## JUSTIFICATION OF PROPOSAL FOR ADDITIONAL SOURCE

The CWSS to 893 habitations in Nagapattinam District is sourcing Nagapattinam Municipality, Velankanni RTP, Kilvelur RTP, and 890 rural habitations in Nagapattinam, Thirumarugal, Kilvelur, Keelaiyur and Thalainayar unions. The present requirement is 22.50 MLD.

The Head works of the CWSS is located at river Coleroon in Ammaiyappan and Vandaiyariruppu village in Thanjavur District. The Head works consists of two number of Collection well of 6m dia each and a collection sump of 20LL capacity. The water from the collection sump at Ammaiyappan is pumped and conveyed through 1000mm PSC pipes to Booster sump located at Thirumarugal and take pumped through the separate pumping mains to the beneficial area spread in 5 blocks. Total population benefitted is 488261.

The Ground water table at the Head work site is being depleted gradually due to failure of Mettur river irrigation system and Monsoon. Huge daily rate of pumping is diminished, and it may come down further in the ensuing acute summer months to a level of 15.00MLD.

In order to mitigate the anticipated drought condition, it is highly essential to establish an additional source for the CWSS. During the Collector's and Superintendent of Police conference conducted by Honorable Chief Minister of Tamil Nadu on 07.03.2018, the Honorable Chief Minister, Tamil Nadu announced as announcement No.5 stating that Investigation to be taken up for creating additional source with pump room to CWSS to 893 Habitations in Nagapattinam District.

The present actual designed quantity is 22.50 MLD, where as the ultimate quantity for the scheme is 37.47 MLD. Hence, the shortage of around 14.97 MLD was decided to be taken as the deficit requirement for which the additional source has to be formulated, as per the RSSFC meeting held at Head Office, Chennai, on 17.6.2019. In order to fulfill the designed demand and to cater the growing future demand, it is found imperative to augment the source for the CWSS immediately.

The initial requirement of water to fulfil the deficit of the scheme had been 7.5 MLD as per the request of the Executive Engineer, TWAD, Maintenance Division, Nagapattinam. Therefore, initially investigation works were carried out in River Kollidam and the Collector Well point had been fixed near Kadambankudi village. During the 56th RSSFC held at TWAD Board Head Office, Chennai, the deficit for the scheme during summer months was recommended to be taken as the new requirement of the scheme in the presence of the Senior Hydro-Geologist, TWAD Board, Chennai. The 2nd Collector Well point at Ayyanallur had been marked based on the Trial bore works alone. As such, it is recommended to carry out the confirmatory works during execution for the Collector well II at Ayyanallur and foot bridge for both the Collector Well sites.

Due to sufficient availability of sand depth at River Coleroon, two nos. of new Collector well cum pump house will be constructed in river Kollidam at a distance of each 500 m from the Kollidam river bund in RS No:2, Magarajapuram Village in Thiruvidaimaruthur Union. The proposed foot Bridge No.1 from Collector well to the flood bund is crossing the forest land of 135m of length & 3m width and the foot bridge No.II is crossing the Forest land of 175m length & 3m width at Ayyanallur in Magarajapuram village in Magarajapuram panchayat in Thiruvidaimaruthur union.

Necessary concurrence obtained from The District Collector, Thanjavur for the proposed forest area does not involve any Forest Tribes Settlement and No alternate non forest land (ie, Revenue Land) is available for construction of Collector well cum foot bridge.

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