurement and commissioning of specified Mechanical Machineries & Plant and other associated Civil, Mechanical, Electrical & Telecommunication works in connection with Development of infrastructure for integrated maintenance of MEMU, DEMU & other coaching stock in SER (phase-1) at Anara, South Eastern Railway.		
Bidding type	Normal Tender		
Tender Type	Open	Bidding System	Two Packet System
Tender Closing Date Time	16/11/2021 13:00	Date Time Of Uploading Tender	08/10/2021 10:53
Pre-Bid Conference Required	No	Pre-Bid Conference Date Time	Not Applicable
Advertised Value	525734574.46	Tendering Section	TENDER
Bidding Style	Single Rate for Each Schedule	Bidding Unit	
Earnest Money /Bid Security (Rs.)	2778700.00	Validity of Offer (Days)	60
Obtain Bid Security Declaration in lieu of Bid Security	No		
Tender Doc. Cost (Rs.)	0.00	Period of Completion	18 Months
Contract Type	Works	Contract Category	Expenditure
Bidding Start Date	02/11/2021	Are Joint Venture (JV) firms allowed to bid	Yes
Ranking Order For Bids	Lowest to Highest	Expenditure Type	Capital (Works)

2. SCHEDULE

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule A1-PEB Shed							100747529.00	Above/ Below/Par
	1 a	292.23	MT	157775.54	46106746.05	AT Par	46106746.05	

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Tender No: 2021WPMechAnaraMEMUWT-21

Closing Date/Time: 16/11/2021 13:00

01	<p>Description:- Designing, providing, fabricating, painting, transporting, erecting and securing in position structural steel work for pre-engineered building and workshops complete as per specifications, approved shop drawings and / or instructions. Work under this item would generally cover all structural steel work in the Buildings/Workshops, including but not being limited to, columns, stanchions, beams, rafters, purlins, canopy, steel work for cladding & louvers above 4.80m high from floor level, gantry girders, bracings, catwalk, ladders & stairs inside & outside, provision for fixing Electrical, Mechanical and S & T equipments. All structural steel shall be supplied painted as per specification of the painting as per Clause 2.0 of Specifications for PEB in Chapter 10. Work to include all intermediate stages of activities not defined herein, but otherwise implied for completion of work under this item. Cost to include but not be limited to, all materials including wastage, all consumables, fasteners of all types for both temporary and permanent stages of work, all temporary stays, labour, temporary works including staging, scaffolding, tools, plant and costs of all incidentals and necessary testing of material, workmanship etc. including cost of painting as per specifications. Note: The above description of item includes the cost of - 1)Designing, providing and fixing of rain water gutters and down take pipe of 0.50 TGT pre-painted Galvalume/Zinacalume steel in approved colour all along all edges of the building based on the available surface area and rainfall data. 2)Provision of ventilation system including designing, supply and fixing at required location for 600mm throat edge ventilators along ridge for full length of the shed with required numbers of 600mm dia Turbo vents shall be provided on both side slopes to achieve minimum 5 (five) air changes per hour as per the design approved by railway. 3)Planning and providing architectural and engineering drawings with all details of Workshop including facade, plan, elevation, section, details of gantry girders & crane rail to suit installation of EOT crane, details of roofing, wall cladding, rolling shutters, flooring, cable duct, water supply, drainage, doors, windows, grills, louvers etc as per requirement of individual shed in consultation with Engineer - in - charge. 4) Designing and providing detailed drawing of Foundations, columns, tiebeams& beam/plinth beam duly proof checked by IIT/NIT approved by Railway and Designing and providing detailed drawing of flooring, cable ducts, drains, water supply, cubicles, embedded tracks, gas pipe line, roofing, solar light pipe & poly carbonate sheets, wall cladding, industrial flooring, etc as per requirement of individual shed in consultation with Engineer - in-charge. a)Covered PEB Shed (Size 465mx15mx 7.50m height) for Examination Bay without Gantry. (Description Read in item no 01,schedule A1)</p>						
01	1 b	136.36	MT	157775.54	21514272.63	AT Par	21514272.63
	<p>Description:- Designing, providing, fabricating, painting, transporting, erecting and securing in position structural steel work for pre-engineered building and workshops complete as per specifications, approved shop drawings and / or instructions. Work under this item would generally cover all structural steel work in the Buildings/Workshops, including but not being limited to, columns, stanchions, beams, rafters, purlins, canopy, steel work for cladding & louvers above 4.80m high from floor level, gantry girders, bracings, catwalk, ladders & stairs inside & outside, provision for fixing Electrical, Mechanical and S & T equipments. All structural steel shall be supplied painted as per specification of the painting as per Clause 2.0 of Specifications for PEB in Chapter 10. Work to include all intermediate stages of activities not defined herein, but otherwise implied for completion of work under this item. Cost to include but not be limited to, all materials including wastage, all consumables, fasteners of all types for both temporary and permanent stages of work, all temporary stays, labour, temporary works including staging, scaffolding, tools, plant and costs of all incidentals and necessary testing of material, workmanship etc. including cost of painting as per specifications. Note: The above description of item includes the cost of - 1)Designing, providing and fixing of rain water gutters and down take pipe of 0.50 TGT pre-painted Galvalume/Zinacalume steel in approved colour all along all edges of the building based on the available surface area and rainfall data. 2)Provision of ventilation system including designing, supply and fixing at required location for 600mm throat edge ventilators along ridge for full length of the shed with required numbers of 600mm dia Turbo vents shall be provided on both side slopes to achieve minimum 5 (five) air changes per hour as per the design approved by railway. 3)Planning and providing architectural and engineering drawings with all details of Workshop including facade, plan, elevation, section, details of gantry girders & crane rail to suit installation of EOT crane, details of roofing, wall cladding, rolling shutters, flooring, cable duct, water supply, drainage, doors, windows, grills, louvers etc as per requirement of individual shed in consultation with Engineer - in - charge. 4) Designing and providing detailed drawing of Foundations, columns, tiebeams& beam/plinth beam duly proof checked by IIT/NIT approved by Railway and Designing and providing detailed drawing of flooring, cable ducts, drains, water supply, cubicles, embedded tracks, gas pipe line, roofing, solar light pipe & poly carbonate sheets, wall cladding, industrial flooring, etc as per requirement of individual shed in consultation with Engineer - in-charge. b)Covered PEB Shed (Size 100mx20mx 10.50m height) for Sick line with provision of 25/7.5T Gantry. (Description Read in item no 01,schedule A1)</p>						
	1 c	11.00	MT	157775.54	1735530.94	AT Par	1735530.94

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01	<p>Description:- Designing, providing, fabricating, painting, transporting, erecting and securing in position structural steel work for pre-engineered building and workshops complete as per specifications, approved shop drawings and / or instructions. Work under this item would generally cover all structural steel work in the Buildings/Workshops, including but not being limited to, columns, stanchions, beams, rafters, purlins, canopy, steel work for cladding & louvers above 4.80m high from floor level, gantry girders, bracings, catwalk, ladders & stairs inside & outside, provision for fixing Electrical, Mechanical and S & T equipments. All structural steel shall be supplied painted as per specification of the painting as per Clause 2.0 of Specifications for PEB in Chapter 10. Work to include all intermediate stages of activities not defined herein, but otherwise implied for completion of work under this item. Cost to include but not be limited to, all materials including wastage, all consumables, fasteners of all types for both temporary and permanent stages of work, all temporary stays, labour, temporary works including staging, scaffolding, tools, plant and costs of all incidentals and necessary testing of material, workmanship etc. including cost of painting as per specifications. Note: The above description of item includes the cost of - 1)Designing, providing and fixing of rain water gutters and down take pipe of 0.50 TGT pre-painted Galvalume/Zinacalume steel in approved colour all along all edges of the building based on the available surface area and rainfall data. 2)Provision of ventilation system including designing, supply and fixing at required location for 600mm throat edge ventilators along ridge for full length of the shed with required numbers of 600mm dia Turbo vents shall be provided on both side slopes to achieve minimum 5 (five) air changes per hour as per the design approved by railway. 3)Planning and providing architectural and engineering drawings with all details of Workshop including facade, plan, elevation, section, details of gantry girders & crane rail to suit installation of EOT crane, details of roofing, wall cladding, rolling shutters, flooring, cable duct, water supply, drainage, doors, windows, grills, louvers etc as per requirement of individual shed in consultation with Engineer - in - charge. 4) Designing and providing detailed drawing of Foundations, columns, tiebeams& beam/plinth beam duly proof checked by IIT/NIT approved by Railway and Designing and providing detailed drawing of flooring, cable ducts, drains, water supply, cubicles, embedded tracks, gas pipe line, roofing, solar light pipe & poly carbonate sheets, wall cladding, industrial flooring, etc as per requirement of individual shed in consultation with Engineer - in-charge. c)Tower Wagon PEB Shed (Size 30mx8mx 8m height) with Oil & Petrol Godown (Size 2.61mx6.17mx 3m height) (Description Read in item no 01,schedule A1)</p>							
01	<table border="1"> <tr> <td data-bbox="295 974 406 1008">2</td> <td data-bbox="406 974 534 1008">9231.00</td> <td data-bbox="534 974 646 1008">Sqm</td> <td data-bbox="646 974 805 1008">2538.71</td> <td data-bbox="805 974 997 1008">23434832.01</td> <td data-bbox="997 974 1125 1008">AT Par</td> <td data-bbox="1125 974 1324 1008">23434832.01</td> </tr> </table> <p>Description:- Providing & fixing of composite insulated panels manufactured in a continuous process plant with high speed oscillation sprayed foam in roof and wall with all necessary flashing, trims, ridge capping, accessories & fasteners to ensure and air tight, insulated building which is not only functionally compliant but also aesthetically pleasing with contemporary international look. The specification is as follows:- Composite insulated panels having on top side trapezoidal profile 28-35 mm deep and 200- 300mm pitch with 950-1050 mm effective cover width. The profile having 2-3 secondary ribs in pan and an anticlimactically flute at side overlap shall be made of 0.50 mm TCT pre-painted high tensile galvalume/zincalume steel grade AZ 150/G-300 having hot dipped metallic Zn-Al alloy coating (150gms/Sqm, Zinc 45% Al 55%) as per AS 1397-1993 having 300MPs yield strength with Super Durable Polyester XRW coating or equivalent as per AS/NZS- 2728-1997 category 3 total coating thickness of 35 microns comprising of 20 microns exterior coat of SMP over superpolyester XRW on top surface & 5 micron polyester reverse on back surface over 5 micron primer coat on both surfaces and bottom liner tray made of 0.50mm TCT pre-painted high tensile galvalume/Zincalume steel grade AZ 150/G-300 of similar specification as for the top sheet in approved colour including side and end taps. The panels shall have 30mm thick (Min) insulation core of rigid polyurethane foam 40 Kg/m3 density to the requirement of IS 12436-68. The panels shall be produced in a continuous process line with high pressure oscillation spray foamed insulation core. The panels of customised length shall have a return leg tongue to ensure snug and air tight joinery at bottom. The overlap side shall have an isolation tap to prevent thermal bridge. Roof and wall panels shall be fixed using stainless steel hex head self drilling fasteners as per AS 3566 class 3 or equivalent on crest of panels for connection with purlins and stitching fastener @ 300 mm c/c on all side and end laps etc. Measurement shall be based on per unit of finished laid surface area. Sealant and gaskets wherever necessary to be provided to ensure contemporary aesthetic look of international standard. Roofs of buildings, Canopy and side cladding, gable end cladding etc all complete:-</p>	2	9231.00	Sqm	2538.71	23434832.01	AT Par	23434832.01
2	9231.00	Sqm	2538.71	23434832.01	AT Par	23434832.01		
01	<table border="1"> <tr> <td data-bbox="295 1624 406 1657">3</td> <td data-bbox="406 1624 534 1657">913.00</td> <td data-bbox="534 1624 646 1657">Sqm</td> <td data-bbox="646 1624 805 1657">2103.89</td> <td data-bbox="805 1624 997 1657">1920851.57</td> <td data-bbox="997 1624 1125 1657">AT Par</td> <td data-bbox="1125 1624 1324 1657">1920851.57</td> </tr> </table> <p>Description:- Designing, supplying, erecting and fixing in position 3 mm thick polycarbonate sheets of approved make texture and colour for roof lighting. Sheets to be profiled to match metal sheets described in other item should include cost of laying sheet in curvature wherever required. cost to include jointing, sealing with Butyl adhesive to make it complete water tight and takes as per manufacturers specifications and cover all cost of labour, tools, plants, temporary works etc all complete. Roofs of buildings and side cladding, gable end cladding etc all complete:-</p>	3	913.00	Sqm	2103.89	1920851.57	AT Par	1920851.57
3	913.00	Sqm	2103.89	1920851.57	AT Par	1920851.57		
01	<table border="1"> <tr> <td data-bbox="295 1848 406 1881">4</td> <td data-bbox="406 1848 534 1881">973.00</td> <td data-bbox="534 1848 646 1881">Sqm</td> <td data-bbox="646 1848 805 1881">2832.03</td> <td data-bbox="805 1848 997 1881">2755565.19</td> <td data-bbox="997 1848 1125 1881">AT Par</td> <td data-bbox="1125 1848 1324 1881">2755565.19</td> </tr> </table> <p>Description:- Designing, providing, fabricating, painting, transporting securing in position louvers with wide narrow slats as per drawings and instructions, complete with metal frame work in 3 mm thick steel sheet. Cost includes necessary fillers, seals flashing, rubber strip nosing to slats complete in all respects. Payment shall be based on area measured with in frame work of louvers units.</p>	4	973.00	Sqm	2832.03	2755565.19	AT Par	2755565.19
4	973.00	Sqm	2832.03	2755565.19	AT Par	2755565.19		
	<table border="1"> <tr> <td data-bbox="295 2004 406 2038">5</td> <td data-bbox="406 2004 534 2038">1508.00</td> <td data-bbox="534 2004 646 2038">Sqm</td> <td data-bbox="646 2004 805 2038">971.02</td> <td data-bbox="805 2004 997 2038">1464298.16</td> <td data-bbox="997 2004 1125 2038">AT Par</td> <td data-bbox="1125 2004 1324 2038">1464298.16</td> </tr> </table>	5	1508.00	Sqm	971.02	1464298.16	AT Par	1464298.16
5	1508.00	Sqm	971.02	1464298.16	AT Par	1464298.16		

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01	<p>Description:- Providing & fixing permanently colour coated trapezoidal profiled sheet of depth 28-35 mm deep and 200- 300mm pitch distance with precisely engineered "rib & Flute" design with 950-1050 mm effective cover width matching to profile of PUF panels. Profiled sheets shall be minimum 0.50 mm TCT/0.45mm BMT high tensile zinc aluminium alloy coated galvalume /zincalume steel sheet (550 MPa yield strength) having a coating of mass of 150 GSM Zn-Al alloy coating as per As 1397-1993 finished with 20 micron approved colour coating of Super Durable Polyester XRW coating or equivalent paint, coat on exposed surface over a primer coat of 5 micron and back coat of 5 micron on reverse side over a 5 microns primer coat. There shall be 2 small ribs/square flutes between profiles for providing additional strength. The sheet to be fixed over the purlins/girts with hexagonal nead self drilling suitable fasteners with EPDM washer on crests of the sheet @ 300mm c/c on all sides and end laps etc. Measurement shall be based on per unit of finished laid surface area. Sealant and gaskets wherever necessary to be provided to ensure contemporary asthetic look of international standard. Roofing and Partition wall claddings etc all complete</p>						
01	6	13.00	MT	139648.65	1815432.45	AT Par	1815432.45
01	<p>Description:- Supplying, erecting & fixing of Gantry rails of section CR 100/CR 80/ CR 60 as per requirement conforming to IS: 3443-1980 including supplying and fixing all fixtures viz. rail clips, nut bolts, washers etc. complete in all respect.</p>						

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule A2-Embedded Track							2437114.56	Above/ Below/Par
01	1	3504.00	Metre	248.84	871935.36	AT Par	871935.36	
01	<p>Description:- Supply & application of Poly sulphide sealants of approved make preferably SIKA or similar, preparation of groove of 5mm to 10mm width and 25mm depth in both horizontal and vertical lines spaced (@ 6m C/C and 4m C/C or as directed by the Engineer-incharge at site) in VD floor.</p>							
01	2	160.00	Metre	9782.37	1565179.20	AT Par	1565179.20	
01	<p>Description:- Supplying, fabrication, laying fitting & fixing of embedded track (of single rail/SWR type) which includes supply, fabrication cutting & drilling holes and laying of base plate as per aproved drawing supplying, fixing of holding down bolt at correct location and alignment at spacing of 750mm (max.) c/c with washers etc. as required, supplying and fixing of guard angles of size 75x75x8 collecting and leading of rails from stock yard pairing , butting of rails, inserting of rails by cutting end and drilling two holes at each end, distribution of small track fitting, oiling and greasing of fish plate and fish bolt etc. complete job with contractor labour, material, consumable, equipment, all lead, lift ascend, descend, crossing the track etc as required as per approved drawing. Note:-(1) Rail fish plate, fish bolt will be supplied by Railway free of cost. (2) Structural steel shall be make SAIL/TISCO/IISCO /RINL. The cost include testing of material from approved laboratory by Railways.(Unit Meter Read as Track Meter)</p>							

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule A3-Drawing & Design							1224570.00	Above/ Below/Par
01	1	1.00	Job	1224570.00	1224570.00	AT Par	1224570.00	
01	<p>Description:- Work of detailed survey, planning, preparation & submission of layout/Setting out plan,Architctural (Plan Elevations, Sections and other details), Structural (Design/Drawingsincluding proof Checking), sanitary, sewage, plumbing, water supply, drainage, sewerage. road, boundary wall with Gates, Track work, horticulture, landscaping drawing, including firefighting drawing complete in all respects etc. for the building mentioned below:- i)Service Building 480 Sqm. ii)Community Hall 300Sqm. iii)Sick Line Pit of CAM TECH Design 1152m iv)Concrete Road 700m v)RCC Overhead Water Tank 50000 Gallons Capacity. vi) Septic Tank 03 Nos. vii)ESS 9mx15m. viii)Drain with Cover 5000m ix)Pipeline for Water supply arrangement. The rate is inclusive of drawings and design including proof check but exclusive of Drawing & Design of PEB structures</p>							

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule A4-Misc. items of Pit line							736143.79	Above/ Below/Par
01	1	35.00	Sqm	286.37	10022.95	AT Par	10022.95	
01	<p>Description:- Providing, Fixing and removing 25mm thick Thermocoal for making 25mm thick expansion joints in the cat walk L & T type beam of washing pit.</p>							
01	2	25.00	Each	1071.47	26786.75	AT Par	26786.75	
01	<p>Description:- Supplying, fitting & fixing stainless steel Ball valve 20mm dia Conforming AISI316 in the 32 mm side filling arrangement and 25mm dia high pressure water pipe line in the washing pit as per direction of Engineer-in-charge.</p>							

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01	3	6.00	Each	1412.38	8474.28	AT Par	8474.28	
	Description:- Supplying, fitting & fixing stainless steel Ball valve 25mm dia Conforming AISI316 in the 32 mm side filling arrangement and 25mm dia high pressure water pipe line in the washing pit as per direction of Engineer-in-charge.							
01	4	300.00	Metre	744.58	223374.00	AT Par	223374.00	
	Description:- Supplying ,fitting & fixing 32mm dia M.S. Seamless Pressure pipe for AIR Pressure in Washing Pit of Jindal or equivalent ISI/ISO mark indenting, cutting, welding, threading etc. including all fitting i.e. bend, knees,nut-bolt, flange, socket, reducing socket and nipples etc. complete.							
01	5	200.00	Metre	899.86	179972.00	AT Par	179972.00	
	Description:- Supplying ,fitting & fixing 50mm dia M.S. Seamless Pressure pipe Conforming IS:1239 for AIR Pressure in Washing Pit of Jindal or equivalent ISI/ISO mark indenting, cutting, welding, threading etc. including all fitting i.e. bend, knees,nut-bolt, flange, socket, reducing socket and nipples etc. complete.							
01	6	25.00	Each	5454.71	136367.75	AT Par	136367.75	
	Description:- Supplying, fitting & fixing stainless steel Ball valve 50mm dia Conforming AISI316 in the 50 mm dia vacuum pipe line in the washing pit as per direction of Engineer-in-charge.							
01	7	0.50	cum	26016.11	13008.06	AT Par	13008.06	
	Description:- Making levelling course on bed block with "Epoxy" resin mortar of hardener HY 840, araldite GY 257, or similar approved material mixed with quartz sand to be mixed by weight in the ratio 1:2:10 or specified by the manufacturer in proper shape and size including chipping of concrete to making the surface rough, cleaning the same properly with wire brush, drying the bed with bed lamp before putting epoxy mortar with all contractor's labours and materials, tools & plants as necessary to complete the work in all respects as per directives of the site engineer.							
01	8	975.00	Each	141.68	138138.00	AT Par	138138.00	
	Description:- Supplying & placing of SGCI insert as per RDSO Drg. No. T/381 and specification IRS/T-46 (1996) over RCC bed block of pit as per direction of Engineer at site. Rate includes cost of materials, transporting, loading, unloading etc. complete.							

