

PROJECT SCOPE AND MILESTONE

1. Scope of work:

- 1.1. This Tender is called for “ Provision of Two additional looplines with island goods platform and associated works at Obulapuram Railway stations along with associated Electrical General, Electrical Traction and Signal & Telecommunication works.
- 1.2. The scope under this tender includes Provision of two additional loopline with island goods platform, Earthwork & Construction of bridges, Extension Station building, High level passenger platform, Platform shelter, Compound wall, Approach Road, General electrical arrangements, Signal& Telecom arrangements, Railway Electrification (TRD) works and all associated works etc as per detailed schedule, specifications and conditions.

2. Project Mile stone:

- 2.1. The Scheduled completion date shall be 18 Months from the Letter of Acceptance Date. Project Milestone to be read as D + Months (number of Months from Letter of acceptance Date (D) as shown in the table below.

SN	Project Milestones	Completion Period (in Days)
1	Design	
1.1	Submission of Site Plan (SP), GAD, LOP & SIP.	D + 1
1.2	Approval of Site Plan (SP), GAD, LOP & SIP.	D + 1.5
1.3	Submission of structural drawings & supplementary drawings (Drainage, water supply, plumbing, Cable layout, S&T, LOP).	D + 1.5
1.4	Approval of structural drawings.	D + 2
2	Earth work	
2.1	Completion of Earth work	D+6
3	Construction of Minor Bridges	
3.1	Casting work	D+4
3.2	Completion of Minor Bridge work	D+9
4	Construction of Major Bridges	
4.1	Foundation work	D+5
4.2	Casting work	D+7
4.3	Completion of Major Bridge work	D+12
5	Track work	
5.1	Collection of Track materials & Supply of Ballast	D+9
5.2	Track formation work	D+12
5.3	Track laying	D+15
6	Extension of Station Building, Platform work, S& Goomty, Approach Road other works	

6.1	Foundation at plinth level	D+4
6.2	Foundation above plinth to roof work	D+6
6.3	Finishing work	D+8
6.4	Approach Road	D+10
6.5	High level plat form work	D+12
6.6	Plat form shelter work	D+15
7	Goods loading platform	
7.1	Completion of Goods loading platform	D+15
8	TRD Work	
8.1	Supply of TRD Materials	D+6
8.2	OHE Foundation work	D+10
8.3	OHE Mast Erection	D+12
8.4	Bracket assembly, laying of OHE, Bonds & other work	D+15
8.5	Testing and commissioning of OHE Works	D+17
9	S&T Works	
9.1	Supply of Signal & Telecom Materials	D+6
9.2	Completion of Signalling work for phase-I	D+8
9.3	Completion of Telecom work for phase-I	D+6
9.4	Testing and commissioning of S&T work for phase-I.	D+9
9.5	Completion of Signalling work for phase-II	D+15
9.6	Completion of Telecom work for phase-II	D+16
9.3	Testing and commissioning of S&T Work for phase-II	D+17
10	Electrical General Work	
10.1	Supply of Electrical General Materials.	D+6
10.2	Erection & Completion of Electrical work	D+12
10.3	Testing and commissioning of Electrical work	D+15
11	Compound wall, Drainage system & water supply system	
	Completion of Compound wall	D+12
	Completion of drainage works	D+15
	Completion and Handing over of work	D+18

- 2.2. The contractor shall submit detailed programme of work inclusive of Detailed Breakup of Activities, Material Supply Schedule, Mobilisation of Plant & Machinery, Interface Activities, Testing and Commissioning, Mobilisation of Manpower etc; in MS Project/ Primavera within 15 days from date of issue of LOA for the approval of the Engineer. The programme shall be unconditional and in compliance to the conditions of contract.
- 2.3. The contractor is liable to pay towards penalty upto Rs. 50,000/- for non-submission of the programme.
- 2.4. The Engineer may direct the contractor to expedite particular activity/ activities and to revise the programme of work. The contractor shall follow such direction and act immediately on such direction and shall submit the revised programme of work without any additional claim and cost.

- 2.5. In the event of the contractor not adhering to the agreed programme of work and / or not achieving the milestones etc., specified, even if no physical or actual damages have occurred to the Railways and even if the currency of the work is not affected, the Railway reserves the rights of, with a view to improve, expedite and the make the contractor realize the effects of delays, levying fine or hold any value as deemed fit on the contractor. The amount will be solely decided by the Engineer at his discretion and will be based on his assessment of disturbances, difficulties or losses caused by the delay etc., including that of the reputation of the Railway. The contractor shall have no claims what-so-ever in this regard. Subsequent to the imposition of the fine, if contractor makes good, the progress and achieves the milestones to the satisfaction of the Railways, part or full amount of the fine imposed may be waived and the amount so worked out will be released to the contractor at the sole discretion of the Engineer duly recording necessary certification to the effect that no damages have occurred. However, in case of actual or anticipated damages occurred or occurring to the Railways, the recovery of agreed / liquidated damages will also be imposed and recovered from contractors due as per provisions in GCC in addition to the above fine.
- 3. Project Implementation and Progress Monitoring:** The contractor's project manager/ project engineer at the site shall report daily progress of work. The contractor shall submit weekly & monthly progress report to Chief Project Manager, Gatishakti, South Western Railway Hubballi. The progress review meeting shall also be held periodically.

Site Office and Deployment of Qualified Engineers/ Personnel

1. Setup of Site Office (s):

Location: Obulapuram Railway station.

