PART 1 PROJECT INFORMATION





PART 1

PROJECT INFORMATION

1.1 Bengaluru Water Supply and Sewerage Project (Phase 3) - Cauvery Water Supply Scheme, Stage V

Under Bengaluru Water Supply and Sewerage Project (Phase 3) 775 MLD of water to the city of Bengaluru will be augmented. This includes water treatment, pumping facilities and transmission to terminal reservoirs in the city.

The present Contract CP-10 consists of supplying, fabrication and laying of City Trunk Main along Westernn Route from Vajarahalli junction to service reservoirs in the Western side.

The clear water from Tataguni pumping station is conveyed to different city GLRs located at east and west sides of Bangalore city. The clear water from Tataguni pump house shall be pumped to eight (9) no. of GLRs in the west side and four (4) no. of GLRs in the east side. The GLRs in the west side are BSK, SMV 6th stage (Kodigehalli), SMV 8th stage (Herohalli), Hegganahalli, Lingaderanahalli, Singapura, GKVK, Vasudevapura and Chokkanahalli. The clear water from Tataguni is pumped to east side terminal GLR at Gottigere and from there water is conveyed to Doddakanahalli, Kadugodi, and Hudi GLRs by gravity.

1.2 Location and Description of the Works

1.2.1 Location of the Works

Two branches of city trunk mains are proposed from Vajarahalli to terminal city reservoirs. The western branch starts at Vajarahalli before Gublala and finally terminates at Chokkanahalli and Vasudevapura GLR. The eastern branch starts at Vajarahalli and finally terminates at Hudi and Kadugodi GLR.

The plan of the trunk mains are enclosed in Volume IV of this Bidding documents.

1.2.2 Description of the Works

The scope of work includes Procurement, fabrication, laying, testing & commissioning of Clear Water Trunk Mains and specials on west side within the city. The scope also covers the associated civil works including the construction of pedestals, saddle supports, pipe encashment, anchor blocks and valve chambers, steel bridges, railway and highway crossings etc. for the pipeline.

The new pipeline will be laid through urban areas wherein frequent bends, conflict with other utilities and right of way are frequently encountered. A right of way to lay the pipeline shall be obtained in places where the service road or land is not readily available.

The major length of pipeline is proposed to be laid underground. The exposed portion is to be laid above ground supported on saddles/bridges. Some short lengths of pipeline laid underground needs concrete encasement, while crossing the existing roads as well as at places of higher soil overburden. Pipeline crossing major roads, national highways and railway crossings shall be laid using trenchless technology.

The works under this contract shall include construction of the following works:

- Excavation of pipeline trench, providing sand bedding, Backfilling of trenches after testing and commissioning.
- Supply, laying, jointing, testing and commissioning of MS trunk mains of diameter from 400 to 2100 mm of total length 65.38 km. The pipe shall be of spirally welded/Plate welded pipes, conforming to IS 10748 Grade 3 for spirally welded/IS 2062 Grade B for Plate welded.
- External coating (guniting / epoxy painting) and internal epoxy lining.
- · Supply, Fabrication, laying and jointing of pipe specials.
- · Procurement and erection of valves.
- Procurement and fixing of flow meters
- Construction of pipe saddle supports, thrust blocks, and anchor blocks.
- Construction of Pipe Bridge across river / stream crossing.
- Crossing Railway line and major roads using trenchless technology.
- · Construction of valve chambers.
- Providing encashment at major road crossings
- Testing and commissioning of clear water trunk mains.
- Interconnection with existing clear water trunk main and other water supply system.
- Reinstatement of roads and maintenance/protection of existing utility services.

13 Funding Agency

Funds for the contract are being provided by the Japan International Cooperation Agency (JICA), Government of Karnataka and BWSSB.

Project Information

Contract No CP - 10

Page 1-2

1.4 **General Information**

The following site conditions shall generally apply:

The following site conditions shall generally apply:

Maximum Temperature

36° C

Minimum Temperature

11° C

Maximum Relative Humidity

75%

Minimum Relative Humidity

28%

Altitude above Mean Sea Level : The average ground levels at the following locations are,

Vajarahalli

891 m

BDA SMV 6th Block GLR

885 m

BDA BSK SMV 6th Stage GLR 885 m

SMV 8th Stage GLR

900 m

Lingaderanahali GLR

920 m

Singapura GLR

921.90 m

GKVK GLR

935 m

Vsaudevpura GLR

930 m

Chokkanahalli GLR

920.50 m

Average Annual Rainfall

900 mm

Seismic Zone

Zone II

Nearest Airport

Kempegowda International Airport

Nearest Railway station

K R Puram

1.5 **Access for Contractors**

The Contractor shall allow reasonable access to all other contractors engaged on the Site or on areas adjoining the Site to carry out their work.

In the event of a dispute over access or priority between contractors, the Engineer shall be informed in writing. The Engineer shall inform all parties concerned in writing of his decision.

Where any part of the Works is associated with or in physical contact with plant supplied under a separate contract, the Contractor shall satisfy himself that the work carried out by the other contractor is consistent with the correct functioning of the Works. In the event of the Contractor considering any work being carried out or any work already completed to be detrimental to the ultimate functioning of the Works, he shall report the matter at once to the Engineer.

Project Information

If the work of the Contractor is delayed because of any acts or omissions of any other contractor, the Contractor shall have no claim against the Employer on that account other than for an extension of time.

Details of other contracts on the same Site or adjoining Site are as follows:

Contract No. CP-08:

Transmission facilities from Harohalli to Vajarahalli (Supplying, Fabrication and laying of Clear Water Transmission Main from Harohalli

to Vajarahalli)

Contract No. CP-09:

City Trunk Main along Eastern Route (Transmission pipeline from

Vajarahalli junction to service reservoirs along Eastern route)

Contract No. CP-11:

Ground Level Reservoirs along Western Route (4 no. of GLRs one each at

SMV 8th block, Singapura, Vasudevpura and Chokkanahalli)

1.6 Project Intermittent Milestone

Milestone	Physical works to be completed	Period from the date of issue of Notice to proceed with the work
Milestone 1	a) Providing and laying pipeline: 10 km.	Six (6) Months form the date of Notice
Mile stone 2	(a) Providing and Laying MS pipeline (Cumulative): 25 km.	Fifteen (15) Months form the date of Notice
	(b) Construction of Valve Chambers/other Structural work: 30% of BOQ.	
Mile Stone 3	(a) Providing and Laying MS pipeline (Cumulative): 40 km	Twenty (20) Months from the date of Notice
	(b) Construction of Valve Chambers/other structural work (Cumulative): 50% of BOQ.	
	(c) Construction of Steel Bridge work: 50% of BOQ.	
Mile Stone 4	100% completion and commissioning of all the works	Thirty (30) Months from the date of Notice

End of Part 1

Project Information

S.2.T.I.E.,
Balanagar,
Hyden Jacus J. J.