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule A5-Deep Tube well							1804353.38	Above/ Below/Par
01	1	180.00	Metre	3657.28	658310.40	AT Par	658310.40	
	Description:- Drilling 300 mm bore hole by rig in all type of soils including the cost of all consumables, stores, fuel and soil stabilizing material. Drilling from 0 to 30 m or more. This shall be as per IS 2800 - Part 1							
01	2	100.00	Metre	3121.56	312156.00	AT Par	312156.00	
	Description:- Supply and lowering of 150 mm dia blind pipe (MSER) 6.0 mm thick ISI mark or as required. This shall be as per IS 8110 -Part 1							
01	3	70.00	Metre	3867.69	270738.30	AT Par	270738.30	
	Description:- Supply and lowering of 150 mm dia slotted pipe (MSER) 6.0 mm thick ISI mark or as required with V wire johnson screen with slot size of 1 mm to 1.5 mm as required. This shall be as per IS 8110 -Part 1.							
01	4 a	2.00	Each	2436.35	4872.70	AT Par	4872.70	
	Description:- Supplying and fixing of accessories of the pipes including the cost of welding (150 mm dia) aMS clamps (Heavy Duty)							
01	4 b	2.00	Each	1674.99	3349.98	AT Par	3349.98	
	Description:- Supplying and fixing of accessories of the pipes including the cost of welding (150 mm dia) bWell Cap (Heavy Duty)							
01	4 c	2.00	Each	1279.08	2558.16	AT Par	2558.16	
	Description:- Supplying and fixing of accessories of the pipes including the cost of welding (150 mm dia) cWell Plug (Heavy Duty)							
01	5	14.00	cum	2893.16	40504.24	AT Par	40504.24	
	Description:- Supplying and packing Pea Gravels of variable sizes into the annular space between tubewell assembly and bore hole in required quantity for developing the filtration system. This shall be as per IS 8110 Part 1							
01	6	60.00	Hour	1370.45	82227.00	AT Par	82227.00	
	Description:- Development of tube well by means of electromechanically/ Diesel operated air compressor of required capacity or as directed. Minimum time of running of compressor/pumps will be 60 hours. In case the hours of pumping are increased till the desired results are achieved as per the direction of Eng - in - Charge. The rate shall be calculated on pro - rata basis of the quoted rates.							

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01	7	2.00	Job	10658.99	21317.98	AT Par	21317.98	
Description:- Collection of strata samples during boring at various sites in bags or jars at every 10 m depth or at change of strata. Strata boxes of appropriate size will be supplied for preservation of samples for mechanical sieve analysis/preparation of log. This will be as per IS 2800 - part 1								
01	8	2.00	Job	15227.13	30454.26	AT Par	30454.26	
Description:- Collection of water samples as per sampling procedures from bores at final strata and filling the sample in one litregerrycanes at different depth for onward transmission to the laboratory for testing (Physical, Chemical &bactriological). The test report on the prescribed proforma will be handed over to the Eng - in - charge for approval and decision thereof.								
01	9 a	2.00	Each	118771.64	237543.28	AT Par	237543.28	
Description:- Supplying, installation, testing and commissioning of KSB or equivalent make submersible pump and motor assembly set duly fixed with M. S. Clamps, OL starter, Switch with selector, indicating lamps, single phase preventer, ON/OFF switch complete of standard ISI make including column pipe & Ammeter with CFS and Earthing/construction of earthing pit as per standard practice. Pump - one working as per IS 8034. aDischarge 7 m3/hr, Head = 63 m, H.P/KW = 3/2.2								
01	10	2.00	Job	70160.54	140321.08	AT Par	140321.08	
Description:- Supply, erection, commissioning and testing of chlorine solution electronic dosing system to feed into rising main upto 2 ppm at the dosing point with solution dosing tank of HDPE of capacity 500 litres with electric pump of 4 lts/hr against 5.5 Kg/sqcm max injection pressure mounted on top of tank lid with PVC pipe line for suction and delivery with 15 mm injector with copper wire from existing main switch, operated on 220 V & 50 Hz. The dosing pump should have stroks variation from 10 to 100% complete in all respect as specified and directed. The unit should be supplied with residual chlorination test kit.								

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule A6-Supply of Ballast							15193087.00	Above/ Below/Par
01	6	8330.00	cum	1823.90	15193087.00	AT Par	15193087.00	
Description:- Supplying of machine crushed ballast 50 mm size confirming RDSO's specification including loading, unloading, all lift, lead, ascent, descent, crossing of railway lines and roads, stacking at desired location including all incidental charges, royaltyetc complete as per direction of Eng - in - Charge.								

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule A7-Track Work							6807668.67	Above/ Below/Par
01	1	3500.00	Metre	13.39	46865.00	AT Par	46865.00	
Description:- Pairing of rails on cess on either side of track in station yard/block section (both the rails in single rail or panels) as per direction of Engineer-in-charge. (Unit Meter Read as Track Meter)								
01	2	3500.00	Metre	15.45	54075.00	AT Par	54075.00	
Description:- Creating stipulated gap and placing rails on wooden block for SKV welding (25 mm gap) for welding of rails as per direction of engineer-in-charge at site including labour,tools etc. (Unit Meter Read as Track Meter)								
01	3	24.00	cum	15.08	361.92	AT Par	361.92	
Description:- Cutting high cess/formation on either side of track in the yards/approaches of level crossings/bridges/points & crossing , making drain in yard as required and dumping excavated earth as directed by Engineer-in-charge including all lift, crossing of track and lead up to 100 meter.								
01	4	8330.00	cum	61.78	514627.40	AT Par	514627.40	
Description:- Spreading ballast from the stacks available on the formation (already unloaded by wagons/cess supply) uniformly on the track as per true profile including all lift, lead up to 100 meter and crossing of track as per direction of Engineer-in-charge.								
01	5 i	82.00	MT	622.53	51047.46	AT Par	51047.46	
Description:- Leading of all type of PSC sleepers including Fan shaped points & crossings, SEJ, Level crossing sleeper etc. from sleeper factory/various places by road vehicle/trailor/truck including unloading at destination such as various level crossings etc. including all labours, tools and plants, machinery, transportation, octroi, local taxes all lift, ascends/descends handling, re-handling and crossing of the track or any other obstructions as per direction of site Engineer (i) Upto 25Km								
	5 ii	105.00	MT	720.24	75625.20	AT Par	75625.20	

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01	Description:- Leading of all type of PSC sleepers including Fan shaped points & crossings, SEJ, Level crossing sleeper etc. from sleeper factory/various places by road vehicle/trailor/truck including unloading at destination such as various level crossings etc. including all labours, tools and plants, machinery, transportation, octroi, local taxes all lift, ascends/descends handling, re-handling and crossing of the track or any other obstructions as per direction of site Engineer(ii) Lead more than 25 Km upto 50Km						
	5 iii	117.00	MT	776.69	90872.73	AT Par	90872.73
01	Description:- Leading of all type of PSC sleepers including Fan shaped points & crossings, SEJ, Level crossing sleeper etc. from sleeper factory/various places by road vehicle/trailor/truck including unloading at destination such as various level crossings etc. including all labours, tools and plants, machinery, transportation, octroi, local taxes all lift, ascends/descends handling, re-handling and crossing of the track or any other obstructions as per direction of site Engineer(iii) Lead more than 50 Km upto 75Km						
	5 iv	140.00	MT	812.83	113796.20	AT Par	113796.20
01	Description:- Leading of all type of PSC sleepers including Fan shaped points & crossings, SEJ, Level crossing sleeper etc. from sleeper factory/various places by road vehicle/trailor/truck including unloading at destination such as various level crossings etc. including all labours, tools and plants, machinery, transportation, octroi, local taxes all lift, ascends/descends handling, re-handling and crossing of the track or any other obstructions as per direction of site Engineer(iv) Lead more than 75 Km upto 100Km						
	5 v	420.00	MT	850.18	357075.60	AT Par	357075.60
01	Description:- Leading of all type of PSC sleepers including Fan shaped points & crossings, SEJ, Level crossing sleeper etc. from sleeper factory/various places by road vehicle/trailor/truck including unloading at destination such as various level crossings etc. including all labours, tools and plants, machinery, transportation, octroi, local taxes all lift, ascends/descends handling, re-handling and crossing of the track or any other obstructions as per direction of site Engineer(v) Lead more than 100 Km upto 150Km						
	5 vii	467.00	MT	1262.90	589774.30	AT Par	589774.30
01	Description:- Leading of all type of PSC sleepers including Fan shaped points & crossings, SEJ, Level crossing sleeper etc. from sleeper factory/various places by road vehicle/trailor/truck including unloading at destination such as various level crossings etc. including all labours, tools and plants, machinery, transportation, octroi, local taxes all lift, ascends/descends handling, re-handling and crossing of the track or any other obstructions as per direction of site Engineer(vii) Lead more than 200 Km upto 250Km						
	6	1867.00	MT	171.12	319481.04	AT Par	319481.04
01	Description:- Loading of all type of PSC sleepers including PSC turnout sleepers etc. in to contractor's own truck/ trailor including lead up to 65m & proper stacking by using road crane or any other suitable mechanical device without damaging the PSC sleepers as per standard specification (loading into contractor's vehicle will normally be done by sleeper plant and this item will be operated only in case of breakdown of factory's crane which will be certified be SE/Works/Sleeper factory) or in case loading of sleepers is done from any other place.						
	7	5600.00	Each	60.24	337344.00	AT Par	337344.00
01	Description:- Carrying and spreading of BG PSC sleepers at uniform spacing already unloaded in Station yard/Block section/level crossing on the slope of bank in main line/loop line as per direction of Engineer-in-charge including all leads/lifts, ascent, descent, crossing of track and other obstruction with contractor vehicle tool & plants.						
	8	5600.00	Each	25.55	143080.00	AT Par	143080.00
01	Description:- Placing of B.G. PSC sleepers in position on level ballast bed at specified spacing and correct alignment by lifting from slope of the bank/cess with contactor tools and labour per direction of Engineer-in-charge.						
	9 i	7.00	Set	4984.94	34894.58	AT Par	34894.58
01	Description:- Carrying and spreading of PSC turn out sleepers and SEJ sleepers already unloaded in station yard/level Xings as per direction of Engineer-in-charge including all leads, lifts, descent, crossing of track and other obstruction(i) 1:8.5,						
	9 ii	3.00	Set	2413.20	7239.60	AT Par	7239.60
01	Description:- Carrying and spreading of PSC turn out sleepers and SEJ sleepers already unloaded in station yard/level Xings as per direction of Engineer-in-charge including all leads, lifts, descent, crossing of track and other obstruction (ii) Derailing Switch						
	10 i	23.00	MT	370.24	8515.52	AT Par	8515.52
01	Description:- Carting of P.Way materials cement bags and misc. materials other than rails switches, check rail from different stations of railway to any station as per directions of site Engineer including all charges of loading, unloading and stacking with lead varying from:(i) Km.0/00 upto Km. 30/0						
	10 ii	35.00	MT	450.00	15750.00	AT Par	15750.00
01	Description:- Carting of P.Way materials cement bags and misc. materials other than rails switches, check rail from different stations of railway to any station as per directions of site Engineer including all charges of loading, unloading and stacking with lead varying from:(ii) Lead more than Km. 30/0 upto Km. 60/0						
	10 iii	58.00	MT	553.01	32074.58	AT Par	32074.58

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	Description:- Carting of P.Way materials cement bags and misc. materials other than rails switches, check rail from different stations of railway to any station as per directions of site Engineer including all charges of loading, unloading and stacking with lead varying from:(iii) Lead more than Km. 60/0 upto Km. 100/0							
01	10 iv	47.00	MT	616.97	28997.59	AT Par	28997.59	
	Description:- Carting of P.Way materials cement bags and misc. materials other than rails switches, check rail from different stations of railway to any station as per directions of site Engineer including all charges of loading, unloading and stacking with lead varying from(iv) Lead more than Km. 100/0 upto Km. 150/0							
01	11	490.00	MT-Km	5.07	2484.30	AT Par	2484.30	
	Description:- Loading, leading & unloading of Rly. P.Way materials such as rails, sleeper of all type of fittings, turnouts, SEJ, Glued Joints etc. at the required locations from block section/yards by contractors which may be involve use of road crane for placement of sleepers first by manual/tractor/crane loading/ Rail dolly etc. up to loading point and then loading nominated place & unloading in the section as per consignee order including contractor's labour, T&P as per dorection of Engineer-in-charge.							
01	12 i	23.33	MT-Km	29.79	695.00	AT Par	695.00	
	Description:- Transporting heavy materials such as C.I. sheets, A.C. sheets and ridges, Rails, joists, MS Angle, C.I. or G.I. Pipe, A.C and C.C pipe, wooden/ steel/cast iron or conc sleeper, lead pig, MS nuts and bolts and other iron work or heavy wood work other than head lead(i) Beyond 5km and upto 10km							
01	12 ii	35.00	MT-Km	10.06	352.10	AT Par	352.10	
	Description:- Transporting heavy materials such as C.I. sheets, A.C. sheets and ridges, Rails, joists, MS Angle, C.I. or G.I. Pipe, A.C and C.C pipe, wooden/ steel/cast iron or conc sleeper, lead pig, MS nuts and bolts and other iron work or heavy wood work other than head lead (ii) Beyond 10km and upto 25km							
01	12 iii	47.00	MT-Km	10.06	472.82	AT Par	472.82	
	Description:- Transporting heavy materials such as C.I. sheets, A.C. sheets and ridges, Rails, joists, MS Angle, C.I. or G.I. Pipe, A.C and C.C pipe, wooden/ steel/cast iron or conc sleeper, lead pig, MS nuts and bolts and other iron work or heavy wood work other than head lead.(iii) Beyond 25km and upto 50km							
01	12 iv	35.00	MT-Km	10.06	352.10	AT Par	352.10	
	Description:- Transporting heavy materials such as C.I. sheets, A.C. sheets and ridges, Rails, joists, MS Angle, C.I. or G.I. Pipe, A.C and C.C pipe, wooden/ steel/cast iron or conc sleeper, lead pig, MS nuts and bolts and other iron work or heavy wood work other than head lead(iv) Beyond 50km and upto 100km							
01	12 v	70.00	MT-Km	7.30	511.00	AT Par	511.00	
	Description:- Transporting heavy materials such as C.I. sheets, A.C. sheets and ridges, Rails, joists, MS Angle, C.I. or G.I. Pipe, A.C and C.C pipe, wooden/ steel/cast iron or conc sleeper, lead pig, MS nuts and bolts and other iron work or heavy wood work other than head lead(v) Beyond 100km and upto 150km							
01	12 vi	47.00	MT-Km	7.30	343.10	AT Par	343.10	
	Description:- Transporting heavy materials such as C.I. sheets, A.C. sheets and ridges, Rails, joists, MS Angle, C.I. or G.I. Pipe, A.C and C.C pipe, wooden/ steel/cast iron or conc sleeper, lead pig, MS nuts and bolts and other iron work or heavy wood work other than head lead(vi) Beyond 150km and upto 200km							
01	12 vii	117.00	MT-Km	7.30	854.10	AT Par	854.10	
	Description:- Transporting heavy materials such as C.I. sheets, A.C. sheets and ridges, Rails, joists, MS Angle, C.I. or G.I. Pipe, A.C and C.C pipe, wooden/ steel/cast iron or conc sleeper, lead pig, MS nuts and bolts and other iron work or heavy wood work other than head lead(vii) Beyond 200km and upto 300km							
01	12viii	233.00	MT-Km	6.33	1474.89	AT Par	1474.89	
	Description:- Transporting heavy materials such as C.I. sheets, A.C. sheets and ridges, Rails, joists, MS Angle, C.I. or G.I. Pipe, A.C and C.C pipe, wooden/ steel/cast iron or conc sleeper, lead pig, MS nuts and bolts and other iron work or heavy wood work other than head lead(viii) Beyond 300km and upto 400km							
01	12 ix	233.00	MT-Km	5.42	1262.86	AT Par	1262.86	
	Description:- Transporting heavy materials such as C.I. sheets, A.C. sheets and ridges, Rails, joists, MS Angle, C.I. or G.I. Pipe, A.C and C.C pipe, wooden/ steel/cast iron or conc sleeper, lead pig, MS nuts and bolts and other iron work or heavy wood work other than head lead(ix) Beyond 400km and upto 500km							
01	13 a	10.00	Set	32211.91	322119.10	AT Par	322119.10	
	Description:- Assembling, linking and laying P and C, S.E.J and DS standard layout as per drawing/specifications including leading of materials from stacks/P.W.I's stores in yard, Cutting, drilling , Jim, crowing of rails as required, fixing stretcher bars and spring levers, two round of through packing, boxing and dressing of ballast to true profile, cleaning, oiling and greasing of fish plate, fish bolts, fishing surface of joints, elastic rail clips with contractors oil, graphite etc. as per direction of Engineer-in-charge (Note 75 percent of payment will be made after the assembly is completed and laid. Balance 25 percent will be paid after completion of all other activities as per item .where ever the space is available, pre-assembly of switch may be done near the site and slewed in final position during traffic block)a) 1: 8.5,							
	13 b	3.00	Set	6056.86	18170.58	AT Par	18170.58	