- a) The contractor shall setup the site office (s) either of a modified container/ or by construction of temporary structure at his cost. No payment shall be made for the setting up site office.
- b) The site office shall have required facilities eg; furniture, computer, data connectivity, toilet etc at the cost of contractor.
- c) Monitoring Camera: CCTV with Recording shall be installed at construction site covering each activity as directed by Engineer in charge for monitoring and access to be given to the Engineer In charge, Railway representative /PMS/PSSA etc as directed by Engineer in charge.

2. Deployment of Qualified and Experienced Engineers and Personnel:

SN	Designation	Qualification	QTY
1	Contractor's Project Engineer	Graduate in civil Engineering with experience in project management	1
2	Site Engineer Civil	Diploma in Engineering with Experience in Civil projects	1
2	Site Engineer Electrical	Diploma in Engineering with Experience in Electrical projects.	1
3	Site Engineer Signalling & Telecom	Diploma in Engineering with Experience in Signalling & Telecom projects.	1

- a) The contractor shall deploy qualified and experienced engineers at the site(s) for the supervision, quality, safety etc as mentioned in above table.
- b) The contractor shall submit resume of qualified and experienced engineers/ Personnel within 15 days from the date of issue of LOA for the approval of CPM/GSU/UBL. These engineers/ personnel shall be available at site for the supervision, quality, safety etc continuously and to take instructions from Engineer/ Engineer's Representative. Any replacement shall be with the approval of Engineer only.
- c) The contractor shall provide the mobile communication facilities and the mobile number shall be provided to Railway.
- d) In case, the contractor fails to employ the engineer/ personnel as aforesaid, he shall be liable to pay penalty of Rs 40,000/- per month for Graduate Engineer and Rs 25,000/- per month for Diploma Engineer

- e) The contractor shall provide photo identity card as per Railway format to all of the contractor's staff. Photo identity card shall only be signed by the either contractor himself or contractor's authorized representative and shall have the contractor's stamp and shall be counter signed by the engineer's representative. The photo identity card signed by any other person shall not be valid. The photo identity card shall be returned to Railway after completion of work. The contractor's workers and staff shall wear the photo identity card in Wearable badge.

3. Registers and Documents to be maintained at Site:

- a) The contractor shall maintain all the registers, documents, test reports, drawings, safety assurance register etc at site office as directed by engineer's representative/ engineer.
- b) **Site order book:** A Site Order Book shall be maintained at the site of work by the contractor under joint signature of Engineer's Representative.
- c) The contractor shall maintain the daily progress of work, daily deployment of manpower, consumption of material, details of inspections etc in the respective register. Engineer/ Engineer's Representative, as deemed fit, may record the instructions in the Site Order Book which contractor shall comply promptly.

Design Documents, Drawing & Route Plans

1. The contractor shall be provided the plans, drawings, specification etc. available at the office of Chief Project Manager, Gatishakti, South Western Railway, Hubballi. Further, The Contractor shall prepare and submit detailed design document, detailed drawings, detailed plans, working arrangements, etc. listed below as applicable to project but not limited to for the approval of Engineer within one month from date of issue of LOA or as per Mile Stone Schedule.

1.1. Civil Works

- i. General Arrangement Drawings.
- ii. Site plan.
- iii. Structural Drawing
- iv. Drainage Drawing.
- v. Water Supply Plan and Drawing.
- vi. Land scape plan
- vii. Road network.
- viii. Circulating plan.
- ix. MEP Plan (Mechanical Electrical & Plumbing)

1.2. Track work

- i. Engineering Scale Plan (ESP).
- ii. Longitudinal plan (L-section).

1.3. Electrical Traction

- i. Layout Plan (LOP).
- ii. Structure Erection Plan (SED).
- iii. Cross Sectional plan (CSD).
- iv. Section Drawing
- v. Wiring Drawings
- vi. Schematic Diagram

1.4. Electrical General

- vii. Electrical Wiring.

- viii. Cable layout Plan.
- ix. Control panel Drawings.
- x. Schematic Diagram

1.5. Signaling and Telecommunication

- i. Signal & interlocking plan (SIP)
 - ii. TOC
 - iii. Cable Route plan.
 - iv. Cable core plan
 - v. Track bonding plan
 - vi. Signage plan.
 - vii. Rule diagram.
 - viii. OEM manuals
 - ix. Circuit alteration diagram
 - x. Logic interface diagram
 - xi. VDU Layout
 - xii. Relay Room floor plan
2. After completion of work, The Contractor shall prepare and submit all the completion drawings as built/ as made, detailed design document, working arrangements, etc. as mentioned below but not limited to;
 - i. All the as built Drawings, Plans, documents as mentioned above in para-1.0
 - ii. OEM's Manuals, Operation & Maintenance Manual
 - iii. Spare Parts Catalogue, Special Maintenance Tools Manual
 - iv. Inspection and Test Reports
 - v. Any other document.
 3. The documents shall be submitted in 05 copies of hard copy as well soft copy. The tracing of Drawings and Plans shall also be submitted. All the plans and drawings shall be neatly prepared using Computer Aided Design System & plotter etc.
 4. The contractor shall engage qualified and experienced Design consultant for Civil, Electrical, TRD & Signal works with the approval of CPM/GSU.
 5. The contractor shall deploy a qualified Design Engineer for coordination of drawing & design. The drawing engineer shall be deputed at GSU office during design phase of project.