

**CAO-CN-ERS-ENGINEERING/SOUTHERN RLY  
TENDER DOCUMENT**

**Tender No:** 15-CE-CN-ERS-2026-OT

**Closing Date/Time:** 27/07/2026 15:00

**Chief Engineer, Construction, Ernakulam Jn** acting for and on behalf of The President of India invites E-Tenders against Tender No **15-CE-CN-ERS-2026-OT** Closing Date/Time 27/07/2026 15:00 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.

**1. NIT HEADER**

<b>Name of Work</b>	Conducting Final Location Survey (FLS)/ Detailed field survey for the following: i. Final location survey for 3rd line between Thiruvananthapuram Central - Nagercoil Junction & other New line/Doubling/ future projects including soil investigations. ii. Detailed field survey & preparation of drawing & documents including soil investigation for Angamaly-Sabari New line iii. Detailed field survey & preparation of drawing & documents including soil investigation for Ambalapuzha-Turavur doubling section under the jurisdiction of CAO/CN/ERS.		
<b>Bidding type</b>	Normal Tender		
<b>Tender Type</b>	Open	<b>Bidding System</b>	Two Packet System
<b>Tender Closing Date Time</b>	27/07/2026 15:00	<b>Date Time Of Uploading Tender</b>	29/06/2026 18:06
<b>Pre-Bid Conference Required</b>	Yes	<b>Pre-Bid Conference Date Time</b>	06/07/2026 11:00
<b>Advertised Value</b>	308836470.53	<b>Tendering Section</b>	TENDER
<b>Bidding Style</b>	Single Rate for Each Schedule	<b>Bidding Unit</b>	
<b>Earnest Money (Rs.)</b>	6176700.00	<b>Validity of Offer ( Days)</b>	90
<b>Tender Doc. Cost (Rs.)</b>	0.00	<b>Period of Completion</b>	24 Months
<b>Contract Type</b>	Works - General	<b>Contract Category</b>	Expenditure
<b>Bidding Start Date</b>	13/07/2026		
<b>Are JV allowed to bid</b>	Yes	<b>Number of JV Member Allowed</b>	3
<b>Are Consortium allowed to bid</b>	No	<b>Number of Consortium Member Allowed</b>	0
<b>Ranking Order For Bids</b>	Lowest to Highest	<b>Expenditure Type</b>	Capital (Works)

**2. SCHEDULE**

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
<b>Schedule () A-</b> Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.							22010614.08	Above/ Below/Par
1	Please see Item Breakup for details.				51887350.50	(-) 57.58	22010614.08	
	<b>Description:-</b> For soil investigation for TVC-NCJ 3rd line & New line/Doubling/ Future projects.							
S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
<b>Schedule () B-</b> Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.							88671854.09	Above/ Below/Par
2	Please see Item Breakup for details.				209033130.80	(-) 57.58	88671854.09	
	<b>Description:-</b> For soil investigation for Angamali-Sabari New line.							
S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
<b>Schedule () C-</b> Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.							19276567.96	Above/ Below/Par
3	Please see Item Breakup for details.				45442168.70	(-) 57.58	19276567.96	
	<b>Description:-</b> For soil investigation for Thuravur-Ambalapuzha Double line.							
S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit

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<b>Schedule ()</b> D-Provides for items of works that are NOT covered by the Southern Railway USSOR 2021.							68474430.00	Above/ Below/P ar
4	Please see Item Breakup for details.			68474430.00	AT Par	68474430.00		
	<b>Description:-</b> For conducting various surveys incl. photogrammetric survey, aerial LiDAR survey, DGPS survey, preparation of yard plans, plans for important /major/minor bridge/ ROB/RUB /LC's/index map, index plan & section, conducting traffic surveys, preparation of DPR & traffic study report, preparation of land acquisition proposals, preparation of EPC documents, design of tunnel, design of bridge super structure including proof checking etc. etc for TVC-NCJ 3rd line & New line/Doubling/Future projects.							
S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
<b>Schedule ()</b> E-Provides for items of works that are NOT covered by the Southern Railway USSOR 2021.							71674280.00	Above/ Below/P ar
5	Please see Item Breakup for details.			71674280.00	AT Par	71674280.00		
	<b>Description:-</b> For conducting various surveys incl. photogrammetric survey, aerial LiDAR survey, DGPS survey, preparation of yard plans, plans for important /major/minor bridge/ ROB/RUB /LC's/index map, index plan & section, preparation of land acquisition proposals, preparation of EPC documents, design of tunnel, design of bridge super structure including proof checking etc. for Angamali-Sabari New line.							
S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
<b>Schedule ()</b> F-Provides for items of works that are NOT covered by the Southern Railway USSOR 2021.							10682875.00	Above/ Below/P ar
6	Please see Item Breakup for details.			10682875.00	AT Par	10682875.00		
	<b>Description:-</b> For conducting various surveys incl. photogrammetric survey, DGPS survey, preparation of yard plans, plans for important /major/minor bridge/ ROB/RUB /LC's/index map, index plan & section, preparation of land acquisition proposals, preparation of EPC documents, design of bridge super structure including proof checking etc. for Thuravur-Ambalapuzha Double line.							
S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
<b>Schedule ()</b> G-Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.							19542586.55	Above/ Below/P ar
7	Please see Item Breakup for details.			19542586.55	AT Par	19542586.55		
	<b>Description:-</b> For design of sub-structure - Angamaly-Sabari New line.							
S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
<b>Schedule ()</b> H-Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.							1044260.35	Above/ Below/P ar
8	Please see Item Breakup for details.			1044260.35	AT Par	1044260.35		
	<b>Description:-</b> For design of sub-structure - Thuravur-Ambalapuzha Double line.							
S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
<b>Schedule ()</b> I-Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.							7459002.50	Above/ Below/P ar
9	Please see Item Breakup for details.			7459002.50	AT Par	7459002.50		
	<b>Description:-</b> For design of sub-structure - TVC-NCJ 3rd line & New line/Doubling/Future projects.							

### 3. ITEM BREAKUP

<b>Schedule</b>	Schedule A-Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.
<b>Item- 1</b>	For soil investigation for TVC-NCJ 3rd line & New line/Doubling/ Future projects.

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S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
		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/chiselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area.				
1	021011	0m to 10m	Metre	2000.00	3378.29	6756580.00
2	021012	10m to 20m	Metre	1500.00	3712.78	5569170.00
3	021013	20m to 30m	Metre	750.00	3880.02	2910015.00
4	021014	30m to 40m	Metre	500.00	4381.75	2190875.00
5	021015	40m to 50m	Metre	250.00	4716.23	1179057.50
		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 30cm), including refilling, reinstating surface and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion / chiselling tool for advancing through occasional seams of hard strata to be employed where necessary in River bed area including standing/flowing water with all necessary arrangements except making of platform under water which shall be paid under relevant item of SOR.				
6	021021	0m to 10m	Metre	1000.00	4053.95	4053950.00
7	021022	10m to 20m	Metre	1000.00	4455.33	4455330.00
8	021023	20m to 30m	Metre	500.00	4656.02	2328010.00
9	021024	30m to 40m	Metre	500.00	5258.09	2629045.00
10	021025	40m to 50m	Metre	500.00	5659.48	2829740.00
11	021030	Extra for 150mm dia. bore in hard Rock/large Boulder at all levels	Metre	100.00	8730.04	873004.00
12	021110	Taking out 100mm dia. & 450mm long undisturbed samples of soil from bore holes, including provision of air tight containers for packing and, labeling 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	1200.00	1337.94	1605528.00
13	021130	Conducting standard penetration test as per IS:2131 at approximate 1.5m intervals in bore holes, as directed by the Engineer in charge	Each	3000.00	936.56	2809680.00
		Conducting laboratory Tests on collected soil samples as per relevant IS code				
14	021151	Moisture Content/Dry Density	Each	1200.00	401.38	481656.00
15	021152	Atterberg Limits	Each	1200.00	602.07	722484.00
16	021153	Specific Gravity	Each	1200.00	518.45	622140.00
17	021154	Grain size analysis including Hydrometer analysis	Each	1200.00	1719.25	2063100.00

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18	021155	Direct Shear Test	Each	1200.00	2307.94	2769528.00
19	021156	Natural Density	Each	1200.00	618.80	742560.00
20	021157	Consolidation Test	Each	500.00	3277.95	1638975.00
21	021158	Unconfined Compression Test	Each	500.00	2187.53	1093765.00
22	021159	Tri-axial Test	Each	500.00	2608.98	1304490.00
		Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code				
23	021161	Density Test	Each	100.00	668.97	66897.00
24	021165	Point Load Test	Each	100.00	1917.71	191771.00
					<b>Total</b>	<b>51887350.50</b>
<b>Schedule</b>	Schedule B-Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.					
<b>Item- 2</b>	For soil investigation for Angamali-Sabari New line.					
<b>S No.</b>	<b>Item No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
		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/chiselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area.				
1	021011	0m to 10m	Metre	9200.00	3378.29	31080268.00
2	021012	10m to 20m	Metre	5090.00	3712.78	18898050.20
3	021013	20m to 30m	Metre	4370.00	3880.02	16955687.40
4	021014	30m to 40m	Metre	3770.00	4381.75	16519197.50
5	021015	40m to 50m	Metre	3770.00	4716.23	17780187.10
		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 30cm), including refilling, reinstating surface and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion / chiselling tool for advancing through occasional seams of hard strata to be employed where necessary in River bed area including standing/flowing water with all necessary arrangements except making of platform under water which shall be paid under relevant item of SOR.				
6	021021	0m to 10m	Metre	960.00	4053.95	3891792.00
7	021022	10m to 20m	Metre	960.00	4455.33	4277116.80
8	021023	20m to 30m	Metre	960.00	4656.02	4469779.20
9	021024	30m to 40m	Metre	480.00	5258.09	2523883.20
10	021025	40m to 50m	Metre	480.00	5659.48	2716550.40
11	021030	Extra for 150mm dia. bore in hard Rock/large Boulder at all levels	Metre	1000.00	8730.04	8730040.00