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01	Description:- Assembling, linking and laying P and C, S.E.J and DS standard layout as per drawing/specifications including leading of materials from stacks/P.W.I's stores in yard, Cutting, drilling , Jim, crowing of rails as required, fixing stretcher bars and spring levers, two round of through packing, boxing and dressing of ballast to true profile, cleaning, oiling and greasing of fish plate, fish bolts, fishing surface of joints, elastic rail clips with contractors oil, graphite etc. as per direction of Engineer-in-charge (Note 75 percent of payment will be made after the assembly is completed and laid. Balance 25 percent will be paid after completion of all other activities as per item .where ever the space is available, pre-assembly of switch may be done near the site and slewed in final position during traffic block) b) Derailing Switch						
01	14	598.00	Each	109.08	65229.84	AT Par	65229.84
01	Description:- Cutting of rail with hack-saw blade/rail cutting machine in station yard/block section as per direction of Engineer-in-charge.(Note: No payment shall be made for incorrect cuts).						
01	15	1197.00	Each	62.05	74273.85	AT Par	74273.85
01	Description:- Drilling 32 mm/25mm. fish bolt holes in rail and chamfering in station yard/block section as per track manual and direction of Engineer-in-charge. (Note: No payment shall be made for incorrect holes).						
01	16	3500.00	Metre	246.45	862575.00	AT Par	862575.00
01	Description:- Linking BG track in straight/curves excluding level crossings in main line, loops, overshoots, with M+7/M+4 PSC sleeper density including lifting 52KG/90 R single rails/SWP/LWR from cess and placing on PSC sleepers, cleaning, oiling and greasing fish plates, fish bolts, ERC etc. with contractors oil, grease and graphite, initial packing, boxing and dressing of ballast as per specified standard to true profile, alignment and levels as per direction of Engineer-in-Charge. (Unit Meter Read as Track Meter)						
01	17	61.00	Metre	1494.92	91190.12	AT Par	91190.12
01	Description:- Linking BG track on level crossings by digging formation to correct level, sleepers with M+7/M+4 PSC sleeper density, painting of running rails and check rails with contractors anticorrosive paint, fixing check rails with brackets and bolts, linking BG track, final packing, boxing and making good road surface to correct level and profile between gate posts for full width of road for immediate use of road traffic as per direction of Engineer-in-charge. (Unit Meter Read as Track Meter)						
01	18	3500.00	Metre	41.32	144620.00	AT Par	144620.00
01	Description:- First round of through packing of PSC sleeper track as per IRPWM to correct level and alignment as per direction of Engineer-in-charge (for loop line & sidings). (Unit Meter Read as Track Meter)						
01	19	3500.00	Metre	41.17	144095.00	AT Par	144095.00
01	Description:- Second round/additional round of through packing of PSC sleeper track as per IRPWM to correct level and alignment as direction of Engineer-in-charge (for loop line & sidings). (Unit Meter Read as Track Meter)						
01	20	5.00	Each	3222.22	16111.10	AT Par	16111.10
01	Description:- Manufacturing, erecting and painting BG dead-ends in the station yards as per drawing including all lead, lift, descent, crossing lines, stacking etc complete as per direction of Engineer-in-charge.						
01	21a	150.00	Metre	65.71	9856.50	AT Par	9856.50
01	Description:- Re-alignment of curve/slewing of track to achieve specified alignment, gauge, cross level etc. as per tolerance and complete in all respect including through packing to make track fit for 20 KMPH speed. The rate is inclusive of the cost for collection of ballast and packing as per requirement of new alignment of track as per instruction of Engineer-in-charge. (a) Upto 500 mm (Unit Meter Read as Track Meter)						
01	21 b	150.00	Metre	138.41	20761.50	AT Par	20761.50
01	Description:- Re-alignment of curve/slewing of track to achieve specified alignment, gauge, cross level etc. as per tolerance and complete in all respect including through packing to make track fit for 20 KMPH speed. The rate is inclusive of the cost for collection of ballast and packing as per requirement of new alignment of track as per instruction of Engineer-in-charge. b) Upto 1000 mm. (Unit Meter Read as Track Meter)						
01	22	3500.00	Metre	82.60	289100.00	AT Par	289100.00
01	Description:- Lifting of track of linked tack without block protection with lifting up to 150 mm in one stage, including pulling of ballast from shoulders or cess and putting it on the track, initial through packing and dressing and boxing of ballast to make the tack fit for 20 KMPH inclusive of free lead of 100 m, all lead, lifts, ascent, descent, crossing of track obstruction etc on concrete sleepers. (Unit Meter Read as Track Meter)						
01	23	5.00	Each	8062.90	40314.50	AT Par	40314.50
01	Description:- Making temporary water proof goomty of size (10-0 inch x10-0 inch) with bamboo framing & tarpaulin cover on roof and three sides for shelter of non-interlocking staffs, for a period 10 to 15 days, the floor to be made firm by means of brick soling or by providing steel/wooden sleeper after proper dressing of base and complete in all respect . The rate includes supply of 4 nos. chair and one table for Railway staff too.						
01	24 a	1867.00	Metre	123.47	230518.49	AT Par	230518.49

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				Description:- Dismantling of existing track consisting of 90R/52Kg/60 kg rail section on any type of sleeper. The work shall include:- Opening/removing of all filling & fastenings, classification, segregation and stacking of released materials at safe distance within free load of 100 m with all lift, descent crossing of track and any other obstruction. Cleaning of area below track after removal of track. The work to be done under block protection. (a) Standard B.G. track. (Unit Meter Read as Track Meter)			
01	24b	3.00	Set	2254.61	6763.83	AT Par	6763.83
				Description:- Dismantling of existing track consisting of 90R/52Kg/60 kg rail section on any type of sleeper. The work shall include:- Opening/removing of all filling & fastenings, classification, segregation and stacking of released materials at safe distance within free load of 100 m with all lift, descent crossing of track and any other obstruction. Cleaning of area below track after removal of track. The work to be done under block protection(b) Trap switch.			
01	24 c	10.00	Set	6654.29	66542.90	AT Par	66542.90
				Description:- Dismantling of existing track consisting of 90R/52Kg/60 kg rail section on any type of sleeper. The work shall include:- Opening/removing of all filling & fastenings, classification, segregation and stacking of released materials at safe distance within free load of 100 m with all lift, descent crossing of track and any other obstruction. Cleaning of area below track after removal of track. The work to be done under block protection (c) 1 in 8-1/2 Pts. Xing			
01	25a	149.00	MT	517.88	77164.12	AT Par	77164.12
				Description:- Carrying rails of varying section by dip lorry/rail dolly/rail tongue or any other means supplied by the contractor including loading and unloading rails of various section and length with all lifts/descents, crossing of tracks, obstruction etc. with/without block protection (a) Upto a distance of 1 KM.			
01	25 b	89.00	MT	179.13	15942.57	AT Par	15942.57
				Description:- Carrying rails of varying section by dip lorry/rail dolly/rail tongue or any other means supplied by the contractor including loading and unloading rails of various section and length with all lifts/descents, crossing of tracks, obstruction etc. with/without block protection (b) Extra over (a) above for lead beyond 1 km and up to 2 km.			
01	25 c	30.00	MT	179.13	5373.90	AT Par	5373.90
				Description:- Carrying rails of varying section by dip lorry/rail dolly/rail tongue or any other means supplied by the contractor including loading and unloading rails of various section and length with all lifts/descents, crossing of tracks, obstruction etc. with/without block protection (c) Extra over (a) and (b) above for lead beyond 2 km and up to 3 km.			
01	26	150.00	Metre	41.39	6208.50	AT Par	6208.50
				Description:- Fixing of guard Rail including cutting, notching, drilling of holes, bending etc. inclusive of lead upto 100 m, all lift/descnt/crossing of track etc. in via-duct/ballasted deck/composite girder bridge etc. with PRC sleepers provided with arrangement for guard rail.			
01	27	3.00	Set	7586.74	22760.22	AT Par	22760.22
				Description:- Making check rails of level crossing by cutting and bending rails, cutting flange, making notches/windows for fixing ERCs/other fastening at PSC sleeper and fixing the same in the track on level crossing and as per directions of Engineer-in charge . 1 set comprises of both left and right check rails of one track.			
01	28a	14.00	Each	235.80	3301.20	AT Par	3301.20
				Description:- Manufacturing and fixing reference tie bar/rail post on cess or other places near track and grouting with cement concrete to indicate proposed BG rail level/alignment at locations indicated by Engineer-in charge. a) Rail post.			
01	28b	28.00	Each	45.54	1275.12	AT Par	1275.12
				Description:- Manufacturing and fixing reference tie bar/rail post on cess or other places near track and grouting with cement concrete to indicate proposed BG rail level/alignment at locations indicated by Engineer-in charge. (b) Tie bar post. Note:- Tie bar/rails will be issued at PWI store which will have to be cut in length as decided by engineer in charge and transported to site at contractor cost. Cement will be paid separately under relevant item. Rail post shall be suitable grouted in concrete as directed by engineer in charge.			
01	29	336.00	Each	959.82	322499.52	AT Par	322499.52
				Description:- Supply of petrol, labour skilled & unskilled and one electric generator of required capacity in working condition for welding of rail 52 kg by SKV process. Rate shall be inclusive of supply of labour, petrol, Hydraulic oil or welding Grinding as per specification, filing, Grinding etc. the welded joint on top and gauge face as per IRPWM to full satisfaction of site in charge under within/without traffic block			
01	30a	10.00	Each	15323.88	153238.80	AT Par	153238.80
				Description:- Deep screening of points and crossing to get average minimum cushion of 250 mm without disturbing the original formation but including lowering down the cess for good drainage as required by cutting over burden, cess/debris etc. and throwing if sufficiently away from Railway Track as per direction of Engineer in charge of the work. (a) 1 in 8.5			
	31	233.00	Metre	177.99	41471.67	AT Par	41471.67

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01	Description:- Deep screening of track ballast including of ballast, digging below and between sleepers to a maximum depth of 100 mm from the centre of track to cess width for 4.80 m, screening of same by 20 mm sieve, cleaning of haunch, throwing of muck arising out of screening and haunch cleaning beyond cess or the bank slope of cutting, catch water drain and water way of bridges and putting back the screened ballast into the track as per direction of engineer at site.						
	32	12.00	Each	2654.53	31854.36	AT Par	31854.36
01	Description:- Supplying fitting fixing luminous caution indicator board of required size and shape as per IRPWM and direction of engineer in charge with 18 SWG plain sheet, edges supported by 25 mm wide x 4 mm thick flats. The boards will be fixed on MS angle 65x65x6 mm which in turn shall be fixed in the ground with CC1:2:4 in a 600 mm x 600 mm x 600 mm size pit.						
	33	22400.00	Each	6.38	142912.00	AT Par	142912.00
01	Description:- Greasing of ERC of main line track by using grease graphite to the specification IS408-1981 Gr O as per procedure as mentioned in para 1411(5)(b) of IRPWM and as per satisfaction of site in charge. The rate also includes the supply of grease.						
	34a	10.00	Each	4170.98	41709.80	AT Par	41709.80
01	Description:- One round of consolidation packing of entire set of points and crossing including switches assembly, crossing and approach sleepers as per IRPWM and direction of engineer-in-charge at site.(a) 1 in 8.5						
	35	3500.00	Metre	63.74	223090.00	AT Par	223090.00
01	Description:- Painting of rail with two coats of ready mix black bituminous paint conforming to IS 158 over a primer of zinc chromate red oxide conforming to IS2074 including cleaning with scraper and /or wire brush to remove all the rust etc to provide a smooth surface for the primer coat complete in all respect with all tools and consumables as per instruction of site in charge. (Unit Meter Read as Track Meter)						
	36a	14.00	Each	327.42	4583.88	AT Par	4583.88
01	Description:- Insertion/Laying of glued joints of 90R/52Kg/60Kg in track as per instruction of site Engineer and as per IRPWM. The work includes cuttings and taking out of existing rail if required, insertion of Glued joints with all standard fittings and fastenings, drilling and cutting rails as per required and respacing and packing of sleepers. a) with traffic block						
	36b	19.00	Each	452.09	8589.71	AT Par	8589.71
01	Description:- Insertion/Laying of glued joints of 90R/52Kg/60Kg in track as per instruction of site Engineer and as per IRPWM. The work includes cuttings and taking out of existing rail if required, insertion of Glued joints with all standard fittings and fastenings, drilling and cutting rails as per required and respacing and packing of sleepers b) without traffic block						
	37	7000.00	Metre	19.60	137200.00	AT Par	137200.00
01	Description:- Maintenance of newly laid BG track main line, loop lines and points & crossing in yard in connection with Anara- Development of Infra structure for Integrated maintenance of train sets in SER workshop. Track laid with 60/52kg rails on PSC sleepers with 1660/1540/1540/1660 sleepers density on loop lines and points & crossing on PSC/ Wooden sleepers, picking up slacks, through packing maintaining the track on straight and curved alignment, level crossing gates, gaurd rails on bridges with all operations such as examination of rails, sleepers and fastenings, squaring of sleepers, lifting of sags, slewing of track to correct level, gauge and alignment, greasing gauge face of on curves and points and crossing, lubrication of SEJs packing, boxing of ballast, recouping of P.way fittings, minor cess reappear, etc. as per para 224 of IRPW manual and LWR manual, with all contractors labour, tools including jacks, rail dollies, supervisors all lead and lifts involved etc complete as per specifications and as directed by the Engineer-in-charge (Unit Metre read as Per track metre/per month)						
	5vi	350.00	MT	959.86	335951.00	AT Par	335951.00
01	Description:- Leading of all type of PSC sleepers including Fan shaped points & crossings, SEJ, Level crossing sleeper etc. from sleeper factory/various places by road vehicle/trailor/truck including unloading at destination such as various level crossings etc. including all labours, tools and plants, machinery, transportation, octroi, local taxes all lift, ascends/descends handling, re-handling and crossing of the track or any other obstructions as per direction of site Engineer(vi) Lead more than 150 Km upto 200Km						

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule B1-Earth Work							22963584.27	Above/ Below/Par
01	Please see Item Breakup for details.				21555978.85	6.53	22963584.27	
	Description:- Earth Work							

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
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Schedule B2-CC & RCC Work				54350354.12	Above/ Below/Par
01	Please see Item Breakup for details.		25741382.08	111.14	54350354.12
Description:- CC & RCC Work					

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule B3-Brick Work								Above/ Below/Par
01	Please see Item Breakup for details.		3136929.90	149.60	7829777.03			
Description:- Brick Work								

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule B4-Steel & Aluminium Work								Above/ Below/Par
01	Please see Item Breakup for details.		24162845.39	61.73	39078569.85			
Description:- Steel & Aluminium Work								

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule B5-General items of SER-USSOR-2010								Above/ Below/Par
01	Please see Item Breakup for details.		27827686.15	66.09	46219003.93			
Description:- General items of SER-USSOR-2010								

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule B6-Soil Investigation items of USSOR-2010								Above/ Below/Par
01	Please see Item Breakup for details.		580518.05	(-) 75.94	139672.64			
Description:- Exploratory drilling of boreholes down to required depth, drilling of 150mm dia. boreholes in all type of soils except hard rock & large boulders (boulder core more than 30cm) including refilling, reinstating surface and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion/chieselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area								

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule B7-Unforeseen items of USSOR-2010								Above/ Below/Par
01	Lump Sum				12720000.00	39.45	17738040.00	
Description :- Unforeseen Items of USSOR/SER-2010 not covered above.								

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule C1-Supply of Cement								Above/ Below/Par
01	Please see Item Breakup for details.				28017220.00	53.85	43104492.97	
Description:- Supply of Cement								

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule C2-Supplying Reinforcementsteel								Above/ Below/Par
01	Please see Item Breakup for details.				35166331.07	59.23	55995348.96	
Description:- Supplying Reinforcementsteel								

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S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule E1-Electrical HT work							20089706.00	Above/ Below/Par
01	1	2.00	Numbers	2083110.00	4166220.00	AT Par	4166220.00	
	Description:- Supply, erection, testing and commissioning with foundation of Copper wound power distribution transformer with OCTC as per following: Rated Voltage (Line to line) : 11KV/433V Rated Output : 630KVA, Type: Oil immersed, Method Of cooling: ONAN, Number of Phase: Three, Rated frequency: 50Hz, Vector group : Dyn11 naturally cooled, Service Installation: Indoor/outdoor installation Range of Taps: +5% to -10% @ 2.5%, Percentage Impedance: 5%, System fault level: 18.1kA for 1sec., System earthing: Solidly Earthed, Terminal Arrangement: 11KV side 3C, XLPE cable , LT side: XLPE cable arrangement, Transformer shall be provided with all fittings & accessories along with marshalling box as listed in technical specification complete as required. Make: Schneider, ABB, BHEL, and Crompton. Energy Efficient transformer as per IS 1180 or latest IS.							
01	2	1.00	Set	4449061.00	4449061.00	AT Par	4449061.00	
	Description:- Supply, erecting (with support structure/foundation), testing & commissioning of 11 KV switch boards (horizontal draw out & horizontal isolation type) consisting of 5 nos. of 1250A VCB's (2 Incoming, 1 Bus coupler and 2 outgoing) with inbuilt 24V DC auxiliary/ control supply (power pack with battery backup) in each VCB Panel with all accessories like CT, PT, protective relay, Copper bus bar, wiring, instrumentation, indication lamp, energy meter, MF meter etc. complete in all respect as per technical specification.							
01	3	1.00	Numbers	5200000.00	5200000.00	AT Par	5200000.00	
	Description:- Supply, erection (with support structure & foundation), testing & commissioning (Connecting & installation) of 500 KVA Water cooled DG set developing 604 BHP (minimum) at 1500 RPM engine make Cummins/ caterpillar/ Greaves coupled to 500 KVA 415V, 3PH 0.8 pf, 50 HZ, XEC/Crompton/ELGI/Stamford/ Cummins /Greaves Alternator mounted on common Base frame with residential silencer, Standard Control panel, Battery with leads and suitable Capacity Diesel tank, Sound proof Acoustic Enclosure and accessories Complete with AMF control panel as per specification. Note: The sound proof acoustic enclosure should be manufactured by Authorized OEM's of the approved DG sets. It should be weather proof, corrosion resistant and made out of cold rolled steel duly surface treated, phosphated and finally powder coated for long lasting finish and aesthetic in looks.							
01	4	1.00	Set	687358.00	687358.00	AT Par	687358.00	
	Description:- Capacitor Panels Supply, erection (with support structure/foundation) ,testing & commissioning of the extensible cubicle indoor mounting, dust and vermin proof, floor mounted ,suitable for IP-42 sheet steel clad, switch board suitable for use of 3- phases 415V 50Hz 4 wire SYS. Incoming: 400A, 415V 4 pole 50 kA MCCB within built thermal magnetic release for short circuit over current protection with CTs - 1 No, Automatic power factor relay (APFCR) with 4 pole contactor-01 nos. 400A, TPN Aluminium Bus Bar-1 Set. Outgoing: 25 kVAR Resistor Type Capacitor Bank with 50A Contactor/ MCB for switching ON/OFF complete as required - 4 Set. 25 kVAR Resistor Type Capacitor Bank with 50A Contactor/ MCB for switching ON/OFF complete as required - 2 Set. Indication lamp for ON/OFF for both status of capacitor operation -2 set							
01	5	800.00	Metre	1407.00	1125600.00	AT Par	1125600.00	
	Description:- Supply and laying of XLPE insulated, PVC sheathed armoured underground aluminium cable of size 3 core 240 Sq. mm HT cable of graded 11KV conforming to IS 7098 with upto date amendment							
01	6	2.00	Set	17166.00	34332.00	AT Par	34332.00	
	Description:- Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 3X240 Sq mm, 3 core, XLPE aluminium conductor cable of 11 KV grade							
01	7	6.00	Set	11681.00	70086.00	AT Par	70086.00	
	Description:- supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 3X240 Sq mm, 3 core, XLPE aluminium conductor cable of 11 KV grade							
01	8 i	1.00	Set	70875.00	70875.00	AT Par	70875.00	
	Description:- H Pole GOS Assembly for taping HT (11 KV) 3Ph. Supply : (i)Supply, erection (with support structure/foundation), testing & commissioning of double pole structure by 02 nos. of RSJ poles 100X116-11 meters. Long with nut , bolt, washer, insulator, all connected works, pit, accessories etc.							
01	8 ii	1.00	Set	10946.00	10946.00	AT Par	10946.00	
	Description:- H Pole GOS Assembly for taping HT (11 KV) 3Ph. Supply : (ii)Supply, erection(with support structure), testing and commissioning of HT (11KV) isolating arrangement with 800 A capacity AB switch vertical mounting type of approved make fixed on DP structure with gang operated rod including all connected accessories etc.							
01	8 iii	1.00	Set	5296.00	5296.00	AT Par	5296.00	
	Description:- H Pole GOS Assembly for taping HT (11 KV) 3Ph. Supply : (iii)Supply, erection(with support structure) , testing and commissioning of 11KV drop out fuse of approved make and operated rod DP structure including all connected accessories for this GOS etc.							
01	9	50.00	cum	3953.00	197650.00	AT Par	197650.00	

