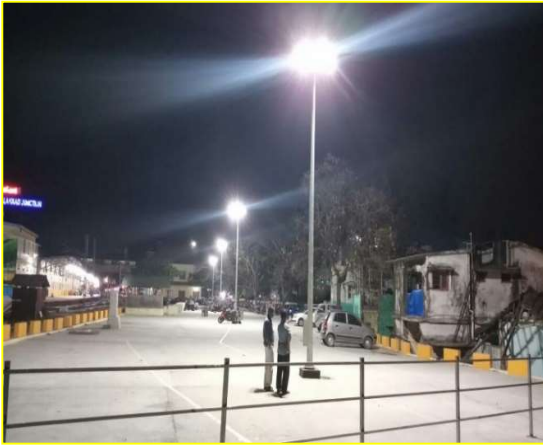


## IMPROVEMENTS AND INNOVATIONS

### ■ PROVISION OF AIRPORT STANDARD LIGHTING:

Provision of Airport standard lighting carried out in 9 stations (Mangalore Junction, Mangalore Central, Kasaragod, Thalassery, Kanuur, Vadakara, Kozhikkode, Shoranur & Palakkad).



**Palakkad station**



**Kannur Station**



Shoranur Station



Thalassery Station

• **PASSENGER AMENITIES PROVIDED**

▪ **Lifts & Escalators already commissioned**

LIFTS						ESCALATORS				
SN	Stn.	LOCATION	QTY	Date of commissioning	Under Warranty/ AMC	Stn.	LOCAT ION	QTY	Date of commissi oning	Under Warranty/ AMC
1	PGT	PF1	1	13.12.2019	AMC	PGT	PF 1	1	07.9.20	AMC
		PF 2&3	1	16.10.2015	AMC			1	12.02.16	AMC
		PF 4&5	1	16.10.2015	AMC					
		PF1	1	28.02.2023	Warranty					
		PF 2&3	1	28.02.2023	Warranty					
		PF 4&5	1	28.02.2023	Warranty					
2	SRR	PF 1	1	25.05.2019	AMC					
		PF 4&5	1	25.05.2019	AMC					
3	CLT	PF 1	1	13.10.2013	AMC	CLT	PF 1	2	13.10.13	AMC
		PF 2&3	1	13.10.2013	AMC	CLT	PF 4	2	28.03.22	Warranty
		PF 4	1	13.10.2013	AMC					
4	BDJ	PF 1	1	13.01.2018	AMC					
		PF 2&3	1	13.01.2018	AMC	BDJ	PF 2&3	1	21.06.19	AMC
5	CAN	PF 2&3	1	19.08.2017	AMC	CAN	PF 1	2	26.12.16	AMC
		2nd Entry	1	19.08.2017	AMC	CAN	2 <sup>nd</sup> Entry	1	28.03.22	Warranty
		PF 1	1	15.07.2023	Warranty					
6	TLY	PF 1	1	02.09.2020	AMC	TLY	PF 1	1	07.09.20	AMC
		PF 2	1	02.09.2020	AMC					
7	KZE	PF 1	1	24.01.2020	AMC					
		PF 2&3	1	24.01.2020	AMC					
8	KGQ	PF 1	1	07.01.2020	AMC					
		PF 2&3	1	07.01.2020	AMC					
9	MAJN	PF 1	1	24.01.2020	AMC					
		PF 2&3	1	24.01.2020	AMC					
10	MAQ	PF 1	1	07.11.2015	AMC	MAQ	PF 1	1	08.07.16	AMC
		PF 2&3	1	07.11.2015	AMC		PF 2&3	1	08.07.16	AMC
11	OTP	PF1	1	26.02.2022	Warranty					
		PF-2	1	26.02.2022	Warranty					
12	KTU	PF1	1	14.12.2023	Warranty					
		PF-2	1	14.12.2023	Warranty					
		<b>Total</b>	<b>30</b>				<b>Total</b>	<b>13</b>		