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12	021110	Taking out 100mm dia. & 450mm long undisturbed samples of soil from bore holes, including provision of air tight containers for packing and, labeling 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	5500.00	1337.94	7358670.00
13	021130	Conducting standard penetration test as per IS:2131 at approximate 1.5m intervals in bore holes, as directed by the Engineer in charge	Each	11650.00	936.56	10910924.00
		Conducting laboratory Tests on collected soil samples as per relevant IS code				
14	021151	Moisture Content/Dry Density	Each	5500.00	401.38	2207590.00
15	021152	Atterberg Limits	Each	5500.00	602.07	3311385.00
16	021153	Specific Gravity	Each	5500.00	518.45	2851475.00
17	021154	Grain size analysis including Hydrometer analysis	Each	5500.00	1719.25	9455875.00
18	021155	Direct Shear Test	Each	5500.00	2307.94	12693670.00
19	021156	Natural Density	Each	5500.00	618.80	3403400.00
20	021157	Consolidation Test	Each	3000.00	3277.95	9833850.00
21	021158	Unconfined Compression Test	Each	4000.00	2187.53	8750120.00
22	021159	Tri-axial Test	Each	3000.00	2608.98	7826940.00
		Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code				
23	021161	Density Test	Each	1000.00	668.97	668970.00
24	021165	Point Load Test	Each	1000.00	1917.71	1917710.00
					<b>Total</b>	<b>209033130.80</b>
<b>Schedule</b>	Schedule C-Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.					
<b>Item- 3</b>	For soil investigation for Thuravur-Ambalapuzha Double line.					
<b>S No.</b>	<b>Item No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
		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/chiselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area.				
1	021011	0m to 10m	Metre	3880.00	3378.29	13107765.20
2	021012	10m to 20m	Metre	900.00	3712.78	3341502.00
3	021013	20m to 30m	Metre	500.00	3880.02	1940010.00
4	021014	30m to 40m	Metre	500.00	4381.75	2190875.00
5	021015	40m to 50m	Metre	250.00	4716.23	1179057.50

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		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 30cm), including refilling, reinstating surface and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion / chiselling tool for advancing through occasional seams of hard strata to be employed where necessary in River bed area including standing/flowing water with all necessary arrangements except making of platform under water which shall be paid under relevant item of SOR.				
6	021021	0m to 10m	Metre	100.00	4053.95	405395.00
7	021022	10m to 20m	Metre	100.00	4455.33	445533.00
8	021023	20m to 30m	Metre	100.00	4656.02	465602.00
9	021024	30m to 40m	Metre	100.00	5258.09	525809.00
10	021025	40m to 50m	Metre	100.00	5659.48	565948.00
11	021030	Extra for 150mm dia. bore in hard Rock/large Boulder at all levels	Metre	50.00	8730.04	436502.00
12	021110	Taking out 100mm dia. & 450mm long undisturbed samples of soil from bore holes, including provision of air tight containers for packing and, labeling 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	2200.00	1337.94	2943468.00
13	021130	Conducting standard penetration test as per IS:2131 at approximate 1.5m intervals in bore holes, as directed by the Engineer in charge	Each	2200.00	936.56	2060432.00
		Conducting laboratory Tests on collected soil samples as per relevant IS code				
14	021151	Moisture Content/Dry Density	Each	2200.00	401.38	883036.00
15	021152	Atterberg Limits	Each	2200.00	602.07	1324554.00
16	021153	Specific Gravity	Each	2200.00	518.45	1140590.00
17	021154	Grain size analysis including Hydrometer analysis	Each	2200.00	1719.25	3782350.00
18	021155	Direct Shear Test	Each	1100.00	2307.94	2538734.00
19	021156	Natural Density	Each	2200.00	618.80	1361360.00
20	021157	Consolidation Test	Each	700.00	3277.95	2294565.00
21	021158	Unconfined Compression Test	Each	700.00	2187.53	1531271.00
22	021159	Tri-axial Test	Each	350.00	2608.98	913143.00
		Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code				
23	021161	Density Test	Each	25.00	668.97	16724.25
24	021165	Point Load Test	Each	25.00	1917.71	47942.75
					<b>Total</b>	<b>45442168.70</b>
<b>Schedule</b>	Schedule D-Provides for items of works that are NOT covered by the Southern Railway USSOR 2021.					
<b>Item- 4</b>	For conducting various surveys incl. photogrammetric survey, aerial LiDAR survey, DGPS survey, preparation of yard plans, plans for important /major/minor bridge/ ROB/RUB /LC's/index map, index plan & section, conducting traffic surveys, preparation of DPR & traffic study report, preparation of land acquisition proposals, preparation of EPC documents, design of tunnel, design of bridge super structure including proof checking etc. etc for TVC-NCJ 3rd line & New line/Doubling/Future projects.					



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1	1	Conducting photogrammetric survey using stereo satellite imagery data (CARTOS set or similar) as obtained from NRSC (national remote sensing centre) and processing the same using suitable GIS software for generation of Digital Elevation Model (DEM) , orthophotos, topomaps etc., to verify the doubling/new line alignment proposed in the PET survey by first identifying minimum 3 alternate viable routes and finalization of most technical and economically alignment in consultation with railways duly adopting latest circular/manuals/code of Railways .	Kilometre	200.00	6785.00	1357000.00
2	2	Conducting Aerial LIDAR survey using Aircraft/Helicopter - Aerial LiDAR Survey using Aircraft/Helicopter complemented with Aerial Photography . Data Capturing to be done for 600m wide corridor i.e.300 m on each side of the proposed alignment. However, Data Processing to be carried out for 100 m wide corridor (i.e, 50 m on either side of the alignment).	Kilometre	200.00	78130.00	15626000.00
3	3	Carrying out the DGPS Survey as per instructions of authority as per scope of work, tender documents and following Indian Railway Engineering Code corrected up to date with contractor's survey equipments such as DGPS, labours, transport, supervision etc., comprising of items of works covered in the scope of work and the special conditions. Covering the following: 1 (A) Provide Control points with X,Y and Z co-ordinates / Bench Mark with MSL at every One Kilometre at permanent structure/ pillar and as directed by the Engineer in Charge. (For both UP & DN lines).Note : Overall Width to be covered is 50 m.	Kilometre	50.00	6235.00	311750.00
4	4	Submission of final working plan and Lsection in scale of 1:5000 horizontal and 1:500 vertical for Railways approval. (colour print ) (The approximate numbers for each items given below is only for the guidance and numbers may vary according to site condition. No extra payment will be made for the variations) (working plan-60 nos, 3km per sheet) (L-section -36 nos, 5km per sheet) Mode of payment: 60% of quoted rate will be paid after submission for final approval duly attending corrections and balance 40% of payment will be made after approval of plans.	Kilometre	200.00	2750.00	550000.00

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5	5	Preparation and submission of plans for stations yards, in scale 1:1000 as per IRPWM/Track Manual/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge. - For Major stations (more than 5 lines including mainline and looplines in station yard).	Each	15.00	22900.00	343500.00
6	6	Preparation and submission of plans for stations yards, in scale 1:1000 as per IRPWM/Track Manual/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge. - For Crossing stations (5 lines or less including main line and loop lines in station yard).	Each	25.00	9170.00	229250.00
7	7	Preparation and submission of plans for Important Bridges/Major Bridges, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment: 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	50.00	14670.00	733500.00
8	8	Preparation and submission of plans for Minor Bridges, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	500.00	6140.00	3070000.00



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9	9	Preparation and submission of plans for ROBS/RUBs, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	50.00	14670.00	733500.00
10	10	Preparation and submission of plans for LCs/Grade seperators, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	25.00	3940.00	98500.00
11	11	Preparation and submission of plans of Genral Map of the country traversed by the project, in scale of 25Km to 1cm as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	4.00	6140.00	24560.00
12	12	Preparation and submission of Index Map, in scale of 2.5Km to 1cm as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	10.00	6140.00	61400.00

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13	13	Preparation and submission of Index Plan, in scale 0.5 km to 1 cm horizontal and 10 m to 1 cm vertical as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	40.00	3117.00	124680.00
14	14	Preparation and submission of Index Section, in scale 0.5 km to 1 cm horizontal and 10 m to 1 cm vertical as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Kilometre	50.00	3117.00	155850.00
15	15	Preparation and submission of cross section sheets at 100 m interval in A3 size in suitable scale as per IRPWM/Track Manual/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	500.00	45.00	22500.00
16	16	Preparation and submission of plans for OHE installations (plans to be submitted for OHE layout, power supply, sectioning diagram, wiring plan etc) in scale 1:100 as per IRPWM/ACTM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment: 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Kilometre	200.00	2750.00	550000.00

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17	17	Preparation and supply of interlocking plan on the basis of approved engineering plan. The contractor shall initially supply two sets of IP duly signed by the designer and submit for approval of Railway. Railway will return one set of SIP duly approved with alterations/correction if any. The contractor will submit final drawing soft copy in pen drive/Hard Disk and four copies of IP to the Railway. (a) Route up to 50.	Numbers	2.00	14670.00	29340.00
18	18	Preparation and supply of interlocking plan on the basis of approved engineering plan. The contractor shall initially supply two sets of IP duly signed by the designer and submit for approval of Railway. Railway will return one set of SIP duly approved with alterations/correction if any. The contractor will submit final drawing soft copy in pen drive/Hard Disk and four copies of IP to the Railway. (b) 51 to 75 Route	Numbers	5.00	20780.00	103900.00
19	19	Preparation and supply of interlocking plan on the basis of approved engineering plan. The contractor shall initially supply two sets of IP duly signed by the designer and submit for approval of Railway. Railway will return one set of SIP duly approved with alterations/correction if any. The contractor will submit final drawing soft copy in pen drive/Hard Disk and four copies of IP to the Railway. (c) 76 to 100 Route	Numbers	5.00	33000.00	165000.00
20	20	Preparation and supply of interlocking plan on the basis of approved engineering plan. The contractor shall initially supply two sets of IP duly signed by the designer and submit for approval of Railway. Railway will return one set of SIP duly approved with alterations/correction if any. The contractor will submit final drawing soft copy in pen drive/Hard Disk and four copies of IP to the Railway. (d) 101 Route and above	Numbers	2.00	42175.00	84350.00