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			Description:- Foundation for electrical items.				
01	10	2.00	Set	5997.00	11994.00	AT Par	11994.00
	Description:- Supply, erecting, testing & commissioning (with supporting structure/foundation) of pallet type oxide film lighting arrestor suitable for 11 KV HT line (9 KV 5 KA) with all allied materials to be provided in 2/4 pole structure of overhead line alignment with suitable bracketing arrangement for fixing.						
01	11	100.00	Metre	2575.00	257500.00	AT Par	257500.00
	Description:- Horizontal drilling of bores for laying of LT/HT cable in road and track						
01	12	200.00	Metre	1187.00	237400.00	AT Par	237400.00
	Description:- Supply and erection of GI pipe of 150 mm dia of "B" Class.						
01	13	50.00	Set	530.00	26500.00	AT Par	26500.00
	Description:- Supply & Installation of cable route marker with cement concrete foundation 1:2:4 of size 60X60 cm at the bottom and 50X50 cm at top with a thickness of 10 cm including inscription duly engraved as required						
01	14	10.00	Sqm	5168.00	51680.00	AT Par	51680.00
	Description:- Supply and laying of industrial type chequered rubber Mat of 25 mm thick of size 2mX1m as per tender specification.						
01	15	4.00	Set	4029.00	16116.00	AT Par	16116.00
	Description:- Supply, erection (with supporting structure), and commissioning of DCP type fire extinguisher 10 kg capacity, cartridge type, fitted with gun metal chrome plated cap 150gm CO2 gas cartridge, powder, bracket confirming to IS & erected with clamp from GI flat of 50X6 mm.						
01	16	10.00	Each	244.00	2440.00	AT Par	2440.00
	Description:- supply, erection (with supporting structure) HT/LT danger notice plate of 200mm x 150mm made of mild steel at least 2 mm thick						
01	17	1.00	Set	358359.00	358359.00	AT Par	358359.00
	Description:- Design, supply, erection (with supporting structure), testing and commissioning of fire detection System for unit substation each set consisting of Smoke detectors 4 nos, Normal Beam Heat detectors 4 nos, Manual call point response - 1 no, Audio visual alarm 1 no, Control Module 1 no, Fire Alarm Control Panel with Display- 1 no, Loop interface board(signaling line Circuit) - 1 no, Fire Alarm Repeater/ annunciator panel - 1 no, Response Indicator - 1 no, Ethernet bridge (If the PLC Panel's ethernet bridge can be utilised, it need not be separate) with all connected accessories like wiring, cabling, clamping etc.						
01	18	50.00	Metre	4996.00	249800.00	AT Par	249800.00
	Description:- Supply, laying, testing & Commissioning with gland, end termination & related accessories of LT XLPE insulated, PVC sheathed armoured aluminium cable of size 4 core 630 sq mm of 1100V grade conforming to IS 7098 with upto date amendment.						
01	19	1.00	Set	2602665.00	2602665.00	AT Par	2602665.00
	Description:- Design, Supply, Installation, testing and commissioning (with support structure) of cubicle type 14SWG LT panel (Indoor type) with 2400 amps sectionalized electrolytic copper bus bar as per specification. All the (incoming only) ACB are should be provided with LT Tri-vector digital meters and incoming ACB & DG set MCCB should be provided with Ammeter, voltmeter, selector switches and RYB indication lamps. LT panel board should confirm to IS-8263, ACB's and MCCB's should be confirming to IS-2516. The digital type KWH meter with CTs of suitable capacity with R.S.485 port for incoming supply and digital type KWH meter with CTs of suitable capacity for each out going feeders including with all other connected accessories etc. as directed by Engineer at site. Incoming: 2 X 1250 Amps 50 KA 4 pole ACB Microprocessor based EDO type with microprocessor released type with over current, short circuit, Earth Fault protection. (Both the ACBs are interlocked mechanically and electrically). Change over: 1 X 800 Amps 4 pole on load change over switch with 1 X 630 Amps 4 pole 50 KA Double Break contact MCCB. (For DG set) Out goings: 8 X 400 Amps 4 pole 50 KA MCCB, 4 X 320 Amps 4 pole 50 KA MCCB, 6 X 250 Amps 4 pole 36 KA MCCB, 4 X 200 Amps 4 pole 36 KA MCCB, 2 X 100 Amps 4 pole 25 KA MCCB, 2 X 63 Amps TP MCB, 4 X 32 Amps TP MCB						
01	20	1500.00	Kg	113.00	169500.00	AT Par	169500.00
	Description:- Supply & Fixing of 6 mm thick MS chequered plate including the MS angle support on the trench of the sub-station equipment complete as required						
01	21	100.00	Metre	400.00	40000.00	AT Par	40000.00
	Description:- Supply ,erection ,testing and commissioning of PVC insulated copper conductor 10 core 2.5 Sq.mm armored control cabling/ wiring in open duct/ pipes/ on surface/in ground etc. as required for complete controls/ audio visual annunciation/ trip system / watering system etc. for above.						
	22	1.00	Set	48328.00	48328.00	AT Par	48328.00

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01	<p>Description:- Supply & fixing of i. shock treatment chart duly framed (Bilingual Hindi & English) ii. Tool Box: 1Set make Tapariya, Jhalani,etc. {Tool box with items a. Open Jaw spanner -12 Nos. 6/7, 8/9,10/11, 12/13, 14/15, 16/17, 18/19, 20/22, 21/23, 24/27, 25/28, 30/32) b. ring spanner-12 nos.6/7, 8/9,10/11, 12/13, 14/15, 16/17, 18/19, 20/22, 21/23, 24/27, 25/28, 30/32) c. Ball Hammer-01 no. d. Hexa frame- 01 no. e. C. Plier 210mm-01 no. f. Chiesel 22 x 200mm-01 no. g. Screw driver 200mm-01 no. h. Round File 200mm-01 no. i. Flat file 150mm-01 no. j. Ratchet socket spanner (Ratchet-01 Nos. ,Handle-03 ,Socket-01 Nos)-01 set } iii. Key Board: 1 Set iv. First Aid Box: 1 Set v. Fire /Sand Bucket: 1Set vi Pair of Insulated gloves: 1 Set vii. Set Earthing rods: 1 Set viii. HT and LT Danger Board: 1 Set</p>
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S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule E2-Electrical LT work							29853131.00	Above/ Below/Par
01	1	100.00	Numbers	7500.00	750000.00	AT Par	750000.00	
	<p>Description:- Supply, erection, testing and commissioning of air circulator wall mounting brackets fan blade 600 mm sweep similar to Crompton price catalogue no AC600WALL-1. with fixing up at suitable height with foundation bolt and clamp as per requirement. Make shall be as per T.S.</p>							
01	2	60.00	Numbers	2780.00	166800.00	AT Par	166800.00	
	<p>Description:- Supply, erection, testing & commissioning of 1400mm sweep ceiling fan low voltage Havells model no SS-390 or equivalent with electronic regulator. Make shall be as per T.S.</p>							
01	3	20.00	Numbers	4583.00	91660.00	AT Par	91660.00	
	<p>Description:- Supply, erection, testing & commissioning of AC Exhaust fan 300 mm sweep, 1400 RPM Crompton greaves price catalogue no EXHD300-4-1 or equivalent suitable to work on 230/250V, 50 HZ complete with mounting frame and louvers including suitable size of hole for fixing of exhaust fan connection complete as required</p>							
01	4	4.00	Set	10863.00	43452.00	AT Par	43452.00	
	<p>Description:- Supply, erection, testing & commissioning of AC Exhaust fan of 600 mm sweep, 900 RPM suitable to work on 230V, 50 HZ equivalent to Crompton greaves model No EXHD600-6-1 complete with mounting frame and louvers including suitable size of hole for fixing of exhaust fan connection complete as required. Make shall be as per T.S.</p>							
01	5	3.00	Set	690077.00	2070231.00	AT Par	2070231.00	
	<p>Description:- Supply, Erection(with foundation), testing & commissioning of 25 Mtr. Long High Mast complete with LED light 1x200-10nos., Control Panel, aviation Twin dome 1x9W- 2 nos. LED light, Foundation, LT cable 3.5x25 Sq mm, MS fencing grill etc. as per technical specification. Light fittings shall be as per Crompton cat no.LSFO-200-CDL/60 or equivalent. Make shall be as per TS.</p>							
01	6	60.00	Each	15443.00	926580.00	AT Par	926580.00	
	<p>Description:- Supply, erection (with foundation), testing and commissioning of heavy gauge galvanized steel tubular pole of 9 m long as per 410 sp 30, bottom size 139.7 mm dia and 5.40 mm thick, middle 114.3 mm dia & 4.5 mm thick, top 88.9 mm dia & 3.25 mm thick with inbuilt junction box on the bottom section of the pole with required loop box and all accessories including MCB.</p>							
01	7	60.00	Each	2059.00	123540.00	AT Par	123540.00	
	<p>Description:- Supply and Erection of Steel Tubular Pole Arm one way for one nos. light fitting.</p>							
01	8	500.00	Numbers	1110.00	555000.00	AT Par	555000.00	
	<p>Description:- Supply, erection, testing and commissioning of LED Tube Light, 18 W, T5 fitting complete with lamp and accessories. havells Model no. REGALBATTENT8UPT01x22WDSBSWH for batten and TITANIANE01213TBSSTL18WLED865SPC for tube light or equivalent. Make shall be as per T.S.</p>							
01	9	20.00	Numbers	10000.00	200000.00	AT Par	200000.00	
	<p>Description:- Supply, erection, testing and commissioning of PDC Aluminium constructed Recessed mounted under canopy luminaire with superior aesthetic finish and high reliability and having efficacy of 110 Lm/w LED of 80Watt with IP 66 protection equivalent to Crompton Model no. LCNP-80-CDL@47<45@M or equivalent. Make shall be as per T.S.</p>							
01	10	4.00	Numbers	5500.00	22000.00	AT Par	22000.00	
	<p>Description:- Supply, erection, testing & commissioning of 45 W, LED based Roadway Light Fitting complete with lamp (Crompton model no. LSTV-45-CDL or equivalent) including bracket suitable for mounting on the wall. Make of fitting shall be as per T.S.</p>							
01	11	30.00	Numbers	1940.00	58200.00	AT Par	58200.00	
	<p>Description:- Supply, erection, testing & commissioning of LED Tube Light, 2X18 W, T5 fitting complete with lamp and accessories. havells Model no. REGALBATTENT8UPT02x22WDSBSWH for batten and TITANIANE01213TBSSTL18WLED865SPC for tube light or similar. Make of fitting shall be as per T.S.</p>							
01	12	4.00	Numbers	2661.00	10644.00	AT Par	10644.00	

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01	Description:- Supply, erection, testing and commissioning of LED mirror light as per Philips, Model no. 30973 or equivalent. Make of fitting shall be as per T.S.						
	13	20.00	Numbers	2100.00	42000.00	AT Par	42000.00
01	Description:- Supply, erection, testing & commissioning of Bulkhead fitting of 10W LED, as per havells model no. LHEOAOP7UZ6W010 or equivalent. Make shall be as per T.S.						
	14	4.00	Each	9900.00	39600.00	AT Par	39600.00
01	Description:- Supply, erection, testing and commissioning of LED Light (Crompton model no. LBGCL 40W LED or equivalent) for Gate/Mini pole light. Make shall be as per T.S.						
	15	10.00	Numbers	7000.00	70000.00	AT Par	70000.00
01	Description:- Supply, erection, Testing & Commissioning of Recessed mounted LED Based 36 watt, luminaries fitting 2x2 feet complete, with glare-less light. Fixture shall be Crompton model no LCTLRP-36-FO-CDL or equivalent. Make shall be as per T.S.						
	16	128.00	Numbers	20000.00	2560000.00	AT Par	2560000.00
01	Description:- Supply, erection, testing and commissioning of High efficiency round highbay 150W LED in PDC housing suitable for industrial application. The luminaire shall be efficacy upto 120Lm/W and ingress protection of IP65. Fixture shall be Bajaj model no BGHBM 150W LED XE or equivalent. Make shall be as per T.S.						
	18	4.00	Set	4275.00	17100.00	AT Par	17100.00
01	Description:- Supply, erection, testing & commissioning of Recess mounted 20W LED wall washers Light with LED Driver, tilted 70° outwards and swivels 360° to offer best illumination on the wall and retail displays fixture shall be havells model no. SPARKLEPROSNOOTDLR20W830MOD30DWTNEEM or equivalent. Make shall be as per T.S.						
	19	25.00	Numbers	750.00	18750.00	AT Par	18750.00
01	Description:- Supply, erection, testing & commissioning of Slim-Fit low profile 6W LED down lights to deliver superior light output and uniformity utilizing the latest edge-lit LED technology suitable for Ceiling cutout: 105x105 mm, height 16mm, equivalent to havells model no. EDGEPROSQDLR6WLED840S. Make shall be as per T.S.						
	20	4.00	Numbers	4200.00	16800.00	AT Par	16800.00
01	Description:- Supply, erection, testing & commissioning of die-cast aluminium 50W LED flood light with high power LEDs as light source, suitable for highlighting architectural features or Area Lighting equivalent to havells model no. JETAQUANTOPLUSFLP50WLED757SYMLENS. Make shall be as per T.S.						
	21	2.00	Numbers	9990.00	19980.00	AT Par	19980.00
01	Description:- Supply, erection, testing & commissioning of die-cast aluminium 100W LED flood light, suitable for highlighting architectural facade and general purpose lighting with IP 66 Protections equivalent to havells model no. JETAIRISFLS100WLED757SYMLTG. Make shall be as per T.S.						
	22	350.00	Each	783.00	274050.00	AT Par	274050.00
01	Description:- Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required .(Point)						
	23 i	2200.00	Metre	229.00	503800.00	AT Par	503800.00
01	Description:- Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. (Cost of conduit included). (i)2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire						
	23 ii	700.00	Metre	263.00	184100.00	AT Par	184100.00
01	Description:- Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. (Cost of conduit included). (ii)2 X 4 sq. mm + 1 X 4 sq. mm earth wire						
	23 iii	200.00	Metre	406.00	81200.00	AT Par	81200.00
01	Description:- Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. (Cost of conduit included). (iii)4 X 4 sq. mm + 2 X 4 sq. mm earth wire						
	23 iv	400.00	Metre	356.00	142400.00	AT Par	142400.00
01	Description:- Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. (Cost of conduit included)(iv) 2 X 6 sq. mm + 1 X 6 sq. mm earth wire						
	24 i	300.00	Metre	167.00	50100.00	AT Par	50100.00
01	Description:- Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. (Cost of conduit included) (i)2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire						
	24 ii	300.00	Metre	200.00	60000.00	AT Par	60000.00

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01	Description:- Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. (Cost of conduit included)(ii)2 X 4 sq. mm + 1 X 4 sq. mm earth wire						
	24 iii	100.00	Metre	249.00	24900.00	AT Par	24900.00
01	Description:- Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. (Cost of conduit included)(iii)2 X 6 sq. mm + 1 X 6 sq. mm earth wire						
	24iv	100.00	Metre	308.00	30800.00	AT Par	30800.00
01	Description:- Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. (Cost of conduit included)(iv)4 X 4 sq. mm + 2 X 4 sq. mm earth wire						
	25 i	3000.00	Metre	55.00	165000.00	AT Par	165000.00
01	Description:- Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/ PVC conduit as required(i)2 x 2.5 sq. mm						
	25ii	3000.00	Metre	117.00	351000.00	AT Par	351000.00
01	Description:- Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/ PVC conduit as required(ii)3 x 4 sq. mm						
	26 i	1500.00	Metre	90.00	135000.00	AT Par	135000.00
01	Description:- Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required(i)25 mm						
	26 ii	1500.00	Metre	92.00	138000.00	AT Par	138000.00
01	Description:- Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required(ii)32 mm						
	27	250.00	Numbers	961.00	240250.00	AT Par	240250.00
01	Description:- Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.						
	28	200.00	Metre	57.00	11400.00	AT Par	11400.00
01	Description:- Supply and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required						
	29	50.00	Metre	128.00	6400.00	AT Par	6400.00
01	Description:- Supply and fixing 4mm dia. copper wire on surface or in recess for loop earthing etc as required.						
	30 i	1200.00	Metre	1773.00	2127600.00	AT Par	2127600.00
01	Description:- Supply, laying, testing and commissioning of XLPE insulated PVC sheathed armoured underground aluminium cable of graded 1.1KV for working voltage upto 1100 volts conforming to IS 7098 with upto date amendment as detailed given below (with making end termination with brass compression gland and lug as required): Laying of cable done with proper provisioning of bricks & sand as given in TS (i)4C x 240 sq.mm						
	30 ii	1200.00	Metre	1414.00	1696800.00	AT Par	1696800.00
01	Description:- Supply, laying, testing and commissioning of XLPE insulated PVC sheathed armoured underground aluminium cable of graded 1.1KV for working voltage upto 1100 volts conforming to IS 7098 with upto date amendment as detailed given below (with making end termination with brass compression gland and lug as required): Laying of cable done with proper provisioning of bricks & sand as given in TS(ii)4C x 185 sq.mm						
	30iii	400.00	Metre	753.00	301200.00	AT Par	301200.00
01	Description:- Supply, laying, testing and commissioning of XLPE insulated PVC sheathed armoured underground aluminium cable of graded 1.1KV for working voltage upto 1100 volts conforming to IS 7098 with upto date amendment as detailed given below (with making end termination with brass compression gland and lug as required): Laying of cable done with proper provisioning of bricks & sand as given in TS (iii)4C x 95 Sq. mm						
	30iv	3000.00	Metre	602.00	1806000.00	AT Par	1806000.00
01	Description:- Supply, laying, testing and commissioning of XLPE insulated PVC sheathed armoured underground aluminium cable of graded 1.1KV for working voltage upto 1100 volts conforming to IS 7098 with upto date amendment as detailed given below (with making end termination with brass compression gland and lug as required): Laying of cable done with proper provisioning of bricks & sand as given in TS (iv)4C x 70 sq.mm						
	30v	2500.00	Metre	356.00	890000.00	AT Par	890000.00
01	Description:- Supply, laying, testing and commissioning of XLPE insulated PVC sheathed armoured underground aluminium cable of graded 1.1KV for working voltage upto 1100 volts conforming to IS 7098 with upto date amendment as detailed given below (with making end termination with brass compression gland and lug as required): Laying of cable done with proper provisioning of bricks & sand as given in TS (v)4C x 35 sq.mm						