### Lifts Commissioned at KTU Railway station on 14.12.2023



### ON GOING PASSENGER AMENITY WORKS

#### ➤ LIFTS

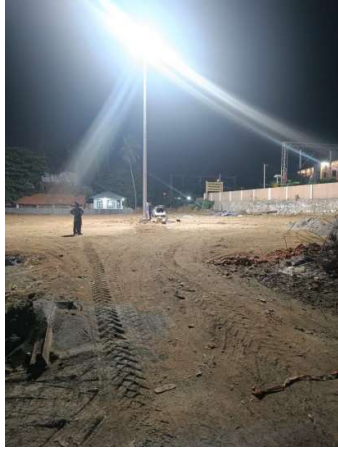
Station	Quantity Nos.	Status	
		Engineering Portion	Electrical portion
QLD	2	Lift pit construction started at PF 2	LOA issued, GAD approved and waiting for the completion of Engg.work
TIR	2	Preliminary work for FOB extension started.	Material received and waiting for the completion of Engg.work

#### ➤ PUBLIC AMINITY WORK- Escalators: Deposit work by Palakkad Municipality

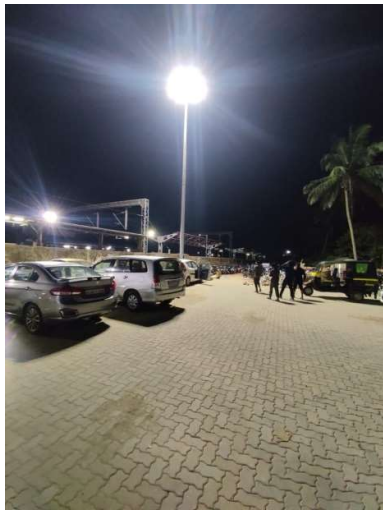
PGTN Escalator Commissioned on 29.02.2024



**High mast Commissioned PGI Station**



**High mast Commissioned at KTU Station Parking area**



**1 No.High mast & 2Nos of Mini mast Commissioned at SRR Parking area**





### High mast Commissioned at OTP Station



### High mast Commissioned at BDJ Station



**Two high masts commissioned at Pollachi station**



### **Amruth Bharath Station Scheme**

Sl. No.	Station	Major works proposed	Present Status
1	Pollachi Junction	Re wiring of existing PF shelters High masts at Parking area Façade lighting for station building Electrification/re-wiring of Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards DG set 11 KV substation	Contract awarded on 9/6/23
2	Ottappalam	Re wiring of existing PF shelters New mini shelter wiring High masts at Parking area Roof top solar panel- 70kWp Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards DG set	Contract awarded on 07.06.2023
3	Shoranur	Re wiring of existing PF shelters High masts and mini masts at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards	Contract awarded on 9/6/23
4	Angadippuram	Re wiring of existing PF shelters Mini masts at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards	Contract awarded on 9/6/23
5	Nilambur Road	Re wiring of existing PF shelters Mini masts at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards	Contract awarded on 9/6/23

Sl. No.	Station	Major works proposed	Present Status
6	Kuttippuram	Re wiring of existing PF shelters New mini shelter wiring High mast at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards DG set 11 KV substation	Contract awarded on 07.06.2023
7	Tirur	Re wiring of existing PF shelters High mast at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards DG set 11 KV substation	Contract awarded on 12.06.2023
8	Parapangadi	Re wiring of existing PF shelters High mast at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards	Contract awarded on 11.08.2023
9	Ferok	Re wiring of existing PF shelters Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards Inverter/DG set	Contract awarded on 03.08.2023
10	Vadakara	Re wiring of existing PF shelters High masts at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards DG set 11 KV substation	Contract awarded on 25.07.2023



Sl. No.	Station	Major works proposed	Present Status
11	Mahe	Re wiring of existing PF shelters Mini masts at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards Inverter/DG set	Contract awarded on 25.07.2023
12	Talassery	Re wiring of existing PF shelters Mini masts at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards DG set 11 KV substation	Contract awarded on 03.08.2023
13	Payyanur	Re wiring of existing PF shelters Mini masts at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans New water coolers LED signage boards DG set 11 KV substation	Contract awarded on 03.08.2023
14	Kasaragod	Re wiring of existing PF shelters High mast at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New water coolers LED signage boards DG set 11 KV substation	Contract awarded on 12.06.2023
15	Mangalore Junction	Re wiring of existing PF shelters High masts at Parking area Façade lighting for station building Electrification/re-wiring of new Toilet, concourse and waiting hall New wall mounting fans LED signage boards	Contract awarded on 12.07.2023

## ENERGY CONSERVATION MEASURES

### ENERGY AUDIT:

Energy Audit at 14 Stations have been completed by outside agencies and their suggestion to reduce the consumption has been implemented. (PGT,OTP,SRR,KTU,TIR,QLD,BKJ,CAN,TLY,PAY,MAQ,MAJN,KGQ & KZE).