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21	21	Hydrological investigation for Important and Major Bridges using DEM : Conducting hydrologocal investigation including detailed caluclation for important, major bridges using Digital Elevation Model (Geological information system) Tasks: i. Marking of all bridge locations on index plan of the alignment. ii. Delineating the catchment boundary of bridges from DEM and calculating physiographic parameters of the catchment - area, longest stream, slope iii Calculating design discharge (Q50) for all bridges based on RBF 16 / RBF 22 reports for small catchments and synthetic unit hydrograph from flood estimation report for large catchments (greater than 25 sq km). iv. Consultant will verify if there are any dams / water storage structures in the catchment and obtain regulated flow discharge from concerned authority for calculation of design discharge. v. Checking of adequacy of proposed linear waterway, vertical clearance, free board and depth of foundation. Soil investigation report for scour depth calculations will be provided to the consultant. Deliverables i. 3 copies of report with bridge wise hydrological calculations should be submitted. Separate booklets should be prepared for Important and Major bridges. ii. For each bridge, calculations and catchment plan with longest stream marked on Survey of India toposheet should be submitted. For bridges with large catchments, unit hydrograph and calculation of equivalent slope should also be submitted. iii. Catchment plan should be marked on 50 year 24 hr rainfall map to verify correctness of rainfall data used and the same and the same submitted in the booklet. iv. The following are required to be submitted as softcopy - calculation spreadsheets, Google Earth KML files of catchment plans, longest stream, alignment and bridge location.	Each	50.00	4195.00	209750.00
22	22	Classified Traffic Volume Count (TVC) Survey (Video graphic counts) - Classified Traffic Volume Count (TVC) Survey (Video graphic counts) for 3 days (3 days X 24 hours) including one Holiday/ Sunday.	Numbers	10.00	75000.00	750000.00
23	23	Vehicle Occupancy Survey- Mode-wise Occupancy Survey at all the TVC-SRR locations for 24 hours simultaneously with the traffic volume count.	Numbers	10.00	60000.00	600000.00
24	24	Origin Destination Survey -Passenger Vehicles for 24 hours simultaneously with the traffic volume count.	Numbers	10.00	60000.00	600000.00
25	25	Origin Destination Survey - Goods Vehicles for 24 hours simultaneously with the traffic volume count.	Numbers	10.00	48000.00	480000.00
26	26	Passenger Terminal O-D Survey at identified Airport, Bus and Train Terminals.	Numbers	10.00	60000.00	600000.00

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27	27	Survey of Truck Operators, Cargo Forwarding Agencies and Railway Parcel Services etc. Minimum 100 Truck operators, 20 Freight forwarding agencies and 5 Railway stations.	Numbers	10.00	135000.00	1350000.00
28	28	Preparation & submission of Detailed Project Report (DPR) and Traffic study report as per latest Railway Board Guidelines including submission of detailed estimate of the project based on the field survey, geotechnical studies for Bridges & formation design, stations area & yards, rates to be adopted as per S. Railway USSOR 2021, Latest LAR/ Latest PWay rate list and market rates including analysis for determining the rates, and other important features required for preparation of estimate as directed by engineer in charge. Note: Rate includes submission of report in 3 copies along with soft copies. Note: The item shall contain preparation, supply & finalization till approval by competent authority. (for TVC-NCJ - 71 Km+ 129 Km future projects)). Payment shall be made for submission of final Traffic study Report - 20% of item cost.	Each	1.00	139900.00	139900.00
29	29	Finding out utility services including infringement along the proposed alignment such as electrical line/poles, OHE structures & installments, S&T structures & installations, telephone lines, high tension lines along with their voltage & sag height, OFC cables, existing RE cables, Quad cables, retaining walls, trees, pipeline for water, petro, gas etc complete including preparation of kilometer wise plan showing all utility services which need to be shifted before construction etc. complete Note : The mapping of infringement in yards like cables, location boxes, OHE portals etc will also be required to be done on ESP.	Kilometre	200.00	3335.00	667000.00
30	30	Erection of cast in situ RCC Pillars (1:1:2) of size 500mmx500mmx1000mm, 300mm projected above ground level for master Control Points, Secondary Control Points etc. with the provision of 700m long M.S. angle of size 50x50x6 mm with brass nailing on the MS angle for making the Control Points and engraving the CP pillar number on the MS plate of size 125mmx125mmx5mm embedded in concrete by four 6mm dia. rods 150mm long as per attached drawings. The pillar should have the following reinforcement: 4nos- 10mm dia. longitudinal and 8mm dia. rings @ 150mm c/c. The foundation size of the pillar should be 800mmx800mmx150mm with a PCG (Nominal mix 1:2:4) base.(Wherever feasible, marking should be done on existing permanent structure. Payment to be made only for actual pillars.	Each	200.00	12800.00	2560000.00

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31	31	1) Conducting Aerial Topographical Survey using DGPS based integrated Drone i.e., PPK/RTK based Drone to capture essential ground features and assets and delivering the topographical information within an accuracy of 5 cm. GCP establishment at every 2km paint marked on the permanent structure and 1 Hr. GPS observation of the same. 2) TBM point's establishment at every 500 m on paint Marked on permanent structures and RTK survey of the same using the 2 km points as the base. 3) Collection of High-Resolution Aerial Imagery of minimum 3 cm GD using survey grade DGPS integrated Drone i.e., PPK/RTK based Drone having on board dual GNSS system and calibrated camera of 20MP UAV Aerial Photo Acquisition shall be done to cover the ROW Suitable Overlapping: minimum 70% forward and 50% side overlap shall be maintained. Ensure Image Quality: Clear/sharp imagery with good light condition. Images must have XYZ coordinates and rotational information, sensor size, focal length as meta data This Information must also be made available in a text file. 4) Aero triangulation using the professional photogrammetry software which supports Stereo Capability to measure control points with highest precision and rigorous bundle block adjustment for reliable mathematical calculation and performing a least squares block adjustment. 5) 3D Topographical mapping - plan data Capture - All topographical information including natural & manmade features to be captured. All the topographical features including Rail, track centre line, Platform, signal, Electrical mast, FOB, ROB, RUB, Station Building, Other buildings, Utilities, land use, Roads, wall, Hydro features were to be captured. (Extensive Layer list in CAD) The output to be delivered in DWG format. (100 m ROW).	Kilometre	50.00	23414.00	1170700.00
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32	32	Drone Ortho photos generation as per Railway Guidelines (Letter no. 2015/Track -1/24 (1)/18/1/dated 09.10.2017 Deliverables: 1) Raw images (.jpg format) (2cm GSD). 2) Final Scaled and Geo-positioned Ortho-photo tiles in jpg & Sid compressed format of 2cm resolution and re sampled at 5cm GSD. 3) Final Scaled and Geo positioned Ortho-photo tiles in jpg & Sid format for each SKM. 4) Map file compatible to CAD/GIS in shp format duly linked with attributes of assets. 5) Quality control report for Positional Accuracy Assessment Coordinates to be picked for at least 5 well defined assets in 1km length from Google and same to be measured on the Ortho-photo Coordinates comparison. The difference between these values should be greater than equal to 3 m. 6) The Alignment plan & Depot land boundary are to be shown on die Google earth. (Alignment file in .dwg format and coordinates will be provided by client). 7) DSM/DTM models for the collected survey data to be prepared and submitted to the client in appropriate file format. (UNIT: Per 100 sqm instead of Per Unit.)	100 Sqm	5000000.00	31.37	1568500.00
33	33	Preparation & submission of, EPC tender document for Civil engineering, Electrical and S & T of the project based on the field survey. Geotechnical studies for Bridges & formation design, stations area & yards, tunnel design & drawing etc. Rates to be adopted as per latest USSOR/DSR, Latest P-way rate list and market rates including analysis for determining the rates, and other important features required for preparation of estimate as directed by Engineer In Charge. Note: Rate includes submission of report in 3 copies along with soft copies. (a) Submission of EPC tender document (60 % payment after final submission) (b) Approval of document (40 %).	Kilometre	71.00	40500.00	2875500.00
34	34	Preparation of land acquisition proposals in seven copies or as per Revenue Department's requirement including collection including superimposition of revenue record on proposed alignment and calculation and identification of area to be acquired along withl and owners detail etc.This item includes submission of proposal in required formats to respective revenue officials for the publication of notifications under various sections of Land Acquisition Act with latest amendments or any other relevant Act amended subsequently to accelerate acquisition of land along with follow up for joint measurement order.	Kilometre	200.00	4820.00	964000.00



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35	35	Designing and developing Detailed structural and working Drawings for ROB/RUB/Bridges super structure based on Railway's approved GAD , duly collecting necessary data from Railways, duly designing members, considering SV loading as per IRC-6 and submission of check plot duly getting proof-checked b y I I T , submitting for Railway's verification and approval, making corrections duly incorporating suggestions in drawings/designs, further submission of original i n hard copy in paper and soft c o p y for Railways approval with contractor's technical expertise and instruments, labour, consumables, etc. complete as directed by Engineer in-charge.	Each	100.00	250000.00	25000000.00
36	36	Conducting Rail Structure Interaction (RSI) Analysis using MIDAS-CIVIL software and submitting reports from agencies undertaking RSI, including submission of softcopies of report of the same with Contractor's consumables, gadgets, men, materials etc as approved by Engineer-in- Charge.	Each	50.00	29500.00	1475000.00
37	37	Preparation of working design and drawing for tunnel including topography Survey at 5m contour interval and modifying the design and drawings during construction phase, which shall include the following but not limit to (a) Tunnel and its drainage & allied civil work (b) Comparability of Design for Railway electrification in future. (c) tunnel Ventilation system. (d) Fire detection & suppression system (e) Tunnel illumination (f)Communication system for Emergencies and maintenance (g) Evacuation scheme in case of Emergencies. (h) Surveillance system (i) Environment & Assessment (j) Methodology, number of fronts, edits (k) Disposal of muck accrued from tunnel excavation (l) List of equipments to be deployed by tunneling contractor (m) Signaling & telecom arrangements Note:1. the rate also include expenditure for site visit including man, machineries, vehicles, hotel charges etc. complete. 2. The railway will finally approve the design and submission of working drawings will be ensured on reproducible tracing films along with 5(five) Ferro print copies, including booklet. Design to be finally approved by railway. The rate also include the fees of proof consultants and as per Railway specifications etc. as a complete job. Per Tunnel KM 1025223.60 47 4,81,85,509.13 Note - While calculating the quantity, separate tunnels considered for each 4th & 5th line i.e. tunnel accommodating single track. Considering the aspect of escape tunnel & geotechnical conditions if single tunnel is planned for accommodating both 4th & 5th line i.e. two tracks then in that case length for payment will be considered once only.	Kilometre	5.00	617900.00	3089500.00
					<b>Total</b>	<b>68474430.00</b>