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01	30vi	300.00	Metre	175.00	52500.00	AT Par	52500.00	
	Description:- Supply, laying, testing and commissioning of XLPE insulated PVC sheathed armoured underground aluminium cable of graded 1.1KV for working voltage upto 1100 volts conforming to IS 7098 with upto date amendment as detailed given below (with making end termination with brass compression gland and lug as required): Laying of cable done with proper provisioning of bricks & sand as given in TS (vi)4C x 10Sq. mm							
01	30vii	800.00	Metre	164.00	131200.00	AT Par	131200.00	
	Description:- Supply, laying, testing and commissioning of XLPE insulated PVC sheathed armoured underground aluminium cable of graded 1.1KV for working voltage upto 1100 volts conforming to IS 7098 with upto date amendment as detailed given below (with making end termination with brass compression gland and lug as required): Laying of cable done with proper provisioning of bricks & sand as given in TS (vii)3C x 10 Sq. mm							
01	31	3000.00	Metre	374.00	1122000.00	AT Par	1122000.00	
	Description:- Excavation of cable trench in Rocky soil to depth of 1250mm and width of 450mm and making of original arrangements including sand cushioning, protective covering and refilling the trench etc. as required.							
01	32	1200.00	Metre	599.00	718800.00	AT Par	718800.00	
	Description:- Supply, erection and commissioning of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5% of size 300mm width, 62.5mm depth, 2mm thickness with all connected accessories viz. vertical bends, reducers, tees, cross members etc. including fixing with suitable Clamps / MS angles / MS flats and with necessary connected hardware etc.							
01	33	200.00	Metre	318.00	63600.00	AT Par	63600.00	
	Description:- Supply & erection of 50 mm dia medium class GI pipe.							
01	34	150.00	Metre	754.00	113100.00	AT Par	113100.00	
	Description:- Supply & erection of 100 mm dia medium class GI pipe.							
01	35	150.00	Metre	520.00	78000.00	AT Par	78000.00	
	Description:- Supply & erection of 80 mm dia medium class GI pipe.							
01	36 i	500.00	Metre	165.00	82500.00	AT Par	82500.00	
	Description:- Supply and fixing of following sizes of Steel conduit along with the accessories in surface/recess including painting in case of surface conduit or cutting the wall and making good the same in case of recessed conduit complete as required:(i)25 mm							
01	36ii	200.00	Metre	203.00	40600.00	AT Par	40600.00	
	Description:- Supply and fixing of following sizes of Steel conduit along with the accessories in surface/recess including painting in case of surface conduit or cutting the wall and making good the same in case of recessed conduit complete as required:(ii)32 mm							
01	36iii	150.00	Metre	292.00	43800.00	AT Par	43800.00	
	Description:- Supply and fixing of following sizes of Steel conduit along with the accessories in surface/recess including painting in case of surface conduit or cutting the wall and making good the same in case of recessed conduit complete as required:(iii)40 mm							
01	37	60.00	Set	3048.00	182880.00	AT Par	182880.00	
	Description:- Supply, erection, testing and commissioning of 30 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top along with 30 A "C" curve, TP MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.							
01	38	120.00	Numbers	401.00	48120.00	AT Par	48120.00	
	Description:- Supply and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular							
01	39	60.00	Each	495.00	29700.00	AT Par	29700.00	
	Description:- Supply and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections, testing etc. as required							
01	40	128.00	Each	831.00	106368.00	AT Par	106368.00	
	Description:- Supply, erection (with support structure), Testing & Commissioning of outdoor type 4 way terminal junction box hinged type, combining SMS, pultruded FRP section, advanced poly metric materials and MS members, 100% maintenance, rust proof, shock proof and highly weatherable and extremely durable and provided with 4 nos. of copper terminals mounted on SMS/Hylam sheet of 10mm thickness including provision for locking arrangements knockout cable entries etc., with all other connected materials and works.							
01	41	20.00	Each	1232.00	24640.00	AT Par	24640.00	
	Description:- Supply, erection, testing and commissioning of 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 A, C curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.							

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01	42 i	192.00	Each	199.00	38208.00	AT Par	38208.00	
	Description:- Supply, erection, testing and commissioning of 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.(i)Single Pole							
01	42ii	24.00	Each	556.00	13344.00	AT Par	13344.00	
	Description:- Supply, erection, testing and commissioning of 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.(ii)Double pole							
01	42iii	16.00	Each	1092.00	17472.00	AT Par	17472.00	
	Description:- Supply, erection, testing and commissioning of 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.(iii)Triple pole and neutral							
01	43	30.00	Each	196.00	5880.00	AT Par	5880.00	
	Description:- Supply, erection, testing and commissioning of 3 pin 5/6 amps modular socket outlet & 5/6A switch modular type on existing modular plate, switch box including connection etc. as required.							
01	44 i	16.00	Each	3068.00	49088.00	AT Par	49088.00	
	Description:- Supply, erection (with support structure), testing & commissioning following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)(i)4 way (4 + 12), Double door, 440V							
01	44ii	24.00	Each	2053.00	49272.00	AT Par	49272.00	
	Description:- Supply, erection (with support structure), testing & commissioning following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)(i)4 way (4 + 12), Double door, 440V (ii)12 way , Double door, 240V							
01	45	10.00	Numbers	1218.00	12180.00	AT Par	12180.00	
	Description:- Supplying and fixing 63A rating, 415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load in the existing MCB DB complete with connections, testing and commissioning etc. as required.							
01	46	4.00	Set	388645.00	1554580.00	AT Par	1554580.00	
	Description:- Supply, erection (with foundation/support structure), testing and commissioning of weather proof LT panel complete with 400Amps TPN MCCB ,35KA-1 No., 400Amps, 3-phase changeover switch-1 No., 200 Amps MCCB,35KA-2 No., 125Amps,TPN MCCB ,35KA-1 No., 100Amps,TPN MCCB ,35KA-4 No., 63 Amps TPN MCB -4, 32 Amps TPN MCB- 4 Nos. Digital A/M 0 to 600Amps, with CT Digital V/M 0-600V, Digital clock-1 No.,3PH,KWH meter-400A with CT-1set, Selector switch for A/M &V/M, freq. meter -1No, P/F meter-1No. Copper busbar of required current rating, The panel should made from 2mm/14SWG CRCA sheet powder coated painting and IP-55 class of insulation having hinged door and locking arrangement rubber gasket, extensible from both sides, suitable for 3 phase four wire 500 volts 50 HZ, in all respect and confirming to latest relevant ISI specification, floor mounted with insulator, measuring instrument, including all connecting material etc as required.							
01	47i	3.00	Set	134623.00	403869.00	AT Par	403869.00	
	Description:- Supply, erection (with foundation), Testing & Commissioning of weather proof feeder pillar in position on suitable platform of brick masonry in 1:6 with neat finish cement plaster having suitable size of channels for mounting feeder pillar, the feeder pillar is to be fabricated out of 14 SWG CRCA sheet with powder coated painting and IP-55 class of insulation having hinged door and locking arrangement rubber gasket, extensible from both sides, suitable for 3 phase four wire 500 volts 50 HZ, in all respect and confirming to latest relevant ISI specification, of approved shape along with copper bus bars of suitable rating, nuts- bolts and washer dust vermin water proof including painting with primer, and two coats of approved shade including proper connection with suitable size of wire with all connecting materials, earthing making etc. complete as required with following mountings (i)(a) 200 A, 36 KA TPN MCCB 1 No, (b) 63 A, 25 KA TPN MCCB 6 No, (c) 32 A TPN MCB 2 No, (d) 32 A SPN MCB 2 No, (e) 10/6 A SPN MCB 9 No, (f) Micro Rex QT 31 Time switch 9 No. , with required size copper bus bar ,contactor ,insulator, indicating lamp and other measuring instrument including all connecting material etc as required.							
01	47ii	20.00	Numbers	14350.00	287000.00	AT Par	287000.00	

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	Description:- Supply, erection (with foundation), Testing & Commissioning of weather proof feeder pillar in position on suitable platform of brick masonry in 1:6 with neat finish cement plaster having suitable size of channels for mounting feeder pillar, the feeder pillar is to be fabricated out of 14 SWG CRCA sheet with powder coated painting and IP-55 class of insulation having hinged door and locking arrangement rubber gasket, extensible from both sides, suitable for 3 phase four wire 500 volts 50 HZ, in all respect and confirming to latest relevant ISI specification, of approved shape along with copper bus bars of suitable rating, nuts- bolts and washer dust vermin water proof including painting with primer, and two coats of approved shade including proper connection with suitable size of wire with all connecting materials, earthing making etc. complete as required with following mountings (ii)(a) 63-A MCB TPN-1 No., (b) 32A SP MCB-6 No., (c)16/20A SP MCB-6 No., Timer, contactor & selector switch as required with required size copper bus bar ,insulator, indicating lamp and other measuring instrument including all connecting material etc as required.						
01	47iii	2.00	Set	56779.00	113558.00	AT Par	113558.00
	Description:- Supply, erection (with foundation), Testing & Commissioning of weather proof feeder pillar in position on suitable platform of brick masonry in 1:6 with neat finish cement plaster having suitable size of channels for mounting feeder pillar, the feeder pillar is to be fabricated out of 14 SWG CRCA sheet with powder coated painting and IP-55 class of insulation having hinged door and locking arrangement rubber gasket, extensible from both sides, suitable for 3 phase four wire 500 volts 50 HZ, in all respect and confirming to latest relevant ISI specification, of approved shape along with copper bus bars of suitable rating, nuts- bolts and washer dust vermin water proof including painting with primer, and two coats of approved shade including proper connection with suitable size of wire with all connecting materials, earthing making etc. complete as required with following mountings (iii)(a) 125A 25KA TPN MCCB - 1 No. (b) 100A 25KA TPN MCCB - 1 No. (c) 63A TPN MCB - 1 No. (d) 40A TPN MCB - 1 No. (e) 32A SPN MCB - 2 No. with required size copper bus bar, contactor, insulator, indicating lamp and other measuring instrument including all connecting material etc as required.						
01	48	48.00	Each	16734.00	803232.00	AT Par	803232.00
	Description:- Supply, erection (with foundation/support structure), testing and commissioning of weather proof 3P, 100A DB pillar mounted O/D type, Power coated made from 2.0 mm/14SWG CRCA sheet complete with 3 Ph, TPN MCB 63A- 2 nos. and 63A, 3 phase 5 pin plug socket-1 no., LED indicator I/C & O/G O/L's for pre-cooling, welding with required size of copper Bus Bar, insulator, measuring instrument, selector switch, including all connecting material etc as required.						
01	49	300.00	Numbers	2513.00	753900.00	AT Par	753900.00
	Description:- PIT LIGHTING: Design, fabrication, supply, erection, testing & commissioning of LED based luminary having input voltage 40V - 72V AC, frequency 50 Hz, Input Power 16 watt with IP 67 enclosure & Impact protection IK 10 with High brightness, high intensity with minimum efficiency of 80 lumens/watt & with proper ON/OFF and locking arrangements . The luminaries shall be designed such a way to illuminate the under frame of the coach and path lighting of pit line. The cubicle shall be fabricated with MS sheet / Poly carbonate body with high built of epoxy coating, heat resistive up to 70 degree centigrade complete with weather proof, rust proof and suitable arrangement for fitment. Fixture shall be IR-GOLD-C1 of M/s Goldwyn Limited or equivalent. Make shall be as per T.S						
01	50	300.00	Numbers	3427.00	1028100.00	AT Par	1028100.00
	Description:- Cat walk lights: Design, fabrication, supply, erection, testing & commissioning of LED based Cat walk lighting luminaries complete, with input wattage of 21W suitable to work on 40 V-72 V AC supply with all connected accessories & proper ON/OFF and locking arrangements. Luminaries should be Ingress protection IP 67 & Impact protection IK 10. The cubicle shall be fabricated with MS sheet / Poly carbonate body with high built of epoxy coating, heat resistive up to 70 degree centigrade complete with weather proof, rust proof and suitable arrangement for fitment. Fixture shall be IR-GOLD-B1 of M/s Goldwyn Limited or equivalent. Make shall be as per T.S						
01	51	15.00	Numbers	33790.00	506850.00	AT Par	506850.00
	Description:- supply, erection, installation, testing and commissioning of 5 KVA , 220V/48 V, single phase, natural air cooled, copper wound auto transformer as per IS in a weatherproof enclosure(with support structure) with input and output MCB protection, input and output terminal block, & indicator.						
01	52	20.00	Numbers	10350.00	207000.00	AT Par	207000.00
	Description:- Supply, erection, testing & commissioning of maintenance free earthing arrangement (Chemical earthing with low impedance, corrosion resistant & long life). Earth electrode is made up of high tensile low carbon steel circular rods bonded with copper on outer surface and interconnection of earth electrode with suitable size copper strip. The earth electrode shall be of minimum 17.0 mm diameter and 3.66 meter length as per details given technical specification.						
01	53	50.00	Metre	1009.00	50450.00	AT Par	50450.00
	Description:- Supplying and laying of 25 mm X 5 mm copper strip at 0.50 meter below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50 mm) as per IS 3043.						
01	54	40.00	Each	5308.00	212320.00	AT Par	212320.00

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	Description:- Supply, erection, testing & commissioning of earthing with G.I. earth pipe 4.5 meter long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.						
01	55	200.00	Metre	206.00	41200.00	AT Par	41200.00
	Description:- Supply and fixing 25mm X 5 mm G.I strip on surface or in recess for connection etc. as required.						
01	56	50.00	Metre	853.00	42650.00	AT Par	42650.00
	Description:- Supply and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.						
01	57	62.00	Each	46599.00	2889138.00	AT Par	2889138.00
	Description:- Design, Engineering, supply, erection, Testing & Commissioning of 750mm diameter Solar Light Pipes with all accessories for lighting as per tender specification.						
01	58	10.00	Kg	108.00	1080.00	AT Par	1080.00
	Description:- Supply and fixing clamp made of MS angle (size 50X25X6mm or 25X25X5mm) with required nuts, bolts, washer, etc.						
01	59	60.00	Each	448.00	26880.00	AT Par	26880.00
	Description:- Supply and fixing of lightening conductor, finial made of 25 mm dia.,300 mm long G.I tube having single prong at top with 85 mm dia. 6 mm thick GI base plate including holes complete as required.						
01	60	100.00	Each	93.00	9300.00	AT Par	9300.00
	Description:- Supply and fixing of Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.						
01	61	1300.00	Metre	104.00	135200.00	AT Par	135200.00
	Description:- Supply and fixing of G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run)						
01	62	600.00	Metre	163.00	97800.00	AT Par	97800.00
	Description:- Supply and fixing of the GI Tape 20X3mm thickness vertical						
01	63	5.00	Numbers	50235.00	251175.00	AT Par	251175.00
	Description:- Supply, erection, testing & commissioning of 5 star, 1.5 Ton Split A.C. (Voltas model no. 185 CYA or equivalent) with iron stand and 5 KVA voltage stabilizer (voltage range 150V to 285V). Make of A.C. & voltage stabilizer shall be as per T.S.						
01	64	5.00	Each	92.00	460.00	AT Par	460.00
	Description:- Supply erection, testing , commissioning of call bell suitable for single phase, 230V complete as required						
01	17	60.00	Numbers	6530.00	391800.00	AT Par	391800.00
	Description:- Supply, erection, testing and commissioning of 60W, LED based Roadway Light Fitting complete with lamp. The luminaire shall be efficacy upto 110 Lm/W and ingress protection of IP66. Fixture shall be Crompton model no. LSTP - 60 - CDL- M or equivalent. Make shall be as per T.S.						

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule F1-Mechanical Items (Machinery and Plants)							59218229.03	Above/ Below/Par
01	1	1.00	Numbers	17842095.60	17842095.60	AT Par	17842095.60	
	Description:- Supply, Installation and commissioning of Automatic coach Washing Plant as per specification no. IM/MEMU/DEMU/Anara/WP/Mech /M&P/ACWP							
01	2	1.00	Numbers	7234659.41	7234659.41	AT Par	7234659.41	
	Description:- Supply, Installation and commissioning of EOT Crane-25/7.5 Ton Cap. as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P/EOT Crane (25/7.5T)							
01	3	1.00	Numbers	1843466.33	1843466.33	AT Par	1843466.33	
	Description:- Supply, Installation and commissioning of Fork Lift Truck (Diesel operated cap.-5000 kg solid wheels) as per specification no. IM/MEMU/DEMU/Anara/WP/Mech /M&P /FLT(5T)							
01	4	1.00	Numbers	624824.50	624824.50	AT Par	624824.50	
	Description:- Supply, Installation and commissioning of Battery operated four wheeled platform truck of 2 Ton capacity with battery charger as per specification no. IM/MEMU/DEMU/Anara/WP/Mech /M&P /BOPT(2T)							
01	5	1.00	Set	3775324.44	3775324.44	AT Par	3775324.44	
	Description:- Supply, Installation and commissioning of Synchronised lifting jacks capacity 15T each (1 set = 5 jacks) as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P/SLJ(15T)							
	6	1.00	Numbers	8779948.53	8779948.53	AT Par	8779948.53	

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01	Description:- Supply, Installation and commissioning of Rail cum Road shunting vehicle as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P/RRSV						
	7	3.00	Numbers	425390.08	1276170.24	AT Par	1276170.24
01	Description:- Supply, Installation and commissioning of Inverter Based MIG/MAG Synergic Pulse welding plant air cooled cap. 400 Amp as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /MIG-MAG(400A)						
	8	2.00	Numbers	1263147.08	2526294.16	AT Par	2526294.16
01	Description:- Supply, Installation and commissioning of Multi Utility Vehicle as per specification no. IM/MEMU/DEMU/Anara/WP/Mech /M&P /MUV						
	9	1.00	Numbers	480146.83	480146.83	AT Par	480146.83
01	Description:- Supply, Installation and commissioning of High Pressure hot water/steam Jet Cleaning Machine as per specification no. IM/MEMU/DEMU/Anara/WP/Mech /M&P /HPJCM						
	10	6.00	Numbers	37762.00	226572.00	AT Par	226572.00
01	Description:- Supply, Installation and commissioning of Ladder as per specification no. IM/MEMU/DEMU/Anara/WP/Mech /M&P /Ladder						
	11	1.00	Numbers	741053.33	741053.33	AT Par	741053.33
01	Description:- Supply, Installation and commissioning of Pick up Van as per specification no. IM/MEMU/DEMU/Anara/WP/Mech /M&P /PUV						
	12	2.00	Numbers	324173.33	648346.66	AT Par	648346.66
01	Description:- Supply, Installation and commissioning of Winch Electric operated pulling machine as per specification no. IM/MEMU/DEMU/Anara/WP/Mech /M&P /PWM						
	13a	1.00	Numbers	2572000.00	2572000.00	AT Par	2572000.00
01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM)13 (a)Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier						
	13b	250.00	Metre	3168.00	792000.00	AT Par	792000.00
01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM)13 (b)Supply, Installation & Commissioning of 80 NB GI Pipe (IS:1239, Part-I) Heavy class (C class) including cutting, threading, welding etc. bends, elbow, reducers, nut bolts, washers, with one coat of primer and two coats of synthetic enamel paint of approved make and shade.						
	13c	60.00	Metre	1258.00	75480.00	AT Par	75480.00
01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM) 13(c)Supply, Installation & Commissioning of 25 NB GI Pipe (IS:1239, Part-I) Heavy class (C class) including cutting, threading, welding etc. bends, elbow, reducers, nut bolts, washers, with one coat of primer and two coats of synthetic enamel paint of approved make and shade.						
	13d	3.00	Numbers	11770.00	35310.00	AT Par	35310.00
01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM) 13(d)Supply, Installation & Commissioning of CI Ball Valve suitable for 15 Kg/sq cm, complete in all respect, 80 mm dia nominal bore.						
	13e	20.00	Numbers	3960.00	79200.00	AT Par	79200.00
01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM)13(e)Supply, Installation & Commissioning of Forged Brass Ball valve with hard chrome plated ball valve suitable for 15 Kg/sq.cm, complete in all respects, 25 mm dia nominal bore.						
	13f	50.00	Numbers	643.50	32175.00	AT Par	32175.00
01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM) 13(f)Supply, Installation & Commissioning of Support Clamp 80mm.						
	13g	50.00	Numbers	247.50	12375.00	AT Par	12375.00
01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM) 13(g)Supply, Installation & Commissioning of Support Clamp 25mm.						
	13h	100.00	Numbers	38.50	3850.00	AT Par	3850.00