The following energy efficient electrical equipment are provided in PGT Division to achieve the energy conservation target.

- Replacement of 100% LED lamps in stations, service buildings and Railway quarters.
- Replacement of ordinary fans with BLDC fans in stations and service buildings.
- Provision of energy efficient inverter AC plants in service buildings, running rooms, ORH, etc.
- Replacement of pumps with energy efficient star rated submersible pumps.
- Automation of pumps provided in all high capacity pumps.
- All stations provided with 70% & 30% Platform light control.
- All street lights and high mast lights provided with timers.

### Roof top solar plants (through Revenue funds)

S No	Location	Capacity in KWP	Date of commissioning
1	PLL stn.	2	26.05.15
2	TLY stn.	3	10.12.16
3	Div./O/PGT	10/ 95	02.03.17/26.6.19
4	Rly. Hsptl. /PGT	20	02.03.17
5	MDDTI/PGT	50	05.06.21
6	PLL	5.2	05.06.2022
7	LDY	5.2	05.06.2022
8	CAN	70	18.10.2023
<b>Total capacity</b>		<b>260.4 KWP</b>	

### Provided by REMCL

Sl.no	Location	Capacity in KWP	Date of commissioning
1	CLT stn	100	10.07.19
2	PGT stn	50	25.09.19
3	SRR stn	50	25.10.19
4	CAN stn	50	31.10.19
5	TLY stn	50	28.10.19
<b>Total</b>		<b>300 KWP</b>	

**70 KWp solar plant commissioned at CAN on 18.10.2023**



**WORKS RELATED TO SAFETY**

**LIGHTING ARRANGEMENTS INSIDE TUNNEL**

- At MAJN-KULS tunnel, lighting works has been completed on both right and left sides and the same has been put into service. (Total 120 nos of 14 watts LED bulbs provided with protection cover).



**Improvement in yard lighting at CANNUR**

Two high mast provided at Kannur yard to improve lighting/safety of stabled racks.



### **DG set at Nilambur Road Running Room**

DG set installed at Nilambur Road running room to ensure uninterrupted power supply and thus proper rest to the Train working Crews to ensure safety



## IMPROVEMENT IN PIT LINE LIGHTING AT MAQ

Portal lights at MAQ yard covering 3 pit lines and a sick line of 600 mtrs length.  
Total 6 portals, average span of portal 25 mtrs.  
Each portal controlling by separate timer.  
9 nos of 5 mtrs height octagonal poles with 2 nos of 200 w light also provided in between the portals in new L type and T type catwalk.  
Total lights 152 nos of 200 watts LED flood light.  
Total load 30.4 KW.  
Cost of work 48 Lakhs approx.





## Improvements to yard lighting at PGT

Four numbers of high masts with 6 x 200W LED flood light fittings each are installed at PGT yard.



## ELEPHANT WARNING LIGHTS

1. A total of 20 nos. of LED lights with Solar system mounted on GI posts has been provided inside the forest area between WRA-KJKD stations in B line for preventing entry of elephants into the railway track at critical cuttings @ KM 511/9 to 510/39 and KM 512/19 to 512/11



2. 25 Nos of 7W 2in 1 Solar Street Light has been commissioned between ETMD-WRA stations in view of wild elephant crossing the Railway track.

Km	Qty
504- A line	4 nos
506- A line	12 nos
507- A line	4 nos
506 A- B line	1 no
507 – B line	2 nos
515 B line	2 nos





### **Provision of hanging Solar fencing**

1. PGT Division has issued LOA for providing Hanging solar fencing and work is completed. Solar fencing provided around and nearby the IBH building between WRA-KJKD stations @ km 514 - km 515 for a length of total 1300m at a total cost of Rs. 9.56 Lakhs.



2. Solar fencing for a length of 1500m at a total cost of Rs. 9.64 Lakhs @ Railway track on B line of WRA-KJKD completed.





**Bogie level illumination work at MAJN yard has been completed and commissioned on 14.11.23.**

\* Total no. of Dwarf poles - 40 nos.

\* Total Light fittings- 80 nos.

\* Type of light: 25W/24V DC flood light fitting.

\* Power supply - 4 nos of 230 v/24 v DC power supply each having 4 nos. SMPS.