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<b>Schedule</b>	Schedule E-Provides for items of works that are NOT covered by the Southern Railway USSOR 2021.					
<b>Item- 5</b>	For conducting various surveys incl. photogrammetric survey, aerial LiDAR survey, DGPS survey, preparation of yard plans, plans for important /major/minor bridge/ ROB/RUB /LC's/index map, index plan & section, preparation of land acquisition proposals, preparation of EPC documents, design of tunnel, design of bridge super structure including proof checking etc. for Angamali-Sabari New line.					
<b>S No.</b>	<b>Item No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
1	1	Conducting photogrammetric survey using stereo satellite imagery data (CARTOS set or similar) as obtained from NRSC (national remote sensing centre) and processing the same using suitable GIS software for generation of Digital Elevation Model (DEM) , orthophotos, topomaps etc., to verify the doubling/new line alignment proposed in the PET survey by first identifying minimum 3 alternate viable routes and finalization of most technical and economically alignment in consultation with railways duly adopting latest circular/manuals/code of Railways.	Kilometre	80.00	6785.00	542800.00
2	2	Conducting Aerial LIDAR survey using Aircraft/Helicopter - Aerial LiDAR Survey using Aircraft/Helicopter complemented with Aerial Photography . Data Capturing to be done for 600m wide corridor i.e.300 m on each side of the proposed alignment. However, Data Processing to be carried out for 100 m wide corridor (i.e, 50 m on either side of the alignment).	Kilometre	80.00	78130.00	6250400.00
3	3	Carrying out the DGPS Survey as per instructions of authority as per scope of work, tender documents and following Indian Railway Engineering Code corrected up to date with contractor's survey equipments such as DGPS, labours, transport, supervision etc., comprising of items of works covered in the scope of work and the special conditions. Covering the following: 1 (A) Provide Control points with X,Y and Z co-ordinates / Bench Mark with MSL at every One Kilometre at permanent structure/ pillar and as directed by the Engineer in Charge. (For both UP & DN lines).Note : Overall Width to be covered is 50 m.	Kilometre	30.00	6235.00	187050.00
4	4	Submission of final working plan and Lsection in scale of 1:5000 horizontal and 1:500 vertical for Railways approval. (colour print ) (The approximate numbers for each items given below is only for the guidance and numbers may vary according to site condition. No extra payment will be made for the variations) (working plan-60 nos, 3km per sheet) (L-section -36 nos, 5km per sheet) Mode of payment: 60% of quoted rate will be paid after submission for final approval duly attending corrections and balance 40% of payment will be made after approval of plans.	Kilometre	115.00	2750.00	316250.00

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5	5	Preparation and submission of plans for stations yards, in scale 1:1000 as per IRPWM/Track Manual/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment: 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge. - For Major stations (more than 5 lines including main line and loop lines in station yard)	Each	2.00	22900.00	45800.00
6	6	Preparation and submission of plans for stations yards, in scale 1:1000 as per IRPWM/Track Manual/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment: 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge. - For Crossing stations (5 lines or less including mainline and loop lines in station yard).	Each	12.00	9170.00	110040.00
7	7	Preparation and submission of plans for Important Bridges/Major Bridges, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment: 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	18.00	14670.00	264060.00
8	8	Preparation and submission of plans for Minor Bridges, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	400.00	6140.00	2456000.00

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9	9	Preparation and submission of plans for ROBS/RUBs, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	30.00	14670.00	440100.00
10	10	Preparation and submission of plans of Genral Map of the country traversed by the project, in scale of 25Km to 1cm as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge	Each	20.00	3940.00	78800.00
11	11	Preparation and submission of plans of Genral Map of the country traversed by the project, in scale of 25Km to 1cm as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge	Each	4.00	6140.00	24560.00
12	12	Preparation and submission of Index Map, in scale of 2.5Km to 1cm as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	10.00	6140.00	61400.00

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13	13	Preparation and submission of Index Plan, in scale 0.5 km to 1 cm horizontal and 10 m to 1 cm vertical as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	40.00	3117.00	124680.00
14	14	Preparation and submission of Index Section, in scale 0.5 km to 1 cm horizontal and 10 m to 1 cm vertical as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Kilometre	40.00	3117.00	124680.00
15	15	Preparation and submission of cross section sheets at 100 m interval in A3 size in suitable scale as per IRPWM/Track Manual/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	100.00	45.00	4500.00
16	16	Preparation and submission of plans for OHE installations (plans to be submitted for OHE layout, power supply, sectioning diagram, wiring plan etc) in scale 1:100 as per IRPWM/ACTM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Kilometre	100.00	2750.00	275000.00

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17	17	Hydrological investigation for Important and Major Bridges using DEM : Conducting hydrologocal investigation including detailed caluclation for important, major bridges using Digital Elevation Model (Geological information system) Tasks: i. Marking of all bridge locations on index plan of the alignment. ii. Delineating the catchment boundary of bridges from DEM and calculating physiographic parameters of the catchment - area, longest stream, slope iii Calculating design discharge (Q50) for all bridges based on RBF 16 / RBF 22 reports for small catchments and synthetic unit hydrograph from flood estimation report for large catchments (greater than 25 sq km). iv. Consultant will verify if there are any dams / water storage structures in the catchment and obtain regulated flow discharge from concerned authority for calculation of design discharge. v. Checking of adequacy of proposed linear waterway, vertical clearance, free board and depth of foundation. Soil investigation report for scour depth calculations will be provided to the consultant. Deliverables i. 3 copies of report with bridge wise hydrological calculations should be submitted. Separate booklets should be prepared for Important and Major bridges. ii. For each bridge, calculations and catchment plan with longest stream marked on Survey of India toposheet should be submitted. For bridges with large catchments, unit hydrograph and calculation of equivalent slope should also be submitted. iii. Catchment plan should be marked on 50 year 24 hr rainfall map to verify correctness of rainfall data used and the same and the same submitted in the booklet. iv. The following are required to be submitted as softcopy - calculation spreadsheets, Google Earth KML files of catchment plans, longest stream, alignment and bridge location.	Each	18.00	4195.00	75510.00
18	18	Finding out utility services including infringement along the proposed alignment such as electrical line/poles, OHE structures & installments, S&T structures & installations, telephone lines, high tension lines along with their voltage & sag height, OFC cables, existing RE cables, Quad cables, retaining walls, trees, pipeline for water, petro, gas etc complete including preparation of kilometer wise plan showing all utility services which need to be shifted before construction etc. complete Note : The mapping of infringement in yards like cables ,location boxes ,OHE portals etc will also be required to be done on ESP.	Kilometre	100.00	3335.00	333500.00

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19	19	Preparation and supply of interlocking plan on the basis of approved engineering plan. The contractor shall initially supply two sets of IP duly signed by the designer and submit for approval of Railway. Railway will return one set of SIP duly approved with alterations/correction if any. The contractor will submit final drawing soft copy in pen drive/Hard Disk and four copies of IP to the Railway. (a) Route up to 50	Numbers	2.00	14670.00	29340.00
20	20	Preparation and supply of interlocking plan on the basis of approved engineering plan. The contractor shall initially supply two sets of IP duly signed by the designer and submit for approval of Railway. Railway will return one set of SIP duly approved with alterations/correction if any. The contractor will submit final drawing soft copy in pen drive/Hard Disk and four copies of IP to the Railway. (b) 51 to 75 Route	Numbers	5.00	20780.00	103900.00
21	21	Preparation and supply of interlocking plan on the basis of approved engineering plan. The contractor shall initially supply two sets of IP duly signed by the designer and submit for approval of Railway. Railway will return one set of SIP duly approved with alterations/correction if any. The contractor will submit final drawing soft copy in pen drive/Hard Disk and four copies of IP to the Railway. (c) 76 to 100 Route	Numbers	5.00	33000.00	165000.00
22	22	Preparation and supply of interlocking plan on the basis of approved engineering plan. The contractor shall initially supply two sets of IP duly signed by the designer and submit for approval of Railway. Railway will return one set of SIP duly approved with alterations/correction if any. The contractor will submit final drawing soft copy in pen drive/Hard Disk and four copies of IP to the Railway. (d) 101 Route and above.	Numbers	2.00	42175.00	84350.00
23	23	Preparation & submission of, EPC tender document for Civil engineering, Electrical and S & T of the project based on the field survey. Geotechnical studies for Bridges & formation design, stations area & yards, tunnel design & drawing etc. Rates to be adopted as per latest USSOR/DSR, Latest P-way rate list and market rates including analysis for determining the rates, and other important features required for preparation of estimate as directed by Engineer In Charge. Note: Rate includes submission of report in 3 copies along with soft copies. (a) Submission of EPC tender document (60 % payment after final submission) (b) Approval of document (40 %).	Kilometre	111.00	40500.00	4495500.00