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01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM) 13(h)Supply, Installation & Commissioning of TEE Bolt M8 X 50mm						
01	13i	50.00	Numbers	456.50	22825.00	AT Par	22825.00
01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM) 13(i)Supply, Installation & Commissioning of Mounting Bracket 300mm.						
01	13j	20.00	Numbers	2750.00	55000.00	AT Par	55000.00
01	Description:- Supply, Installation and commissioning of Air compressor of capacity 500 CFM with air receiver and air drier along with compressed air pipe line with valves, clamps and other fittings as per specification no. IM/MEMU/DEMU/Anara/WP/Mech/M&P /EAC(500CFM) 13(j)Supply, Installation & Commissioning of Branching Reducer 80mm X 25 mm						
01	14 i	1.00	Set	582400.00	582400.00	AT Par	582400.00
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(i)Pump sets 40 HP. 1 set= 2Nos Pump of 40 HP each along with Electric Motor). Motor & Pump should be of standard manufacturer such as M/s Kirloskar./ CGL/M&P/ D&B Vertical in Line Or type/HSC.						
01	14 ii	1.00	Numbers	73442.88	73442.88	AT Par	73442.88
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(ii)Common Skid Mounting For Pump set						
01	14 iii	2.00	Numbers	63632.80	127265.60	AT Par	127265.60
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(iii)MS Fabricated Suction Main Fold						
01	14iv	2.00	Numbers	63632.80	127265.60	AT Par	127265.60
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(iv)M.S. Delivery Main Fold						
01	14v	6.00	Numbers	18474.40	110846.40	AT Par	110846.40
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(v)Butter Fly Valve 150 mm						
01	14vi	4.00	Numbers	16056.32	64225.28	AT Par	64225.28
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(vi)Non return Valve 150 mm						
01	vii	1.00	Numbers	67827.20	67827.20	AT Par	67827.20
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(vii)Hydro Pneumatic Tank With Fittings						
01	14viii	2.00	Numbers	197478.40	394956.80	AT Par	394956.80
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(viii)On Line Flow meter 150NB .						
01	14ix	2.00	Numbers	197478.40	394956.80	AT Par	394956.80
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(ix)Electrical Operated Motorized Valve 150 mm make: CAIR/ZOLOTO/L&T/MTPL						
01	14x	200.00	Metre	277.76	55552.00	AT Par	55552.00
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(x)Laying of 1 sqmm 2 core Shielded cable including lugs etc.						
01	14xi	6.00	Set	29008.00	174048.00	AT Par	174048.00
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xi)Laying of RS 485 communication cable						
01	14xii	5.00	Set	43680.00	218400.00	AT Par	218400.00
01	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xii)2X25 mm Casing Pipe for communication and power cables						
01	14xiii	1.00	Set	197478.40	197478.40	AT Par	197478.40

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	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xiii)Panel for operation of Valves and flow meter						
01	14xiv	40.00	Metre	566.72	22668.80	AT Par	22668.80
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xiv)Power Cable From Pumps to Control Panel 16 Sq mm. Copper 3.5 core including lugs etc.						
01	14xv	1.00	Numbers	985600.00	985600.00	AT Par	985600.00
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xv)Control Panel for 2 pumps With VFD , PLC, HMI For Group Wise Pumping with APFC and suitable Capacitors.						
01	14xvi	1.00	Numbers	487200.00	487200.00	AT Par	487200.00
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xvi)SITC of Smart Control to Operate system (PUMPS and valves through mobile. Communication via GSM Network including SMPS power supply This may be installed in MCC Panel.						
01	14xvii	1.00	Numbers	140109.76	140109.76	AT Par	140109.76
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xvii)2 KVA Industrial UPS to give back up of minimum 2 hr.						
01	14xviii	4.00	Numbers	33202.40	132809.60	AT Par	132809.60
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xviii)Chemical Earthing as Per RDSO Nomes						
01	14xix	1.00	Set	500497.76	500497.76	AT Par	500497.76
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xix)SCADA For 500 Tab, data analysiser, including of PC, LED of 32" Key Board, Printer , allied accessories.						
01	14xx	1.00	Numbers	28344.96	28344.96	AT Par	28344.96
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xx)Suction Pressure Transducer and Pressure Gauges With Fittings.						
01	14xxi	1.00	Numbers	28344.96	28344.96	AT Par	28344.96
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xxi)Delivery Pressure Transducer With Pressure Gauge With Fittings.						
01	14xxii	1.00	Job	28582.40	28582.40	AT Par	28582.40
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xxii)Delivery Pressure Transducer With Pressure Gauge With Fittings. Various type of Small Cable to Connect control panel to UPS ,PC, and others as per site requirement in Pump Room and control room. Various Type of Luges, Cable Gland, Terminals etc.						
01	14xxiii	20.00	Kg	1086.40	21728.00	AT Par	21728.00
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xxiii)Copper wire to Connect the Control Panel,& Motors						
01	14xxiv	80.00	Kg	249.76	19980.80	AT Par	19980.80
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14 (xxiv)MS/GI/Fabricated Speceres like, Tee, Enlarger, reducer, spool including nut & bolts & packing, and flanges						
01	14xxv	600.00	Metre	3360.00	2016000.00	AT Par	2016000.00
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xxv)Supply & Fixing of 150 mm G.I. Hydrant Pipe Line with bends, distance pieces running meter.						
01	14xxvi	15.00	Numbers	1680.00	25200.00	AT Par	25200.00
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14 (xxvi)Supply of MS/G.I. Bends 90 degree 150 mm.						
01	14xxvii	50.00	Numbers	1411.20	70560.00	AT Par	70560.00
	Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xxvii)Supply &Fixing of MS Flanges 150 mm.						

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01	14xxviii	200.00	Numbers	246.40	49280.00	AT Par	49280.00
Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xxviii)Making Hole in G.I. Hydrant Pipe Line in every three meter and Fixed the M.S. Coupling with welding.							
01	14xxix	200.00	Numbers	179.20	35840.00	AT Par	35840.00
Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14 (xxix)Supply of MS reducing Coupling Size 50 X 25mm with treading to connect the G.I. Nipple 25 mm.							
01	14xxx	3.00	Numbers	30240.00	90720.00	AT Par	90720.00
Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14(xxx)Bellow seal for Hydrant Line of 150 mm G. I, Pipe Line at the interval of 150 meters length.							
01	14xxxi	200.00	Numbers	2116.80	423360.00	AT Par	423360.00
Description:- Supply, Installation and commissioning of Hydrant system for quick watering arrangement as per specification no. IM/MEMU/DEMU/Anara/ WP/Mech/M&P /QWA 14 (xxxi)Supply of SS304 PTEF seat 25 mm dia. Brass Bal valve KOR valve India(p) Ltd or TBS Engineers (p) Ltd or similar make with IS 9001-2000 Certificate or ISI standard single PC Designing Ball valve SS 304.							
01	15a	1.00	Job	180000.00	180000.00	AT Par	180000.00
Description:- Transportation and Restoration/ Renovation of Rolling Stock for displaying as Indian Railway Heritage at Premises of Pratapnagar Workshop 15(a)Transportation of 1 no. of BG/NG/MG Locomotive/Coach up to 63 KM by Road transport with loading and unloading by suitable crane & Trailer etc.							
01	15b	800.00	Kilometre	252.00	201600.00	AT Par	201600.00
Description:- Transportation and Restoration/ Renovation of Rolling Stock for displaying as Indian Railway Heritage at Premises of Pratapnagar Workshop 15(b)Transportation Charges for extra per Km rate beyond 63 Km including cost of fuel, lubricant etc. as per enclosed terms and conditions							
01	15c	1.00	Job	1462020.00	1462020.00	AT Par	1462020.00
Description:- Transportation and Restoration/ Renovation of Rolling Stock for displaying as Indian Railway Heritage at Premises of Pratapnagar Workshop 15(c)Restoration/Renovation of Locomotive/Coach for displaying as Indian Railway Heritage							

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule G1-Telecommunication works							204198.26	Above/ Below/Par
01	1	2000.00	Metre	25.65	51300.00	AT Par	51300.00	
Description:- Supply and transportation of CAT-6 Cable. Refer Technical specification. Inspection: Consignee								
01	2	1000.00	Metre	83.00	83000.00	AT Par	83000.00	
Description:- Supply and transportation, laying of HDPE Pipe for telecom wiring concealed or as per site engineer instruction, Dia: 25mm. I Refer Technical specification. Inspection: Consignee								
01	3	2.00	Numbers	4817.88	9635.76	AT Par	9635.76	
Description:- Supply and transportation of Krone type CT box (50 Pair) with disconnection & reconnection facility. Refer Technical specification. Inspection: Consignee								
01	4	1000.00	Metre	26.40	26400.00	AT Par	26400.00	
Description:- Supply and laying of 5 Pair PVC 0.6 MM Switch Board Cable as per TEC GR/WIR-06/03 MAR 2002. Refer Technical specification. Inspection: Consignee								
01	5	50.00	Numbers	529.00	26450.00	AT Par	26450.00	
Description:- Supply and fixing of 2 line RJ11 rosette in concealed wall with frames. Refer Technical specification. Inspection: Consignee								
01	6	25.00	Numbers	296.50	7412.50	AT Par	7412.50	
Description:- Supply and fixing of IO box RJ45 in concealed wall with frames and all accessories Refer Technical specification. Inspection: Consignee.								

3. ITEM BREAKUP

Schedule	Schedule B1-Earth Work							
Item- 01	Earth Work							
S No.	Item No	Description of Item			Unit	Qty	Rate	Amount

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		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				
1	011011	All kinds of soils	cum	15878.00	87.81	1394247.18
		Extra for lead of earth work above initial lead of 50m, in all kind of soils and rocks :				
2	011051	for every 50 m or part thereof - lead over 50m and upto 150m	cum	2806.00	10.98	30809.88
3	011052	for every 50m or part thereof - lead over 150m and upto 500m	cum	3732.00	9.40	35080.80
4	011070	Extra for every additional lift of 1.5m or part thereof, after the initial 1.5m, for earth work in all soils	cum	5856.00	8.20	48019.20
5	012010	Extra over item 011010 for excavation in foundations for buildings and bridges to cover dressing to neat dimension and plumbing sides etc. Note : Dressing under this item is payable for the total quantity of excavation in foundation and not partly	cum	13739.00	9.40	129146.60
6	012030	Extra for watering and ramming earth in foundation and floors in 15cm layers. Note : This item is payable where ramming is not included in the original rate for earthwork in filling.	cum	467.00	16.60	7752.20
7	012050	Supplying and filling sand in plinth and under floors including watering, ramming, consolidating and dressing complete	cum	2859.00	389.08	1112379.72
8	013120	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	70053.00	254.05	17796964.65
9	013130	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 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	cum	70833.00	14.14	1001578.62
					Total	21555978.85
Schedule	Schedule B2-CC & RCC Work					
Item- 01	CC & RCC Work					
S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
		Providing and laying in position cement concrete of specified proportion excluding cost of cement, centering and shuttering - All works upto Plinth level :				
1	031011	1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 20mm nominal size)	cum	438.80	1593.12	699061.06

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2	031012	1:3:6 (1 cement : 3 sand : 6 graded stone aggregate 40mm nominal size)	cum	635.14	1510.24	959213.83
		Providing and laying cement concrete, up to plinth in retaining walls, walls (any thickness) including attached plasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc, excluding the cost of cement and of shuttering, centering.				
3	031023	1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size)	cum	612.47	1774.56	1086864.76
4	031024	1:1.5:3 (1cement : 1.5 sand : 3 graded stone aggregate 20mm nominal size)	cum	446.00	1774.56	791453.76
5	031030	Providing and laying 1:3:6 cement concrete (1 cement:3 sand:6 graded stone aggregate 20 mm nominal size) in kerbs, steps and the like at or near ground level excluding cost of cement and of centering, shuttering and finishing :	cum	135.00	1639.00	221265.00
		Centering and shuttering including strutting, propping etc. and removal of form work for :				
6	031063	Columns, pillars, posts and struts & miscellaneous parts	Sqm	675.00	266.87	180137.25
		Providing and laying in position M 20 Grade concrete for reinforced concrete structural elements but excluding cost of centering, shuttering, reinforcement and Admixtures in recommended proportion (as per IS:9103) to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer in charge				
7	041011	All work upto plinth level, including raft foundation of washable aprons, HS tank, pile cap, footings of FOB, and Platform shelter etc.	cum	5535.40	2123.57	11754809.38
8	041012	All work in buildings above plinth level upto floor two level.	cum	1925.80	2363.49	4551609.04
9	041016	In arches, arch ribs, domes, vaults, shells, folded plates and roofs having slopes above 150	cum	35.00	1879.23	65773.05
		Centering and shuttering including strutting, propping etc. and removal of form for :				
10	042011	Foundations, footings, bases of columns, raft foundation of washable aprons, Pile caps, Footings of FOB etc.	Sqm	6738.00	128.80	867854.40
11	042012	Walls (any thickness) including attached plasters, buttresses, plinth and string courses etc.	Sqm	10926.50	212.70	2324066.55
12	042013	Suspended floors, roofs, landings, balconies, FOB slabs, walkway slabs and access platform	Sqm	980.00	205.20	201096.00
13	042014	Lintels, beams, plinth beams, bed blocks, girders, bressumers and cantilevers	Sqm	2284.75	180.45	412283.14
14	042015	Columns, pillars, , posts and struts	Sqm	1535.00	266.90	409691.50
15	042016	Stairs (excluding landings) except spiral-staircases	Sqm	23.50	245.40	5766.90
16	042018	Arches, domes, vaults upto 6m span	Sqm	135.00	665.50	89842.50
17	042030	Extra for additional height in centering, shuttering wherever required with adequate bracing, propping etc. including cost of de-shuttering and de-centering at all levels, over a height of 3.5m, for every additional height of 1 metre or part thereof in Suspended floors, roofs, landing, beams and balconies (Plan area to be measured)	Sqm	350.00	83.90	29365.00
		Providing, hoisting and fixing in position upto floor two level M20 Grade precast RCC work including setting in cement mortar 1:3 (1 cement : 3 coarse sand) and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete including cost of centering, shuttering, finishing, Admixtures in recommended proportion (as per IS:9103) to accelerate, retard setting of concrete, improve workability without impairing strength and durability, excluding cost of cement and steel reinforcement, as per approved plan & direction of Engineer incharge.				

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18	043012	In small lintels upto 1.50m clear span	cum	0.15	3150.26	472.54
19	043014	In Shelves, cantilevers, chajjas, sunshades etc.	cum	3.00	3382.55	10147.65
20	043015	In slabs for drain covers, manhole covers, flue tops etc.	cum	374.00	2618.68	979386.32
21	046010	Extra for RCC work in superstructure above floor two level for every floor or part thereof.	cum	250.00	291.90	72975.00
22	048070	Vacuum dewatering of all types & grade concrete by mechanical means including draining out the sucked excess water from concrete & then finishing the surface smooth with mechanical trowelling with suitable equipment etc. complete. The methodology to be adopted will be as per user manual of dewatering & trawling machine and as directed by Engineer.	Sqm	4235.00	6.67	28247.45
					Total	25741382.08
Schedule	Schedule B3-Brick Work					
Item- 01	Brick Work					
S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
		Brick work with non-modular (FPS) bricks of class designation 7.5 in foundation and plinth in :				
1	051014	Cement mortar 1:4 (1 cement : 4 fine sand)	cum	15.60	1963.40	30629.04
2	051017	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	224.00	1933.46	433095.04
3	051018	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	1245.00	1929.39	2402090.55
4	051040	Extra over item 051010 & 051020 for brick work in superstructure beyond plinth level upto floor two level :	cum	1024.60	139.25	142675.55
		Half brick masonry with bricks of class designation 7.5 in foundations and plinth in :				
5	051181	Cement mortar 1:3 (1 cement : 3 coarse sand)	Sqm	93.00	231.57	21536.01
6	051182	Cement mortar 1:4 (1 Cement : 4 coarse sand)	Sqm	6.00	232.01	1392.06
7	051190	Extra for half Brick masonry in superstructure above plinth level upto floor two level	Sqm	93.00	38.21	3553.53
		Brickwork with clay fly ash FPS bricks of class designation 7.5 in superstructure above plinth level upto floor two level. In:				
8	055076	Cement mortar 1:6 (1 cement: 6 coarse sand).	cum	22.00	2384.42	52457.24
		Brickwork with modular fly ash lime bricks (FALG Bricks) conforming to IS:12894-1989, class designation 10 in superstructure above plinth level upto floor two level in :				
9	055093	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	22.00	2250.04	49500.88
					Total	3136929.90
Schedule	Schedule B4-Steel & Aluminium Work					
Item- 01	Steel & Aluminium Work					
S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
		Structural steel work in single section including cutting, bending, straightening, drilling, rivetting, bolting, hoisting, fixing in position, including applying a priming coat of approved steel primer, complete - upto 6m height above GL				
1	081011	In RSJ, tees, angles and channels	Kg	1863.00	52.19	97229.97
2	081012	In flats, plates, round or square bars	Kg	1863.00	52.01	96894.63
		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 6m height above GL				
3	081031	In RSJ, tees, angles and channels	Kg	241459.00	72.84	17587873.56
4	081032	In flats, plates , round or square bars	Kg	500.00	70.86	35430.00

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5	081270	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitered and welded with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as require including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer	Kg	233.00	99.06	23080.98
6	081350	Providing and fixing circular/ hexagonal M.S. sheet ceiling fan box with clamps of internal dia 140mm, 73mm height, 3mm thick rim, top and bottom lid of 1.5mm M.S. sheet. Lids shall be screws into M.S. box by means of 3mm round beaded screws, clamps shall be made of 12mm dia M.S. bar bent to shape as per standard drawing with over all length as 80cm. (it includes cost of clamps also)	Each	10.00	107.52	1075.20
		Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required				
7	081411	In stringers, treads, landings etc. of stair cases including use of chequered plate wherever required all complete	Kg	1046.50	49.05	51330.83
8	081412	In gratings, frames, guard bar, ladders, railings, brackets, gates and similar works	Kg	3068.50	73.68	226087.08
		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				
9	081423	G.I. pipes 40mm nominal bore (class B)	Kg	200.00	99.39	19878.00
		Providing and fixing anodised aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular and other sections of approved make conforming to IS:733 and IS:1285, anodised transparent or dyed to required shade according to IS:1868 (Minimum anodic coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitered and jointed mechanically wherever required including cleat angle. Aluminium snap beading for glazing/ panelling, C.P. brass/stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and panelling to be paid for separately)				
10	082011	For fixed portion	Kg	3105.00	420.48	1305590.40
11	082012	For openable/sliding portions and fixing hinges / pivots, PVC/ neoprene gasket required and making provision for fixing of fittings. (Fittings shall be paid for separately)	Kg	9124.00	436.46	3982261.04
		Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item)				
12	082031	With float/frosted glass panes of 4mm thickness (weight not less than 10.0 kg/sqm)	Sqm	178.50	841.80	150261.30
13	082032	With float/frosted glass panes of 5.5mm thickness (weight not less than 13.75 kg/sqm)	Sqm	550.00	914.76	503118.00

