## SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF STREET LIGHTING AT SG LANGAT DAM

## **SCOPE OF WORKS**

## A. STREET LIGHTING

- 1. The Contractor shall carry out full inspection of the existing street lighting, bridge lighting and floodlight lighting.
- 2. The Contractor shall submit HIRARC and Method of Statement on dismantling of existing lighting for Engineer's approval.
- 3. The Contractor shall liaise with local authoriities such as CGSO, LUAS, Jabatan Perhutanan etc and obtain their approval before start work.
- 4. The contractor shall submit material catalogue and sample for Engineer's approval.
- 5. The Contractor shall liaise with operation & maintenance team and obtain approval for permit to work before start work.
- 6. The Contractor shall provide the coordination discussion, drawings, etc for all services
- 7. The Contractor shall submit HIRARC and Method of Statement for installation of new street lighting, underground cable, feeder pillar, etc.
- 8. The Contractor shall provide temporary support during dismantling and installation.
- 9. The Contractor shall protect the existing structure or services from damage during dismantling and installation works.
- 10. The Contractor shall deliver the dismantling items to the approved storage by C.A.
- 11. The Contractor shall made replacement and upgrading of existing 43 nos of street lighting at dam perimeter and new 11 nos of street lighting from the main gate to Gauge House. Also, to provide new LED lighting and cables (new 2m high (flange type), LED lantern & cables) at Draw-off Tower Bridge.
- 12. The Contractor shall made replacement and upgrading of the existing 250W HPSV floodlight to LED 200W floodlight and 10m high mid hinged pole including laying new cables and On/Off switch.
- 13. The Contractor shall dismantling of existing 3 nos of existing street lighting poles (2 nos at Gauge House & 1 no at Guard House Sg Langat Dam)
- 14. The Contractor shall provide street lighting at the Draw-off Tower bridge area with 2m high HDG standard pole with 0.5m short arm and LED 50W lantern. In total, there will be 14 nos of street poles at the bridge, 7 nos will be connected to timer & by-pass switch and the balanced seven (7) nos will be by manually switch. The switch shall be weatherproof type and located at the gate of the bridge entrance
- 15. The Contractor shall provide one (1) no of 200W LED floodlight mounted at the Draw-off Tower bridge and manually switch to spot the water level chart.
- 16. The Contractor shall provide street lighting along the road from the main gate at Sg Langat Dam to office area with 150W LED lantern c/w 8m high mid hinged pole flange type.
- 17. The Contractor shall provide street lighting along the road to Gauge House with 50W LED lantern mounted on 2m high short arm HDG standard pole flange type.

- 18. The Contractor shall replace the 3 nos of existing flood light with 10m high mid hinged pole and 200W LED flood light and manually switch. The switch shall be weatherproof type to be located at MSB room.
- 19. The Contractor to check on the existing pole footing conditions and make a report.
- 20. The Contractor shall provide lux report simulation based on the proposed lantern by them.
- 21. The Contractor shall perform the testing and commissioning.
- 22. The Contractor shall prepare Operation & Manual and As-built drawing and being endorse by qualified / competent Engineer (PEPC)
- 23. The Contractor shall perform routine inspection for every six (6) months and replace the defect item during the defect liability period (24 Months).

## **B. INSTALLATION OF NEW FEEDER PILLAR & DB**

- 24. The Contractor shall carry out full inspection of existing MSB
- 25. The contractor shall submit material catalogue and sample for Engineer's approval.
- 26. Contractor shall submit HIRARC for installation of new Feeder Pillar & Distribution boards.
- 27. The Contractor shall supply & install of new Feeder Pillar and including tapping point.
- 28. The Contractor shall supply & install of new DBs.
- 29. The Contractor shall protect existing boards from damage during DBs dismantle and installation.
- 30. The Contractor shall upgrading existing main switchboard to provide power supply for new feeder pillar (FP/1) and new DB/SL.
- 31. The Contractor shall upgrading of the existing MSB i.e Installing 1 no of 63A MCCB for the new feeder pillar.
- 32. The Contractor shall supply and install new feeder Pillar from 63A three phase for feeder pillar (FP/1) and 40A 3 phase distribution board (DB/SL)
- 33. The Contractor shall provide surge protection device (SPD) at the feeder pillar FP/1, DB/SL and service box at every pole.
- 34. The Contractor shall perform the testing and commissioning.
- 35. The Contractor shall prepare Operation & Manual and As-built drawing and being endorse by qualified / competent Engineer.
- 36. The Contractor shall perform routine inspection for every six (6) months and replace the defect item during the defect liability period (24 months).