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24	24	Erection of cast in situ RCC Pillars (1:1:2) of size 500mmx500mmx1000mm, 300mm projected above ground level for master Control Points, Secondary Control Points etc. with the provision of 700m long M.S. angle of size 50x50x6 mm with brass nailing on the MS angle for making the Control Points and engraving the CP pillar number on the MS plate of size 125mmx125mmx5mm embedded in concrete by four 6mm dia. rods 150mm long as per attached drawings. The pillar should have the following reinforcement: 4nos- 10mm dia. longitudinal and 8mm dia. rings @ 150mm c/c. The foundation size of the pillar should be 800mmx800mmx150mm with a PCG (Nominal mix 1:2:4) base.(Wherever feasible, marking should be done on existing permanent structure. Payment to be made only for actual pillars.	Each	200.00	12800.00	2560000.00
25	25	Preparation of land acquisition proposals in seven copies or as per Revenue Department's requirement including collection including superimposition of revenue record on proposed alignment and calculation and identification of area to be acquired along withl and owners detail etc.This item includes submission of proposal in required formats to respective revenue officials for the publication of notifications under various sections of Land Acquisition Act with latest amendments or any other relevant Act amended subsequently to accelerate acquisition of land along with follow up for joint measurement order.	Kilometre	111.00	4820.00	535020.00

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26	26	Preparation of working design and drawing for tunnel including topography Survey at 5m contour interval and modifying the design and drawings during construction phase, which shall include the following but not limit to (a) Tunnel and its drainage & allied civil work (b) Comparability of Design for Railway electrification in future. (c) tunnel Ventilation system. (d) Fire detection & suppression system (e) Tunnel illumination (f)Communication system for Emergencies and maintenance (g) Evacuation scheme in case of Emergencies. (h) Surveillance system (i) Environment & Assessment (j) Methodology, number of fronts, edits (k) Disposal of muck accrued from tunnel excavation (l) List of equipments to be deployed by tunneling contractor (m) Signaling & telecom arrangements Note:1. the rate also include expenditure for site visit including man, machineries, vehicles, hotel charges etc. complete. 2. The railway will finally approve the design and submission of working drawings will be ensured on reproducible tracing films along with 5(five) Ferro print copies, including booklet. Design to be finally approved by railway. The rate also include the fees of proof consultants and as per Railway specifications etc. as a complete job. Per Tunnel KM 1025223.60 47 4,81,85,509.13 Note - While calculating the quantity, separate tunnels considered for each 4th & 5th line i.e. tunnel accommodating single track. Considering the aspect of escape tunnel & geotechnical conditions if single tunnel is planned for accommodating both 4th & 5th line i.e. two tracks then in that case length for payment will be considered once only.	Kilometre	25.00	617900.00	15447500.00
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27	27	1) Conducting Aerial Topographical Survey using DGPS based integrated Drone i.e., PPK/RTK based Drone to capture essential ground features and assets and delivering the topographical information within an accuracy of 5 cm. GCP establishment at every 2km paint marked on the permanent structure and 1 Hr. GPS observation of the same. 2) TBM point's establishment at every 500 m on paint Marked on permanent structures and RTK survey of the same using the 2 km points as the base. 3) Collection of High-Resolution Aerial Imagery of minimum 3 cm GD using survey grade DGPS integrated Drone i.e., PPK/RTK based Drone having on board dual GNSS system and calibrated camera of 20MP UAV Aerial Photo Acquisition shall be done to cover the ROW Suitable Overlapping: minimum 70% forward and 50% side overlap shall be maintained. Ensure Image Quality: Clear/sharp imagery with good light condition. Images must have XYZ coordinates and rotational information, sensor size, focal length as meta data This Information must also be made available in a text file. 4) Aero triangulation using the professional photogrammetry software which supports Stereo Capability to measure control points with highest precision and rigorous bundle block adjustment for reliable mathematical calculation and performing a least squares block adjustment. 5) 3D Topographical mapping - plan data Capture - All topographical information including natural & manmade features to be captured. All the topographical features including Rail, track centre line, Platform, signal, Electrical mast, FOB, ROB, RUB, Station Building, Other buildings, Utilities, land use, Roads, wall, Hydro features were to be captured. (Extensive Layer list in CAD) The output to be delivered in DWG format. (100 m ROW)	Kilometre	60.00	23414.00	1404840.00
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28	28	Drone Ortho photos generation as per Railway Guidelines (Letter no. 2015/Track -1/24 (1)/18/1/dated 09.10.2017 Deliverables: 1) Raw images (.jpg format) (2cm GSD). 2) Final Scaled and Geo-positioned Ortho-photo tiles in jpg & Sid compressed format of 2cm resolution and re sampled at 5cm GSD. 3) Final Scaled and Geo positioned Ortho-photo tiles in jpg & Sid format for each SKM. 4) Map file compatible to CAD/GIS in shp format duly linked with attributes of assets. 5) Quality control report for Positional Accuracy Assessment Coordinates to be picked for at least 5 well defined assets in 1km length from Google and same to be measured on the Ortho-photo Coordinates comparison. The difference between these values should be greater than equal to 3 m. 6) The Alignment plan & Depot land boundary are to be shown on die Google earth. (Alignment file in .dwg format and coordinates will be provided by client). 7) DSM/DTM models for the collected survey data to be prepared and submitted to the client in appropriate file format. (UNIT: Per 100 sqm instead of Per Unit.)	100 Sqm	6000000.00	31.37	1882200.00
29	29	Designing and developing Detailed structural and working Drawings for ROB/RUB/Bridges super structure based on Railway's approved GAD , duly collecting necessary data from Railways, duly designing members, considering SV loading as per IRC-6 and submission of check plot duly getting proof-checked b y I I T , submitting for Railway's verification and approval, making corrections duly incorporating suggestions in drawings/designs, further submission of original i n hard copy in paper and soft c o p y for Railways approval with contractor's technical expertise and instruments, labour, consumables, etc. complete as directed by Engineer in-charge.	Each	131.00	250000.00	32750000.00
30	30	Conducting Rail Structure Interaction (RSI) Analysis using MIDAS-CIVIL software and submitting reports from agencies undertaking RSI, including submission of softcopies of report of the same with Contractor's consumables, gadgets, men, materials etc as approved by Engineer-in- Charge.	Each	17.00	29500.00	501500.00
					<b>Total</b>	<b>71674280.00</b>
<b>Schedule</b>	Schedule F-Provides for items of works that are NOT covered by the Southern Railway USSOR 2021.					
<b>Item- 6</b>	For conducting various surveys incl. photogrammetric survey, DGPS survey, preparation of yard plans, plans for important /major/minor bridge/ ROB/RUB /LC's/index map, index plan & section, preparation of land acquisition proposals, preparation of EPC documents, design of bridge super structure including proof checking etc. for Thuravur-Ambalapuzha Double line.					
<b>S No.</b>	<b>Item No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>

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1	1	Conducting photogrammetric survey using stereo satellite imagery data (CARTOS set or similar) as obtained from NRSC (national remote sensing centre) and processing the same using suitable GIS software for generation of Digital Elevation Model (DEM), orthophotos, topomaps etc., to verify the doubling/new line alignment proposed in the PET survey by first identifying minimum 3 alternate viable routes and finalization of most technical and economically alignment in consultation with railways duly adopting latest circular/manuals/code of Railways.	Kilometre	50.00	6785.00	339250.00
2	2	Carrying out the DGPS Survey as per instructions of authority as per scope of work, tender documents and following Indian Railway Engineering Code corrected up to date with contractor's survey equipments such as DGPS, labours, transport, supervision etc., comprising of items of works covered in the scope of work and the special conditions. Covering the following: 1 (A) Provide Control points with X,Y and Z co-ordinates / Bench Mark with MSL at every One Kilometre at permanent structure/ pillar and as directed by the Engineer in Charge. (For both UP & DN lines).Note : Overall Width to be covered is 50 m.	Kilometre	50.00	6235.00	311750.00
3	3	Submission of final working plan and L-section in scale of 1:5000 horizontal and 1:500 vertical for Railways approval. (colour print ) (The approximate numbers for each items given below is only for the guidance and numbers may vary according to site condition. No extra payment will be made for the variations) (working plan-20 nos, 3km per sheet) (L-section -10 nos, 5km per sheet) Mode of payment: 60% of quoted rate will be paid after submission for final approval duly attending corrections and balance 40% of payment will be made after approval of plans.	Kilometre	50.00	2750.00	137500.00
4	4	Preparation and submission of plans for stations yards, in scale 1:1000 as per IRPWM/Track Manual/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment@58<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge. - For Major stations (more than 5 lines including main line and loop lines in station yard)	Each	2.00	22900.00	45800.00

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5	5	Preparation and submission of plans for stations yards, in scale 1:1000 as per IRPWM/Track Manual/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment@58<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge. - For Crossing stations (5 lines or less including main line and loop lines in station yard).	Each	5.00	9170.00	45850.00
6	6	Preparation and submission of plans for Important Bridges/Major Bridges, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment: 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	5.00	14670.00	73350.00
7	7	Preparation and submission of plans for Minor Bridges, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	100.00	6140.00	614000.00
8	8	Preparation and submission of plans for ROBs/RUBs, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	30.00	14670.00	440100.00

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9	9	Preparation and submission of plans for LCs/Grade separators, in scale 1:100 as per IRPWM/IRBM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment: 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	20.00	3940.00	78800.00
10	10	Preparation and submission of plans of Genral Map of the country traversed by the project, in scale of 25Km to 1cm as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	5.00	6140.00	30700.00
11	11	Preparation and submission of Index Map, in scale of 2.5Km to 1cm as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	10.00	6140.00	61400.00
12	12	Preparation and submission of Index Plan, in scale 0.5 km to 1 cm horizontal and 10 m to 1 cm vertical as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	40.00	3117.00	124680.00