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14	083050	Fabricating, supplying & installing stainless steel railings for staircases, balconies, FOBs, Enquiry/Reservation complex etc., made of SS 304 grade stainless steel, laser cut / water jet cut (no shearing), polished with Automatic round/flat polishing machine to get a uniform hairline finish. All parts shall be connected to each other with the help of prescribed size CNC made solid connectors, countersunk screws. Welding should be finished ensuring that no welding marks are visible and assembly is mounted on floor with the help of dash fasteners. Railings shall be fabricated as per approved drawings by engineer-in-charge. Manufacturer shall submit maintenance manual and basic material test report for grade certification.	Kg	140.00	590.96	82734.40
					Total	24162845.39
Schedule	Schedule B5-General items of SER-USSOR-2010					
Item- 01	General items of SER-USSOR-2010					
S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
		Providing and fixing flush door shutters to IS: 2202 Part-I non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3ply veneering with vertical grains or cross bands and face veneers on both faces of shutters				
1	072151	35mm thick including ISI marked stainless steel butt hinges with necessary screws	Sqm	31.00	1173.31	36372.61
2	072153	25mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws	Sqm	3.50	1052.40	3683.40
		Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. all complete				
3	074231	Fixed to steel windows by welding	Kg	140.00	67.82	9494.80
4	074232	Fixed to opening/ wooden frames with rawl plugs screws etc.	Kg	233.00	69.56	16207.48
		Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers including necessary screws etc. complete (best make of approved quality)				
5	077124	75mm	Each	2.00	142.51	285.02
		Providing and fixing ISI marked aluminium butt hinges ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete				
6	078011	125x75x4mm	Each	13.00	119.88	1558.44
7	078014	100x63x4mm	Each	13.00	89.63	1165.19
		Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete				
8	078022	250x16mm	Each	10.00	215.24	2152.40
		Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete				
9	078032	250x10mm	Each	10.00	69.86	698.60
10	078034	150x10mm	Each	10.00	58.36	583.60
		Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete				
11	078061	125mm	Each	19.00	53.40	1014.60

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		Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade with necessary screws etc. complete				
12	078072	Twin rubber stopper	Each	10.00	74.19	741.90
13	078130	Providing and fixing factory made P.V.C. door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitered at corners and joined with 2 Nos. of 150mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100mm size complete as per manufacturers specification and direction of Engineer-in-Charge	Metre	12.00	411.88	4942.56
14	078150	Providing and fixing to existing door frames 30mm thick factory made solid both side prelaminate panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm, top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5mm thick heat moulded prelaminate PVC Foam Sheet 'C' channel as per drawing given in IR Standard Specifications complete in all respect	Sqm	6.00	3241.98	19451.88
		Providing hand packed dry flat brick flooring, class designation 7.5 (FPS Bricks), excluding pointing with joints filled with sand over a bed of dry sand (ordinary) of average thickness 25 mm including ramming sub grade :				
15	091031	Brick on edge	Sqm	8.00	221.76	1774.08
16	091032	Flat brick	Sqm	108.00	152.35	16453.80
17	091060	Dry stone ballast 50 mm nominal size, rammed in floors 75 mm thick layer	Sqm	1348.50	103.87	140068.70
		Cement concrete flooring 1:2:4 (1cement: 2coarse sand: 4graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete				
18	092011	25mm thick with 12.5mm nominal size stone aggregate	Sqm	156.90	86.95	13642.46
19	092012	40mm thick with 20mm nominal size stone aggregate	Sqm	200.00	110.34	22068.00
		Cement plaster skirting (upto 30cm height) with cement mortar 1:3 (1cement: 3coarse sand) finished with a floating coat of neat cement				
20	092021	15mm thick	Sqm	153.00	98.09	15007.77
		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.				
21	092063	M-30	cum	982.00	2394.37	2351271.34
		Providing and fixing 1st quality ceramic tiles conforming to Group B-III (Ceramic Wall Tiles) of IS:15622 of manufacturers approved by railway in all colours, shades, and design as approved by the Engineer-in-Charge in skirting, risers of steps and dado over 12mm thick bed of cement mortar 1:3 (1cement: 3coarse sand) including pointing in white cement mixed with pigment of matching shade complete				
22	095012	200x300 mm	Sqm	19.50	580.16	11313.12

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		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				
23	098022	80mm thick blocks of M35 grade for medium traffic	Sqm	2000.00	702.23	1404460.00
24	098040	Extra over items for lacquer finish	Sqm	2000.00	73.79	147580.00
		Providing and fixing 18mm thick mirror polished, machine cut for kitchen platforms, vanity counters facias, dados and skirtings and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement: 4coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touchups, including rubbing, curing. etc. complete at all levels				
25	099035	Granite Black. Area of slab over 1.0 Sqm but upto 2.0 Sqm or larger	Sqm	2.20	3080.05	6776.11
		Extra for providing edge moulding to 16mm to 20mm thick marble/granite stone counters, vanities etc including machine polishing to edge to give high gloss finish etc. complete as per design approved by the Engineer-in-Charge				
26	099062	Granite work	Metre	105.50	155.70	16426.35
		Extra for providing opening of required size and shape for wash basins/ kitchen sink / Pillar tap etc in kitchen platform, vanity counters and similar location in marble / stone work. including rubbing and polishing of cut edges etc complete. No deduction for opening area shall be made from parent item				
27	099101	Opening of area upto 100 sq cm	Each Opening	2.00	105.97	211.94
		Providing and fixing 18mm thick mirror polished, machine cut for floors and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement: 4coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touchups, including rubbing, curing etc. complete at all levels				
28	099164	Granite Black. Area of slab over 0.5 Sqm but upto 1.0 Sqm	Sqm	19.00	2491.29	47334.51
		Providing and fixing 18mm thick mirror polished, machine cut for floors and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement: 4coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touchups, including rubbing, curing etc. complete at all levels				
29	099175	Granite Pink. Area of slab over 1.0 Sqm but upto 2.0 Sqm Or larger	Sqm	390.00	2550.41	994659.90
		Providing and fixing 25mm thick flame cut/machine cut for floors /stairs and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement: 4coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touchups, including rubbing, curing etc. complete at all levels				
30	099183	Granite Pink - Area of slab over 0.2 Sqm but upto 0.5 Sqm	Sqm	70.00	3137.62	219633.40
31	099185	Granite Pink - Area of slab over 1.0 Sqm but upto 2.0 Sqm Or larger	Sqm	39.00	3435.21	133973.19

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32	099200	Supplying and applying surface hardener for concrete floors ready to use, specially graded, non metallic and mineral aggregate dry shake surface hardener free from oil and grease to be sprinkled at 9 kg/sqm of surface area. Complete with finishing	Sqm	9215.00	247.15	2277487.25
33	105080	Supplying and applying bituminous solution primer on roof and or wall surface at 0.24litre/sqm	Sqm	100.00	22.88	2288.00
		12 mm cement plaster of mix -				
34	111011	1:4 (1cement: 4 fine sand)	Sqm	700.00	55.63	38941.00
35	111012	1:6 (1cement: 6fine sand)	Sqm	27.00	55.63	1502.01
		15 mm cement plaster on the rough side of single or half brick wall of mix -				
36	111021	1:4 (1cement: 4 fine sand)	Sqm	1166.00	63.82	74414.12
		20 mm cement plaster of mix -				
37	111031	1:4 (1cement: 4 fine sand)	Sqm	6605.00	74.58	492600.90
		15 mm cement plaster on the rough side of single or half brick wall of mix -				
38	111052	1:6 (1cement: 6coarse sand)	Sqm	4482.00	64.89	290836.98
		12 mm cement plaster finished with a floating coat of neat cement of mix -				
39	111072	1:4 (1cement: 4fine sand)	Sqm	1728.00	67.38	116432.64
		Cement plaster to ceiling of mix -				
40	111151	6 mm thick 1:3 (1cement: 3 fine sand)	Sqm	233.00	49.30	11486.90
41	111180	Neat cement punning	Sqm	1057.00	11.76	12430.32
42	112040	Providing and applying plaster of Paris putty of 2mm average thickness over plastered surface to prepare the surface even and smooth complete	Sqm	3510.00	66.58	233695.80
		Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade				
43	115042	New work (two or more coats of distemper) over and including priming coat with distemper primer	Sqm	10082.00	54.17	546141.94
44	115050	Distempering two or more coats on new work with 1st quality acrylic washable distemper (ready mixed) of approved manufacturer and of required shade and colour complete as per manufacturer's specification	Sqm	100.00	31.90	3190.00
45	115060	Applying one coat of cement primer of approved brand and manufacture on wall surface	Sqm	10182.00	21.89	222883.98
46	115092	Extra over Items for spray painting in lieu of normal brush painting if specifically ordered	Sqm	1755.00	11.99	21042.45
47	115110	Finishing walls with water proofing cement paint of required shade two or more coats on new work applied @ 3.84 Kg/10 sqm	Sqm	10340.00	36.35	375859.00
48	115180	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade on new work (Two or more coats applied @ 1.43ltr/10 sqm over and including one coat of water proofing cement paint applied @ 2.20 kg/10sqm	Sqm	585.00	72.06	42155.10
49	115190	Finishing walls with Premium Acrylic Smooth Interior paint with Silicone additives of required shade on new work (Two or more coats applied @ 1.43ltr/10 sqm over and including one coat of water proofing cement paint applied @ 2.20 kg/10sqm	Sqm	1170.00	75.59	88440.30
50	121020	Painting wood work with Deluxe Multi Surfaces Paint of required shade. Two or more coat applied @ 0.90ltr/10sqm over an under coat of primer, applied @ 0.75ltr/10sqm of approved brand or manufacture	Sqm	74.00	59.89	4431.86
51	121030	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coats applied @ 0.90ltr/10sqm over an under coat of primer applied @ 0.80ltr/10sqm of approved brand or manufacture	Sqm	184.00	62.48	11496.32

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52	121140	Painting (one or more coats) with black Japan paint of approved brand and manufacture to give an even shade	Sqm	13.50	23.25	313.88
		Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Internal work - exposed on wall				
53	131083	25mm nominal outer dia. Pipes	Metre	93.00	172.35	16028.55
54	131084	32mm nominal outer dia. Pipes	Metre	140.00	224.01	31361.40
55	131085	40mm nominal outer dia. Pipes	Metre	47.00	314.77	14794.19
		Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing in This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the walls etc.				
56	131092	20mm nominal outer dia. Pipes	Metre	116.50	170.79	19897.04
57	131093	25mm nominal outer dia. Pipes	Metre	23.50	204.01	4794.24
		Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of Engineer-in-Charge. External work				
58	131106	50mm nominal outer dia. Pipes	Metre	23.50	436.64	10261.04
		Providing and fixing medium grade G.I. pipes complete with G.I. fittings including trenching and refilling etc. External Work				
59	131151	15 mm dia. nominal bore	Metre	200.00	124.14	24828.00
60	131152	20 mm dia. nominal bore	Metre	400.00	164.71	65884.00
61	131153	25 mm dia. nominal bore	Metre	200.00	211.71	42342.00
62	131156	50 mm dia. nominal bore	Metre	200.00	367.86	73572.00
63	131159	100 mm dia. nominal bore	Metre	300.00	717.95	215385.00
		Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)				
64	132031	25 mm nominal bore	Each	3.00	324.64	973.92
65	132032	32 mm nominal bore	Each	3.00	410.59	1231.77
66	132033	40 mm nominal bore	Each	1.00	818.75	818.75
67	132180	Providing and fixing C.P. brass bib cock, 15mm nominal bore, of approved quality conforming to IS:8931	Each	10.00	409.49	4094.90
68	132190	Providing and fixing C.P. brass long nose bib cock, 15 mm nominal bore, of approved quality conforming to IS standards and weighing not less than 810 gms	Each	2.00	403.21	806.42
69	132220	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931	Each	4.00	401.82	1607.28
		Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536 : upto 300 mm dia.				
70	133055	200 mm dia. pipe	Metre	55.00	2164.97	119073.35
		Providing and laying S&S centrifugally cast (spun) iron pipes (Class A) conforming to IS - 1536 :				
71	133072	100 mm dia. pipe	Metre	100.00	1245.26	124526.00

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72	133074	150 mm dia. pipe	Metre	70.00	1766.92	123684.40
73	133075	200 mm dia. pipe	Metre	50.00	2197.91	109895.50
		Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. 100 mm dia (the tail pieces if required will be paid separately)				
74	133201	Class I	Each	5.00	5594.71	27973.55
		Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. 200 mm dia (the tail pieces if required will be paid separately).				
75	133231	Class I	Each	6.00	14566.70	87400.20
76	136150	Providing and placing on terrace/staging (at all heights) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	Litre	5000.00	8.03	40150.00
		Hoisting, fitting and fixing in position plastic moulded water storage tank including making connection of intake, delivery, outlet and overflow .pipes etc. with all lead and lift upto all stories. Cost of tanks/fittings to be paid separately				
77	138046	5000 ltr Capacity tank	Each	1.00	1899.75	1899.75
		Providing, laying and jointing glazed stoneware pipes grade 'A' as per IS:651 including bends etc. with stiff mixture of cement mortar in the proportion of 1:1 (1cement : 1fine sand) including testing of joints etc. complete				
78	141011	100mm diameter	Metre	3.60	150.72	542.59
		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.				
79	142031	300mm dia. R.C.C. pipe	Metre	19.50	583.21	11372.60
80	142033	450mm dia. R.C.C. pipe	Metre	800.00	712.51	570008.00
81	142035	600mm dia. R.C.C. pipe	Metre	19.50	1159.73	22614.74
		Constructing brick masonry manhole in cement mortar 1:4 (1cement: 4coarse sand) R.C.C. top slab with 1:2:4 (1cement: 2coarse sand: 4graded stone aggregate 20mm nominal size), foundation concrete 1:4:8 mix (1cement: 4coarse sand: 8graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1cement: 3coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1cement: 2coarse sand: 4graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design				
82	143011	Inside size 90x80cm and 45cm deep including C.I. cover with frame (light duty) 455x610mm internal dimensions total weight of cover and frame to be not less than 38kg (weight of cover 23kg and weight of frame 15kg). With F.P.S. bricks class designation 7.5	Each	5.00	3940.81	19704.05
83	143013	Inside size 120x90cm and 90cm deep including C.I. cover with frame (medium duty) 500mm internal diameter, total weight of cover and frame to be not less than 116kg (weight of cover 58kg and weight of frame 58kg). With F.P.S. bricks class designation 7.5	Each	2.00	9196.68	18393.36
84	143160	Supplying and fixing C.I. cover 300x300mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5kg	Each	2.00	283.21	566.42

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		Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast iron P or S trap, 10litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required				
85	151011	White Vitreous China Orissa pattern W.C. pan of size 580x440-mm with integral type foot rests	Each	3.00	2687.46	8062.38
		Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10litre low level white, P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required				
86	151021	W.C. pan with ISI marked white solid plastic seat and lid	Each	2.00	2570.15	5140.30
		Providing and fixing wash basin with C.I./ M.S. brackets, 15mm C.P. brass pillar taps, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required				
87	151074	white vitreous china flat back wash basin size 550x400mm with single 15mm C.P. brass pillar tap	Each	3.00	1253.55	3760.65
		Providing and fixing Stainless Steel AISI- 304 (18/8) kitchen sink with drain board as per IS: 13983 with C.I. brackets and stainless steel plug 40mm including painting of fittings and brackets, cutting and making good the walls wherever required				
88	152023	510x1040 mm bowl depth 200mm	Each	1.00	5671.69	5671.69
89	152110	Providing and fixing 600x450mm bevelled edge mirror , 5.5 mm thick of float glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete	Each	3.00	739.84	2219.52
		Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with C.P. brass screws with concealed fitting arrangement of approved quality colour and make				
90	153322	600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms	Each	2.00	373.65	747.30
91	153380	Providing and fixing C P brass Soap dish holder having length of 138 mm, 102 mm wide, 75 mm high with concealed fittings arrangements weighing approx. 110 gms	Each	3.00	154.94	464.82
92	153390	Providing and fixing Shower rose (C.P.) brass with swivel joint having aprox. wt. 270 gm	Each	2.00	340.31	680.62
93	153520	Providing and fixing Shower arm (C.P. Brass) 15 mm dia. x 225 mm long	Each	2.00	145.76	291.52
94	154010	Providing and fixing 110mm dia PVC soil, waste and vent pipes including jointing and cost of spun yarn and sand etc. complete	Metre	102.00	226.92	23145.84
95	154030	Providing and fixing 110 mm x 110 mm x 110mm dia PVC plain branch (single equal junction)of the required degree including jointing and cost of spun yarn and sand etc., complete	Each	6.00	117.00	702.00
96	154040	Providing and fixing 110 mm x 110 mm x 110mm dia PVC plain branch (single equal junction)of the required degree with access door inclusive of 3mm thick bitumastic felt washer and bolts and nuts, complete, including jointing and the cost of spun yarn and sand etc., complete	Each	6.00	130.39	782.34

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97	154060	Providing and fixing 110 mm x 110 mm x 110mm dia PVC plain branch (double equal junction) of the required degree with access door inclusive of 3mm thick bitumastic felt washer and bolts and nuts, complete, including jointing and cost of spun yarn and sand etc., complete	Each	6.00	143.17	859.02
98	154100	Providing and fixing 110 mm PVC Plain bend of the required degree with access door inclusive of 3mm thick bitumastic felt washer, bolts and nuts, complete, including jointing and cost of spun yarn and sand etc. complete	Each	6.00	83.35	500.10
99	154110	Providing and fixing 110 mm PVC bend of the required degree with access door inclusive of 3mm thick bitumastic felt washer, bolts and nuts, complete, including jointing and cost of spun yarn and sand etc. complete	Each	6.00	108.52	651.12
100	155220	Providing and fixing Glass Shelf of approved make or equivalent of size 550 mm x 130 mm x 5.5 mm thick (rounded end) with C.P. brass brackets & guard rails having approx. wt.2.4 kg	Each	2.00	568.71	1137.42
101	155240	Supplying and fixing approved quality chromium plated shirt hooks (One unit of 4 hooks) with all necessary fittings etc. complete and as directed by the Engineer-in-charge	Each	2.00	86.74	173.48
102	155250	P&F 127mm dia C.P. steel Jali cockroach trap (CCTR-127) for gully floor or Nahani trap	Each	3.00	217.80	653.40
103	171210	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc. by applying cement slurry mixed with water proofing cement compound as per IS 2645 in layers a) 1st layer of slurry of cement @ 0.488kg/ sqm mixed with water proofing cement compound @ 0.253 lit/Sqm, allowed to air cure for 4hours.(b) 2nd layer of slurry of cement @ 0.242kg/ sqm mixed with water proofing cement compound @ 0.126 lit/Sqm, allowed to air cure for 4 hours followed with water curing for 48hours.Rate includes preparation of surface, treatment, sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry. Rendering/ plastering as protective layer, if required will be paid separately	Sqm	3.00	133.47	400.41
104	171230	Providing and laying integral cement based water proofing treatment incl. preparation of surface on roofs, balconies, terraces etc. (i) Grouting a slurry coat of neat cement @ 2.75kg/ sqm mixed with water proofing compound conforming to IS: 2645 inc. walls upto 300mm height. (ii) Laying CC with brickbats 25 to 40mm with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) mixed with water proofing compound over 20mm thick layer of cement mortar of 1:5 mortar mixed with water proofing compound to required slope, treating adjoining walls upto 300mm height, rounding of junctions.(iii) Curing for 2 days & applying 2nd coat of cement slurry @ 2.75 kg/sqm mixed with water proofing compound. (iv) Finishing surface with 20mm thick jointless cement mortar of mix 1:4 (1 cement : 4 coarse sand) including laying of glass fibre cloth of approved quality in top layer of plaster mixed with water proofing compound and finishing surface with trowel with neat cement slurry and making pattern of 300x300mm square, 3mm deep with average thickness of 120mm and minimum thickness at khurra as 65mm	Sqm	933.00	410.96	383425.68