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13	13	Preparation and submission of Index Section, in scale 0.5 km to 1 cm horizontal and 10 m to 1 cm vertical as per IRPWM/IRE Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Kilometre	40.00	3117.00	124680.00
14	14	Preparation and submission of cross section sheets at 100 m interval in A3 size in suitable scale as per IRPWM/Track Manual/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment:@10<37@ of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Each	100.00	45.00	4500.00
15	15	Preparation and submission of plans for OHE installations (plans to be submitted for OHE layout, power supply, sectioning diagram, wiring plan etc) in scale 1:100 as per IRPWM/ACTM/Code in Auto CAD in specified size and scale etc complete with contractor's labour, equipment, engineers, computer, software, consumables etc and as directed by Engineer in charge. Mode of payment: 60% of quoted rate will be paid after submission of drawing for checking and balance 40% of payment will be made only after carrying out necessary correction as directed and approval of final drawing and pen drive to the satisfaction of the Engineer in charge.	Kilometre	50.00	2750.00	137500.00

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16	16	Hydrological investigation for Important and Major Bridges using DEM : Conducting hydrological investigation including detailed calculation for important, major bridges using Digital Elevation Model (Geological information system) Tasks: i. Marking of all bridge locations on index plan of the alignment. ii. Delineating the catchment boundary of bridges from DEM and calculating physiographic parameters of the catchment - area, longest stream, slope iii Calculating design discharge (Q50) for all bridges based on RBF 16 / RBF 22 reports for small catchments and synthetic unit hydrograph from flood estimation report for large catchments (greater than 25 sq km). iv. Consultant will verify if there are any dams / water storage structures in the catchment and obtain regulated flow discharge from concerned authority for calculation of design discharge. v. Checking of adequacy of proposed linear waterway, vertical clearance, free board and depth of foundation. Soil investigation report for scour depth calculations will be provided to the consultant. Deliverables i. 3 copies of report with bridge wise hydrological calculations should be submitted. Separate booklets should be prepared for Important and Major bridges. ii. For each bridge, calculations and catchment plan with longest stream marked on Survey of India toposheet should be submitted. For bridges with large catchments, unit hydrograph and calculation of equivalent slope should also be submitted. iii. Catchment plan should be marked on 50 year 24 hr rainfall map to verify correctness of rainfall data used and the same and the same submitted in the booklet. iv. The following are required to be submitted as softcopy - calculation spreadsheets, Google Earth KML files of catchment plans, longest stream, alignment and bridge location.	Each	5.00	4195.00	20975.00
17	17	Finding out utility services including infringement along the proposed alignment such as electrical line/poles, OHE structures & installments, S&T structures & installations, telephone lines, high tension lines along with their voltage & sag height, OFC cables, existing RE cables, Quad cables, retaining walls, trees, pipeline for water, petro, gas etc complete including preparation of kilometer wise plan showing all utility services which need to be shifted before construction etc. complete Note : The mapping of infringement in yards like cables, location boxes, OHE portals etc will also be required to be done on ESP.	Kilometre	50.00	3335.00	166750.00

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20	20	Preparation and supply of interlocking plan on the basis of approved engineering plan. The contractor shall initially supply two sets of IP duly signed by the designer and submit for approval of Railway. Railway will return one set of SIP duly approved with alterations/correction if any. The contractor will submit final drawing soft copy in pen drive/Hard Disk and four copies of IP to the Railway. (c) 76 to 100 Route.	Numbers	5.00	33000.00	165000.00
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25	25	1) Conducting Aerial Topographical Survey using DGPS based integrated Drone i.e., PPK/RTK based Drone to capture essential ground features and assets and delivering the topographical information within an accuracy of 5 cm. GCP establishment at every 2km paint marked on the permanent structure and 1 Hr. GPS observation of the same. 2) TBM point's establishment at every 500 m on paint Marked on permanent structures and RTK survey of the same using the 2 km points as the base. 3) Collection of High-Resolution Aerial Imagery of minimum 3 cm GD using survey grade DGPS integrated Drone i.e., PPK/RTK based Drone having on board dual GNSS system and calibrated camera of 20MP UAV Aerial Photo Acquisition shall be done to cover the ROW Suitable Overlapping: minimum 70% forward and 50% side overlap shall be maintained. Ensure Image Quality: Clear/sharp imagery with good light condition. Images must have XYZ coordinates and rotational information, sensor size, focal length as meta data This Information must also be made available in a text file. 4) Aero triangulation using the professional photogrammetry software which supports Stereo Capability to measure control points with highest precision and rigorous bundle block adjustment for reliable mathematical calculation and performing a least squares block adjustment. 5) 3D Topographical mapping - plan data Capture - All topographical information including natural & manmade features to be captured. All the topographical features including Rail, track centre line, Platform, signal, Electrical mast, FOB, ROB, RUB, Station Building, Other buildings, Utilities, land use, Roads, wall, Hydro features were to be captured. (Extensive Layer list in CAD) The output to be delivered in DWG format. (100 m ROW)	Kilometre	50.00	23414.00	1170700.00
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26	26	Drone Ortho photos generation as per Railway Guidelines (Letter no. 2015/Track -1/24 (1)/18/1/dated 09.10.2017 Deliverables: 1) Raw images (.jpg format) (2cm GSD). 2) Final Scaled and Geo-positioned Ortho-photo tiles in jpg & Sid compressed format of 2cm resolution and re sampled at 5cm GSD. 3) Final Scaled and Geo positioned Ortho-photo tiles in jpg & Sid format for each SKM. 4) Map file compatible to CAD/GIS in shp format duly linked with attributes of assets. 5) Quality control report for Positional Accuracy Assessment Coordinates to be picked for at least 5 well defined assets in 1km length from Google and same to be measured on the Ortho-photo Coordinates comparison. The difference between these values should be greater than equal to 3 m. 6) The Alignment plan & Depot land boundary are to be shown on die Google earth. (Alignment file in .dwg format and coordinates will be provided by client). 7) DSM/DTM models for the collected survey data to be prepared and submitted to the client in appropriate file format. (UNIT: Per 100 sqm instead of Per Unit.)	100 Sqm	5000000.00	31.37	1568500.00
27	27	Designing and developing Detailed structural and working Drawings for ROB/RUB/Bridges super structure based on Railway's approved GAD , duly collecting necessary data from Railways, duly designing members, considering SV loading as per IRC-6 and submission of check plot duly getting proof-checked b y I I T , submitting for Railway's verification and approval, making corrections duly incorporating suggestions in drawings/designs, further submission of original i n hard copy in paper and soft c o p y for Railways approval with contractor's technical expertise and instruments, labour, consumables, etc. complete as directed by Engineer in-charge.	Each	7.00	250000.00	1750000.00
28	28	Conducting Rail Structure Interaction (RSI) Analysis using MIDAS-CIVIL software and submitting reports from agencies undertaking RSI, including submission of softcopies of report of the same with Contractor's consumables, gadgets, men, materials etc as approved by Engineer-in- Charge.	Each	5.00	29500.00	147500.00
					<b>Total</b>	<b>10682875.00</b>
<b>Schedule</b>	Schedule G-Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.					
<b>Item- 7</b>	For design of sub-structure - Angamaly-Sabari New line.					
<b>S No.</b>	<b>Item No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>

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		Designing and developing Detailed structural and working Drawings for following items for ROB/RUB/Bridge based on Railway's approved GADs, duly collecting necessary data from Railways and R&B authorities, duly designing members and submission of check plot duly getting proof-checked by Railway approved institutes, submitting for Railway's verification and approval, making corrections duly incorporating suggestions in drawings/designs, further submission of original in transparent film paper and soft copy (CD) for Railways approval etc. with contractor's technical expertise and instruments, labour, consumables, repeatedly attending till final approval etc., complete as directed by Engineer in-charge.				
1	053011	Open / Pile / Well Foundation for piers/abutments	Set	131.00	108372.95	14196856.45
2	053012	RCC Bed Block	Set	131.00	40807.10	5345730.10
					<b>Total</b>	<b>19542586.55</b>
<b>Schedule</b>	Schedule H-Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.					
<b>Item- 8</b>	For design of sub-structure - Thuravur-Ambalapuzha Double line.					
<b>S No.</b>	<b>Item No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
		Designing and developing Detailed structural and working Drawings for following items for ROB/RUB/Bridge based on Railway's approved GADs, duly collecting necessary data from Railways and R&B authorities, duly designing members and submission of check plot duly getting proof-checked by Railway approved institutes, submitting for Railway's verification and approval, making corrections duly incorporating suggestions in drawings/designs, further submission of original in transparent film paper and soft copy (CD) for Railways approval etc. with contractor's technical expertise and instruments, labour, consumables, repeatedly attending till final approval etc., complete as directed by Engineer in-charge.				
1	053011	Open / Pile / Well Foundation for piers/abutments	Set	7.00	108372.95	758610.65
2	053012	RCC Bed Block	Set	7.00	40807.10	285649.70
					<b>Total</b>	<b>1044260.35</b>
<b>Schedule</b>	Schedule I-Provides for the items of works that are covered by the Southern Railway USSOR 2021 as corrected by and up to date applicable to TRIVANDRUM & PALAKKAD DIVISION.					
<b>Item- 9</b>	For design of sub-structure - TVC-NCJ 3rd line & New line/Doubling/Future projects.					
<b>S No.</b>	<b>Item No</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>



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		Designing and developing Detailed structural and working Drawings for following items for ROB/RUB/Bridge based on Railway's approved GADs, duly collecting necessary data from Railways and R&B authorities, duly designing members and submission of check plot duly getting proof-checked by Railway approved institutes, submitting for Railway's verification and approval, making corrections duly incorporating suggestions in drawings/designs, further submission of original in transparent film paper and soft copy (CD) for Railways approval etc. with contractor's technical expertise and instruments, labour, consumables, repeatedly attending till final approval etc., complete as directed by Engineer in-charge.				
1	053011	Open / Pile / Well Foundation for piers/abutments	Set	50.00	108372.95	5418647.50
2	053012	RCC Bed Block	Set	50.00	40807.10	2040355.00
					<b>Total</b>	<b>7459002.50</b>

#### 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

##### Standard Financial Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Financial Eligibility Criteria: The tenderer must have minimum average annual contractual turnover of V/N or "V" whichever is less; where V= Advertised value of the tender in crores of Rupees N= Number of years prescribed for completion of work for which bids have been invited. The average annual contractual turnover shall be calculated as an average of "total contractual payments" in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover. The tenderers shall submit requisite information as per Annexure-VIB along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.	No	No	Allowed (Mandatory)
1.1	Bid Capacity: The tender/technical bid will be evaluated based on bid capacity formula detailed as Annexure-VI	No	No	Allowed (Optional)

##### Standard Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
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: (a)Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or (b) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or (c)One similar work each costing not less than the amount equal to 60% of advertised value of the tender.(EXPERIENCE CERTIFICATE) The single similar work as defined in Tender Notice/Tender Document)	No	No	Allowed (Mandatory)

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1.1	(i)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: Separate completed works of minimum required values for each component can also be considered for fulfilment of technical eligibility criteria. (ii)In such cases, what constitutes a component in a composite work shall be clearly pre-defined with estimated tender cost of it, as part of the tender documents without any ambiguity. Any work or set of works shall be considered to be a separate component, only when cost of the component is more than 2 crore each.	No	No	Not Allowed
1.2	SUB SECTIONING ELIGIBILITY CRITERIA: [A]If, Sub-sectioning as indicated in the NIT has been done with a view to expedite the works and in view of the sub-sectioning, if eligible tenderer/firm becomes L-1 only in one tender, the tender will be awarded to the lowest eligible tenderer/firm. (OR) If the tenderer/firm becomes L-1 in more than one tender for the same nature of work invited for the same project in the same tender notice, then Evaluation of Tenderer/firm for his/its eligibility for award of all such tenders shall be done, duly considering the work experience of 35 percent of combined value of such tenders and Financial capability of 150 percent of combined value of such tenders, in which the tenderer/firm is L-1. [B] In case the tenderer is lowest in more than one tender under consideration, however, falls short of above sub-sectioning eligibility criteria, then the tenderer will be considered for awarding any of the work at the sole discretion of the Railways. The decision of the Railway will be final and binding on the tenderer	No	No	Not Allowed
1.3	Defination of Similar Work :- "Any project involving final location survey and preparation of DPR for Railway/Metro/High speed Rail/Regional Railway Project/ Highway/ Expressway/ Irrigation Projects"	No	No	Not Allowed

**Bidders shall confirm and certify on the behalf of the tenderer including its constituents as under:**

S.No.	Description
1	I/we the tenderer (s) am/are signing this document after carefully reading the contents.
2	I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3	I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website <a href="http://www.ireps.gov.in">www.ireps.gov.in</a> . I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
4	I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5	I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
6	I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
7	I/we certify that I/we the tenderer(s) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
8	I/we understand that if the contents of the certificate submitted by us are found to be forged/false at any time during process for evaluation of tenders, it shall lead to forfeiture of the Bid Security and may also lead to any other action provided in the contract including banning of business for a period of upto two year. Further, I/we and all my/our constituents understand that my/our offer shall be summarily rejected.
9	I/we also understand that if the contents of the certificate submitted by us are found to be false/forged at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of Bid Security/Security Deposit and Performance guarantee and may also lead to any other action provided in the contract including banning of business for a period of upto two year.

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10	I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We hereby certify that I/we fulfil all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed)
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**Partnership firm/Joint Venture (JV) / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc.**

S.No.	Description
1	<b>Partnership firm/Joint Venture (JV) / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc.</b> Please submit a certificate in the prescribed format (please download the format from the link given below). 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. ( <a href="#">Click here</a> to download the Format of Self Certification)

## 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.

### Check Lst

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	ANNEXURE-XVI	No	No	Not Allowed

### Commercial-Compliance

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Annexure IX Details of Bank Particulars.	Yes	Yes	Allowed (Mandatory)
2	Annexure XII Form -JV-1 Format for Power of Attorney for Authorised Signatory (if applicable in original or attested copy).	Yes	Yes	Allowed (Optional)
3	Annexure XIII Form -JV-2 Format for Power of Attorney to lead partner (if applicable in original or attested copy).	Yes	Yes	Allowed (Optional)
4	Annexure -XIV Form - JV-3 Format for Draft M.O.U. (if applicable).	Yes	Yes	Allowed (Optional)
5	Annexure XV Form - JV -4 Draft format for Agreement (in the required proforma in original if applicable).	Yes	Yes	Allowed (Optional)
6	Annexure-III Constitution of the Firm with required document copies i.e., Joint Venture / Partnership Deed(s), Incorporation of Company etc.,	Yes	Yes	Allowed (Optional)
7	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	Payment towards the Bid Security as indicated in the NIT header should be paid only through the E-Payment facility (i.e.) Net banking or Payment Gateway provided in the IREPS web portal.	No	No	Not Allowed
2	If the date of opening of tender is declared a holiday at a later date, the tenders will be opened on the next working day.	No	No	Not Allowed
3	Failure to furnish the Bid security exclusively for each work will result in offer becoming invalid.	No	No	Not Allowed
4	Only one representative/tenderer is permitted to attend the tender opening, irrespective of number of tender documents submitted on a particular day of opening.	No	No	Not Allowed
5	Tenderers/Representatives are requested to attend the tender opening in time and also to keep their cell phones switched off while attending.	No	No	Not Allowed

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6	Tenderer/representatives are not permitted to enter the premises after the prescribed time for opening of tenders (i.e. after 15.30 hrs). The tenderer who have participated in the tender can view the rates of all the tenderers after opening of tenders.	No	No	Not Allowed
7	Tenderers shall hold the offer open for acceptance for a minimum period of 60 days for single packet/90 days for two packet tenders from the date of opening of the tender	No	No	Not Allowed
8	All documents in support of fulfillment of eligibility criteria should be uploaded along with the tender. Tenders without 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. The tenderer shall have no claims in this regard.	No	No	Not Allowed
9	E-Tender Shall be rejected if it is not accompanied by Bid Security	No	No	Not Allowed
10	Unreleased EMD/Bid Security, if any, held with the Railway Administration, shall not be adjusted towards the Bid security to be remitted.	No	No	Not Allowed
11	If the Tenderer deliberately gives wrong information in his/their tender or creates/create circumstances for the acceptance of his/their tender, the Railway reserves the right to reject such tender at any stage. The entire Bid Security with Railway will be forfeited. In addition, may also lead to any other action provided in the contract including banning of business for a period of upto two year	No	No	Not Allowed
12	All terms and conditions in the tender documents are binding on the tenderers. Manual tenders sent by Post/FAX/Courier or in Person SHALL NOT BE ACCEPTED.	No	No	Not Allowed
13	Railway reserves the right to accept or reject any or all the tenders and to award the work in whole or in part without assigning the reason for any such action. The General Conditions of Contract governing the performance of the works covered by this tender are the Indian Railway Standard General Conditions of Contract as amended from time to time up to date. A soft of copy of the Indian Railway Standard General Conditions of Contract is uploaded in the annexed documents to the tender. Hard copy may be perused in the office of the Chief Administrative Officer/Construction/ Southern Railway/Ernakulam Jn-682016. In submitting his tender it would be deemed that the tenderer has kept himself fully informed of the provision of the IRS General Conditions of Contract including all corrections and Amendments issued up to date and claim that he is not aware of any amendment or correction slip to the IRS GCC shall not be entertained.	No	No	Not Allowed
14	The tenderers are advised to visit the site of work in their own interest and acquaint themselves with the site conditions and expected quantum of work. Tenderer should refer for Special Conditions General & Technical, which are attached to the tender document in Documents attached to the tender. These special conditions form part of the tender document and will supplement to the conditions of tender already submitted by the tenderer, IRSGCC-2014 along with updated correction slips, IRUSSR-2021. Where are provisions of these special conditions are at variance with IRSGCC and other documents mentioned above, these Special Conditions shall prevail.	No	No	Not Allowed

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15	Railway reserves the right to accept or reject any or all the tenders and to award the work in whole or in part without assigning the reason for any such action. The General Conditions of Contract governing the performance of the works covered by this tender are the Indian Railway Standard General Conditions of Contract as amended from time to time up to date. A soft of copy of the Indian Railway Standard General Conditions of Contract is uploaded in the annexed documents to the tender. Hard copy may be perused in the office of the Chief Administrative Officer /Construction/ Southern Railway/ Ernakulam Jn-682016. In submitting his tender it would be deemed that the tenderer has kept himself fully informed of the provision of the IRS General Conditions of Contract including all corrections and Amendments issued up to date and claim that he is not aware of any amendment or correction slip to the IRS GCC shall not be entertained.	No	No	Not Allowed
16	The tenderers are advised to visit the site of work in their own interest and acquaint themselves with the site conditions and expected quantum of work. Tenderer should refer for Special Conditions General & Technical, which are attached to the tender document in Documents attached to the tender. These special conditions form part of the tender document and will supplement to the conditions of tender already submitted by the tenderer, IRSGCC-2022 along with updated correction slips, IRUSSR-2021 Where are provisions of these special conditions are at variance with IRSGCC and other documents mentioned above, these Special Conditions shall prevail.	No	No	Not Allowed

**Special Conditions**

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	IN CASE OF ADVERTISED TENDER VALUE IS MORE THAN RS. 20 CRORES: Bid capacity is applicable, the tenderers should submit proforma attached in tender document. In case, the tenderer/s failed to upload BID CAPACITY PROFORMA and details along with offer, their/his offer shall be considered as incomplete and will be rejected summarily	No	No	Not Allowed
2	IN CASE OF ADVERTISED TENDER VALUE IS MORE THAN RS.50 CRORES, Electronic Reverse Auction (e-RA) method will be applicable as per guide lines issued by Railway Board vide Lr no. 2017/Trans/01/Policy/Pt-S Dt 28/3/2018.(Copy attached)	No	No	Not Allowed
3	MOBILISATION ADVANCE IS APPLICABLE FOR TENDERS OF VALUE MORE THAN RS. 50 CRORES AND ABOVE as detailed in tender document	No	No	Not Allowed