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105	171250	Water proofing of Overhead & Underground water tank by : Providing and fixing 12mm N.B.M.S. threaded nozzle of 75mm length upto reqd. depth in an approximate grid pattern at a spacing not exceeding 1.5m c/c on entire flooring, walls etc. followed by injecting water-proof Non-shrinkable Polymeric Grouting Compound (NSPGC) mixed with cement slurry @ 2% of weight of cement through nozzle under 2.5 kg/cm2 pressure. The grout should be pumped until it flows through all pores and voids thereby sealing them. The nozzles should be sealed with quick setting admixture. Thereafter two coats of Tapecrete acrylic based polymer water proofing compound (having solid content 30% ± 2, pH >7) admixed with cement in 1:2 ratio to be applied on the entire surface of tank, 12 mm thick 1:4 plaster (to be paid separately) to be applied as a top coat	Sqm	85.00	338.15	28742.75
		Boring, providing and installing bored cast-in-situ reinforced cement concrete pile of all length M 35 grade to carry a safe working load not less than specified incl. cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and pile to be embedded in the pile cap etc all incl. removal of excavated earth with all lifts and leads. Length of pile for payment shall be measured upto bottom of pile cap. Payment for steel reinforcement & cement will be made separately				
106	171614	500mmdia piles	Metre	5196.00	2103.77	10931188.92
		Vertical load testing of piles in accordance with IS: 2911 (Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and the direction of Engineer-in-Charge				
107	171651	Single pile upto 50 tonne capacity- initial test	Each Test	3.00	33460.88	100382.64
108	171652	Single pile upto 50 tonne capacity - routine test	Each Test	3.00	20219.78	60659.34
109	171690	Providing & applying Pre-Construction Anti-Termite treatment to proposed structure, with application of Imidacloprid 30.5% SC @ 0.075% concentration mixed with water in ratio of 1:475, as per detailed specifications given in Indian Railways Standard Specifications, so as to create a chemical barrier below and around the structure by an approved agency. (Plinth Area/Basement floor area shall be considered for Payment)	Sqm	933.00	77.28	72102.24
110	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	4550.00	38.16	173628.00
111	231020	Consolidation of subgrade with power road roller of 8 to 12 tonne capacity including making good the undulations etc. with earth or quarry spoils etc. and re-rolling the subgrade	Sqm	4550.00	1.42	6461.00
		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.				
112	231041	Sub-base with stone aggregate 90mm to 45mm including stone screening 13.2mm size	cum	521.00	1488.61	775565.81
113	231042	Base course with 63mm to 45mm size including stone screening 13.2mm size	cum	78.00	1276.05	99531.90
114	231043	Base course with 53mm to 22.4mm size including stone screening 11.2mm size	cum	78.00	1213.62	94662.36

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115	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	306.00	1551.77	474841.62
116	236020	Providing and laying design mix cement concrete in roads, having a cube strength of M-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 construction & dummy joints with approved joint filler (conforming to grade B of IS: 1834) rounding of the edges, making & filling the grooves as per drawing	cum	701.00	1973.24	1383241.24
117	236040	Extra over item236010 & 236020 for providing and mixing hardening compound of approved quality as per manufacturer's specification	Litre	976.00	48.01	46857.76
118	236050	Providing and fixing in position pre-moulded joint filler in expansion joints	per cm width per cm depth /metre	736.00	3.51	2583.36
119	236060	Providing and laying in position bitumen hot sealing compound for expansion joints etc. using grade 'A' sealing compound	per cm width per cm depth /metre	736.00	1.54	1133.44
120	252020	Moorum	cum	2043.00	373.75	763571.25
121	256070	Miscellaneous G I pipe fittings as nipples/ elbows/ sockets/ bends for GI pipe work.	Kg	500.00	115.00	57500.00
					Total	27827686.15

Schedule Schedule B6-Soil Investigation items of USSOR-2010

Item- 01 Exploratory drilling of boreholes down to required depth, drilling of 150mm dia. boreholes in all type of soils except hard rock & large boulders (boulder core more than 30cm) including refilling, reinstating surface and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion/chieselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area

S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
		Exploratory drilling of Boreholes down to required depth, drilling of 150mm diameter boreholes in all type of soils except hard rock and large boulders (boulder core more than 30 cm), including refilling and reinstating surface, and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion / chieselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area				
1	191011	0m to 10m	Metre	20.00	1161.50	23230.00
2	191012	10m to 20m	Metre	20.00	1277.65	25553.00
3	191030	Extra for 150mm dia bore in hard Rock/ large Boulder at all levels	Metre	20.00	5226.75	104535.00
4	191100	Taking out 100mm dia & 450mm long undisturbed samples of soil from bore holes, including provision of air tight containers for packing and, labelling incl. transporting the samples to laboratory. Piston sampler shall be used for extracting undisturbed samples where necessary. Samples shall be collected as per IS 2720	Each	20.00	116.15	2323.00
5	191110	Taking out 100mm dia & 450mm long disturbed samples of soil from bore holes, including provision of air tight containers for packing, labelling and transporting the samples to laboratory. Samples shall be collected as per IS 2720	Each	20.00	116.15	2323.00

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6	191120	Conducting standard penetration test as per IS 2131 at approximate 1.5 m intervals in bore holes, as directed by the Engineer in charge	Each	20.00	174.23	3484.60
		Conducting laboratory Tests on collected soil samples as per relevant IS code				
7	191141	Moisture contents/ Dry density	Each	20.00	290.38	5807.60
8	191142	Atterberg Limit	Each	20.00	696.90	13938.00
9	191144	Grain size analysis including Hydrometer analysis	Each	20.00	569.14	11382.80
10	191145	Direct Shear Test	Each	20.00	2293.96	45879.20
11	191147	Consolidation test	Each	20.00	2323.00	46460.00
12	191148	Unconfined compression test	Each	20.00	2323.00	46460.00
13	191149	Tri-axial test	Each	20.00	2323.00	46460.00
14	191160	Conducting chemical analysis of ground water samples to determine suitability for concreting and aggressiveness in relation to attack on concrete / reinforcement including determination of pH value	Each	20.00	2903.75	58075.00
15	191170	Conducting chemical analysis of soil samples to determine aggressiveness in relation to attack on concrete / reinforcement including determination of pH value	Each	20.00	3891.03	77820.60
16	191180	Preparation and submission of Final report giving complete and comprehensive record of investigations, laboratory test reports and calculations in approved format	Each	1.00	66786.25	66786.25
					Total	580518.05

Schedule Schedule C1-Supply of Cement

Item- 01 Supply of Cement

S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
		Supply and using cement at worksite :				
1	033063	PPC	Tonne	4972.00	5635.00	28017220.00
					Total	28017220.00

Schedule Schedule C2-Supplying Reinforcementsteel

Item- 01 Supplying Reinforcementsteel

S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
		Supplying Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
1	045016	Thermo-Mechanically Treated bars	Kg	726427.00	48.41	35166331.07
					Total	35166331.07

4. ELIGIBILITY CONDITIONS

Important : All documents uploaded and remarks / confirmation entered by the bidders against any eligibility condition shall be opened as part of technical bid only

Special Financial Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	The tenderer must have received contractual payments in the previous three financial years and the current financial year up to the date of inviting of tender, at least 150% of the advertised value of the tender. The tenderers shall submit Certificates to this effect which may be an attested Certificate from the concerned department / client or Audited Balance Sheet duly certified by the Chartered Accountant/Certificate from Chartered Accountant duly supported by Audited Balance Sheet.	No	No	Allowed (Mandatory)

Special Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
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1	The tenderer must have successfully completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited: Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or One similar work each costing not less than the amount equal to 60% of advertised value of the tender.	No	No	Allowed (Mandatory)
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Special Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	In case of composite works (e.g. works involving more than one distinct component, such as Civil Engineering works, S&T works, Electrical works, OHE works etc. and in the case of major bridges - substructure, superstructure etc.), tenderer must have successfully completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited: Three similar works each costing not less than the amount equal to 30% of advertised value of each component of tender, or Two similar works each costing not less than the amount equal to 40% of advertised value of each component of tender, or One similar work each costing not less than the amount equal to 60% of advertised value of each component of tender. Note:(i) Separate completed works of minimum required values for each component can also be considered for fulfillment of technical eligibility criteria. (ii) Similar nature of work is defined in Sr. No. 12 of TOP SHEET, CHAPTER-I.	No	No	Allowed (Mandatory)

Special Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	In such cases, what constitutes a component in a composite work shall be clearly predefined with estimated tender cost of it, as part of the tender documents without any ambiguity. Note for Clause 2.1 of Chapter-3:- Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued any Govt. Organisation, work experience certificate issued by Public listed company having average annual turn over of Rs. 500 Crore and above in last three financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, Incorporated/ Registered atleast 5 years prior to the date of opening of tender, shall also be considered provided the work experience certificate has been issued by a persone authorized by the Public listed company to issue such certificates. In case tenderer submittes work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/ last bill paid by company in support of above work experience certificate.	No	No	Allowed (Mandatory)

Special Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Regarding technical and financial eligibility criteria, scanned copies of supportive documents/certificates from competent officials are to be submitted along with their offer.	No	No	Allowed (Mandatory)

Special Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Scanned copies of documents in support of formation/registration of the company/firm/legal authorization of the person to deal with the tender/notarized/registered copies of the documents wherever required as per tender conditions are to be submitted along with offer.	No	No	Allowed (Mandatory)

Special Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Bid Capacity :- Applicable	No	No	Allowed (Mandatory)

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S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Similar nature of work is defined as " Similar nature of work is defined as "Works involving" 1. For Civil Engg. Component- Any civil Engineering work involving construction of building in R.C.C. framed structure and Industrial Shed with Pre-Engineered Building (PEB) including foundation. 2. For Electrical Engg. Component- Electrical works involving supply, erection and commissioning of 11 KV or above voltage level substation and illumination & electrification of sheds/buildings. 3. For Mech. Engg. Component- Mechanical Engineering Works involving Supply/Procurement, Installation and Commissioning of Mechanical Machineries & Plants."	No	No	Allowed (Mandatory)

Submission of Document Verification Certificate

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Please submit a certificate in the prescribed format (please download the format from the link given below) for verification / confirmation of the documents submitted for compliance of eligibility / qualifying criteria. Non submission of the certificate, or submission of certificate either not properly filled in, or in a format other than the prescribed format shall lead to summary rejection of your offer. (Click here to download the Format of Self Certificatio)	No	No	Allowed (Mandatory)

5. COMPLIANCE

Important : All documents uploaded and remarks / confirmation entered by the bidders against any compliance condition shall be opened as part of technical bid only.

Commercial-Compliance

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Please enter the percentage of local content in the material being offered. Please enter 0 for fully imported items, and 100 for fully indigenous items. The definition and calculation of local content shall be in accordance with the Make in India policy as incorporated in the tender conditions.	No	Yes	Allowed (Mandatory)
2	Please enter the percentage of local content in the material being offered. Please enter 0 for fully imported items, and 100 for fully indigenous items. The definition and calculation of local content shall be in accordance with the Make in India policy as incorporated in the tender conditions.	No	Yes	Allowed (Optional)

General Instructions

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	All documents in support of fulfilment of eligibility criteria with respect to completion of Similar nature of work for Technical Eligibility Criteria and Total contract value for Financial Eligibility Criteria should be furnished along with the tender and should be submitted online at the time of tender bidding. Tenders not accompanied by documentary evidence in support of eligibility criteria will be summarily rejected. No post tender communication, in any form will be made or entertained, after opening of tenders, in this regard. Railways may however call for the originals of the credentials for verification or any clarifications/confirmations on the contents of the documents submitted.	No	No	Not Allowed
2	Tenderers shall note that the submission of other supporting documents namely- Constitution of firm, Work in hand, Arbitration/Court cases, Tools & Plants, Technical Personnel/Man Power and Association of railway Officers, at the time of on line bidding of tender, is important and they shall ensure the same. However Railways may seek clarifications/details/documents in this regard.	No	No	Not Allowed
3	The tenderer(s) should not put any unusual condition from their side contradicting terms and conditions in the e-tender. Such unusual/contradictory conditions may not be considered.	No	No	Not Allowed
4	PLEASE FILL IN REQUIRED INFORMATION ASKED FOR IN THE SPECIFIED SPACE IN THE E-TENDER. TENDER WILL BE OTHER WISE TREATED INCOMPLETE AND HENCE WILL BE LIABLE FOR REJECTION.	No	No	Not Allowed

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5	THE QUANTITY SHOWN IN THE SCHEDULES ARE APPROXIMATE AND ARE LIKELY TO VARY ON EITHER SIDE (+/-) AS PER CLAUSE-2 OF SPECIAL CONDITIONS OF CONTRAC.	No	No	Not Allowed
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Technical-Compliances

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Scanned copy [in PDF format] of the details regarding the Association of Railway Officer/s with the tender [for details please refer Annexure-H]	Yes	Yes	Allowed (Mandatory)
2	Scanned copy [in PDF format] of the details of the List of the Arbitration & Court cases during the last 3 years [for details please refer Annexure-J and I of Tender document]	Yes	Yes	Allowed (Mandatory)
3	Scanned copy [in PDF format] of the details of agency and own equipments proposed to be included [for details please refer Annexure- D of Tender document].	Yes	Yes	Allowed (Mandatory)
4	Scanned copy [in PDF format] of the details of technical personals of the Agency, available in hand [for details please refer Annexure-E of Tender document].	Yes	Yes	Allowed (Mandatory)
5	Scanned copy [in PDF format] of the complete address of the firm in PDF format, to which the all correspondences shall be made by the railway.[for details please refer Annexure-A of Tender document].	Yes	Yes	Allowed (Mandatory)
6	Scanned copy [in PDF format] of the eligibility criteria by the tenderer regarding contractual payments received. [for details please refer Annexure-C of Tender document].	Yes	Yes	Allowed (Mandatory)
7	Scanned copy [in PDF format] of details the works on hand by the tenderer(s) [for details please refer Annexure-G of Tender document].	Yes	Yes	Allowed (Mandatory)
8	Scanned copy [in PDF format] of broad plan of execution of this work within the stipulated completion period [for details please refer Annexure-K of Tender document].	Yes	Yes	Allowed (Mandatory)
9	Scanned copy [in PDF format] of other credentials/facilities available with the firm/contractor/tenderer[for details please refer Annexure-L of Tender document].	Yes	Yes	Allowed (Mandatory)
10	Scan COPY OF THE PROGRAMME IN THE FORM OF BAR CHART FOR COMPLETION OF WORK, MACHINERY DEPLOYMENT FOR ACHIEVING THE PROGRAMMED PROGRESS MUST BE UPLOADED ALONG WITH THE TENDER	Yes	Yes	Allowed (Mandatory)
11	Scanned copy [in PDF format] of Deviation [for details please refer Annexure-M of Tender document].	Yes	Yes	Allowed (Mandatory)
12	Scanned copy [in PDF format] of the undertaking by Bidders towards compliance of office memorandum F. No. 6/18/2019-PPD dated 23rd July, 2020 (Public Procurement no.1) issued by Department of Expenditure, Ministry of Finance, Govt. of India. [for details please refer Annexure-N of Tender Document].	Yes	Yes	Allowed (Mandatory)
13	Scanned copy [in PDF format] of informations for each M&P [for details please refer Annexure- E(M) of Tender document].	Yes	Yes	Allowed (Mandatory)
14	Scanned copy [in PDF format] of the Eligibility Criteria by the tenderer regarding execution of similar work (as per tender condition) [for details please refer Annexure- B of Tender document].	Yes	Yes	Allowed (Mandatory)
15	Statement of Bid Capacity:- The tenderer should submit details of existing commitments and balance amount of ongoing work as per Para 2.3 of Chapter-3.[for details please refer Annexure- B1 of Tender document].	Yes	Yes	Allowed (Mandatory)
16	Scanned copy [in PDF format] of the details of the works completed during previous seven financial years and current year by the tenderer [for details please refer Annexure-F of Tender document]	Yes	Yes	Allowed (Mandatory)

Undertakings

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	I/ We have visited the works site and I / We am / are aware of the site conditions.	No	No	Not Allowed

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2	I/We also hereby agree to abide by the Indian Railways Standard General Conditions of Contract 2020 [GCC], with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and specifications of materials and works as laid down by Railway as mentioned in the Special Conditions/ Specifications.	No	No	Not Allowed
3	It is certified that I am the authorised person to represent the firm and I am authorised to sign the tender and all the documents on behalf of the firm.	No	No	Not Allowed
4	It is certified that all the statement and document submitted with the offer are true and correct.	No	No	Not Allowed
5	It is certified that we are aware of the fact that this tender offer is made in the full understanding that our offer will be subjected to verification of all the information submitted with this tender.	No	No	Not Allowed
6	We have read the tender Notice [NIT] in detail, Tender document along with all the conditions attached/referred to, in this tender document, and agree to abide by the said conditions.	No	No	Not Allowed
7	We are aware of the fact that the railway reserve the rights to amend the scope and value of the contract and to reject [or accept] this offer without assigning any financial liability.	No	No	Not Allowed

6. Documents attached with tender

S.No.	Document Name	Document Description
1	Advance-Correction-Slip-11.pdf	Advance Correction Slip 1
2	2020_11_20-July-2020.pdf	2020 11 20 July 2020
3	GCCJuly2020.pdf	Standard General Condition GCC 2020
4	TDAnara.pdf	Tender document Anara
5	Annexure-B1.pdf	Annexure B1 pdf
6	Annexure-A.pdf	Annexure A
7	Annexure-B.pdf	Annexure B
8	Annexure-C.pdf	Annexure C
9	Annexure-D.pdf	Annexure D
10	Annexure-E.pdf	Annexure E
11	Annexure-F.pdf	Annexure F
12	Annexure-G.pdf	Annexure G
13	Annexure-H.pdf	Annexure H
14	Annexure-I.pdf	Annexure I
15	Annexure-J.pdf	Annexure J
16	Annexure-K.pdf	Annexure K
17	Annexure-L.pdf	Annexure L
18	Annexure-M.pdf	Annexure M
19	ANNEXURE-N.pdf	Annexure N
20	ANNEXUREEM.pdf	Annexure E M

This tender complies with Public Procurement Policy (Make in India) Order 2017, dated 15/06/2017, issued by Department of Industrial Promotion and Policy, Ministry of Commerce, circulated vide Railway Board letter no. 2015/RS(G)/779/5 dated 03/08/2017 and 27/12/2017 and amendments/ revisions thereof.

As a Tender Inviting Authority, the undersigned has ensured that the issue of this tender does not violate provisions of GFR regarding procurement through GeM.

Signed By: RAJIV KUMAR

**WPO-HQ-MECHANICAL/WPO
TENDER DOCUMENT**

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Designation : Dy.CME-II/WP