**Technical-Compliances**

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Annexure-II Experience Certificate duly attested as per the proforma or proforma filled up and signed by the tenderer based on the details furnished in the certificate.	No	Yes	Allowed (Optional)
2	Annexure IV Statement of works on hand.	Yes	Yes	Allowed (Mandatory)
3	Annexure V List of Engineers/Personnel	No	Yes	Allowed (Mandatory)
4	Annexure VI Details of Machinery (minimum as specified in relevant technical conditions).	Yes	Yes	Allowed (Mandatory)
5	Annexure VII Form for reporting of Employment of Railway Officers.	Yes	Yes	Allowed (Optional)
6	Annexure X Proforma for No Middlemen	Yes	Yes	Allowed (Mandatory)
7	Affidavit as per ANNEXURE-XVI to be uploaded	Yes	Yes	Allowed (Mandatory)

**Undertakings**

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1	I/ We have visited the works site and I / We am / are aware of the site conditions.	No	No	Not Allowed
2	I/We have read the conditions of tender attached hereto and agree to abide by such conditions. I/We have perused the contract documents (i.e. General Conditions of Contract, Special Conditions and Indian Railways Unified Standard Specifications (2021), Southern Railway Specifications for Materials & Works (1969) and all other specifications and the Unified Standard Schedule of Rates of the Southern Railway, 2021, CPWD DSR specification 2019 Vol. I & 2 and various schedules (Annexures), and all other documents attached to this tender) and that I/We am/are fully aware that I/We will have to perform the contract if my/our tender is accepted subject to general conditions of contract aforesaid and also subject to the Contract Documents complete aforesaid. I/We offer to do the work at the rates shown in the Annexure annexed and hereby bind myself/ourselves to complete the work in the stipulated period as mentioned in the contract documents attached from the date of issue of letter of acceptance.	No	No	Not Allowed
3	I/We agree that until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.	No	No	Not Allowed
4	Bid security in the form of Online payment/Bank Guarantee shall stand deposited in case my/our tender is accepted and forfeited without prejudice to any other right or remedies available to the Railway if: a) I/We do not execute the Contract Documents within 7 [seven days] of receipt of information from Railway that such documents are ready; b) I/We do not furnish the necessary bank guarantee for the Performance Guarantee required for the work within 60 days of receipt of the Letter of Acceptance for the work, and c) I/We do not commence the work within 15 (fifteen) days after receipt of Letter of Acceptance for the work duly furnishing a programme for executing the work to the Railway for their approval.	No	No	Not Allowed
5	I/We also hereby agree to abide by the General and Special Conditions of Contract and to carryout the works according to the specification of materials and works laid down by Southern Railway in the Tender Documents. I/We also undertake to carry out the work in accordance with the said Specifications and Conditions of Contract, and to find and provide such of the materials (other than those to be supplied by the Railway) for, and to do all such things which in the opinion of the Engineer may be necessary for, or incidental to the construction, completion and maintenance thereof and to complete the whole of the said works in the tender documents in all respects, and hand them over to you or your representatives within the period specified; and to maintain the same for the period and in the manner provided in the Conditions of Contract.	No	No	Not Allowed
6	I/We offer to do the above work at the specific rates/percentage rates quoted by me/us in the subject schedule and bind myself/ourselves to complete the work within the completion period specified from the date of issue of letter of acceptance of this tender as per the milestone statement furnished in the scope of work/Letter of Acceptance and as per the agreed programme of work. As the Tenderer/Contractor is expected to adhere to the progress of work as per mile stone statement mentioned in the scope of work and in case I/We fail in achieving the mile stone and programme, I/We understand and agree that the contract is liable to be terminated at my/our fault and cost thereof, apart from penalties for the delays imposed at the discretion of the Engineer-in-Charge.	No	No	Not Allowed

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7	I/We uploaded the following documents as required as per the Tender Documents:- a) Partnership Deed Joint Venture Agreement details of consortium of firm (Annexure-III) etc. b) Power of Attorney. c) List of works executed year wise during the last three years along with their values. d) Credentials issued by the Department for whom the work was executed by the tenderer/s during the last three years (in the appropriate format). e) The documentary evidence from the employer/client showing the contractual amount received OR attested copy of the audited Financial Statements such as Trading, Profit and Loss Account OR Balance Sheet along with the certificate from the Chartered Accountant for the contractual amount received etc. f) Experience Certificate issued by the Department/other as permitted in the Tender Document (as shown in Annexure II). g) List of works on hand, their values and stage of completion (Annexure IV). h) List of engineering personnel employed for the work (Annexure V). i) Details of Plant and Machinery (Annexure VI). j) Reporting of employment of retired Gazetted Officers (Annexure VII). k) Declaration for employing no middle man (Annexure X).l) Ballast Test certificate (If Applicable)	No	No	Not Allowed
8	DECLARATION: I/We have examined and have no reservations to the Tender documents, including Addenda/Corrigenda issued by the Railway;	No	No	Not Allowed
9	DECLARATION: I/We declare that offer to execute all the Works in conformity with the Tender Documents;	No	No	Not Allowed
10	DECLARATION: I/We commit to submit Security Deposit and Performance Guarantee in accordance with the tender Documents, if my/our tender is accepted;	No	No	Not Allowed
11	DECLARATION: I/We commit to deploy minimum key personnel and equipments consistent with the stipulation in the relevant special conditions of the Tender Document, if my/our tender is accepted;	No	No	Not Allowed
12	DECLARATION: I/We commit to submit a detailed programme in conformity with the milestones and completion period prescribed in the Tender Documents and mile stone statements for all major activities and get these approved from the engineer prior to commencing work on such activities, and also understand that the work shall be executed as per the approved programme and the milestone statements without any deviations if my/our tender is accepted;	No	No	Not Allowed
13	DECLARATION: I/We commit to establish Testing Laboratory at the site of work with minimum Testing equipments indicated in the relevant specifications, if my/our tender is accepted; and further declare that	No	No	Not Allowed
14	DECLARATION: I/We declare that I/We am/are not banned from doing business with Railways;	No	No	Not Allowed
15	DECLARATION: I/We declare that I/We do not have any partners who are individuals or partners of firms banned from doing business with Railways;	No	No	Not Allowed
16	DECLARATION: I/We declare that I/We are not sister concerns/allied partners who were individuals or firms or partners of firms banned from doing business with Railways	No	No	Not Allowed
17	DECLARATION: I/We declare that I/we further understand and agree that if I/We were found during consideration of the tender to be a firm/individual or sister/allied concern or any individual or firms or partner of firms banned by the Ministry of Railways from doing business with Railways and ban is still in force, Earnest money deposit remitted by me/us will be forfeited in full;	No	No	Not Allowed
18	DECLARATION: I/We declare that if I/We were found during the course of execution of work to be an individual or firm or partner or firms or sister/allied concern of any individuals or firms banned by the Ministry of Railway from doing business with Railways and the ban is still in force, my/our security deposit and Performance Guarantee will be forfeited in full;	No	No	Not Allowed



**CAO-CN-ERS-ENGINEERING/SOUTHERN RLY  
TENDER DOCUMENT**

**Tender No:** 15-CE-CN-ERS-2026-OT

**Closing Date/Time:** 27/07/2026 15:00

19	DECLARATION: I/We declare that if I/We are found to be individual or firm or partner of firm or sister/allied concern of any individuals or firms banned by the Ministry of railway from doing business with Railways during the consideration of tender or during the execution of work, I/We are liable to be banned from doing business for further periods to be specified by Railways;	No	No	Not Allowed
20	DECLARATION: I/We declare that for satisfying the eligibility conditions mentioned in the Tender Documents, I/We have uploaded copies of documents along with the tender in support of my/our claim of satisfying eligibility conditions. I/We understand that I/We have to produce the original documents if so demanded by the Railways. I/We understand that if any of the documents were found to be bogus at any stage, my/our earnest money deposit (before finalisation of tender) and/or security deposit and Performance Guarantee (after awarding work) will be forfeited in full and I/We are liable to be banned from doing business with Railways for any period to be specified by the Railways and also liable for legal proceedings against me/us.	No	No	Not Allowed
21	DECLARATION: I/We declare further that I/We have submitted full details of work on hand and progress thereon and I/We understand that if the information furnished by me/us were found to be false, my/our tender is liable to be rejected and Earnest money deposit in full is liable to be forfeited. If it is found to be false at any stage, I/We are liable to be banned from doing business with Railways for any period to be specified by Railways and also liable for legal proceedings against me/us.	No	No	Not Allowed
22	DECLARATION: Further I/We understand, agree and declare that you (Railway) are not bound to accept the lowest evaluated bid or any other bid that you may receive and I/We have no claim/demand whatsoever in this regard.	No	No	Not Allowed
23	DECLARATION: I hereby declare and commit that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other items of work related to the award and performance of this contract. I further declare and commit that no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the tender price will not include any such amount.	No	No	Not Allowed

**Custom**

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	It may please be noted that the supplier of goods and services for the said tender/agreement would be subject to GST Act and rules applicable from time to time and rate quoted in the tender is inclusive of GST.	Yes	No	Not Allowed

**6. Documents attached with tender**

S.No.	Document Name	Document Description
1	PARTABCWITHCS6102025.pdf	PART ABC
2	GCCUPTOacs10.pdf	GENERAL CONDITIONS OF CONTRACT
3	GCCACS11.pdf	GCC ACS 11
4	MODELBANKGUARANTEE.pdf	MODEL BANK GUARANTEE
5	RlyBdletter.pdf	RAILWAY BOARD LETTER
6	SCOPEOFWORK-SURVEY.pdf	SCOPE OF WORK
7	QCBSSplconditionsdocument150426.pdf	SPECIAL CONDITIONS OF CONTRACT
8	pre-bidmeetinglink_1.pdf	Pre bid meeting

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.



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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:** SOUMYA S

**Designation :** Dy.CE/CN/G/ERS