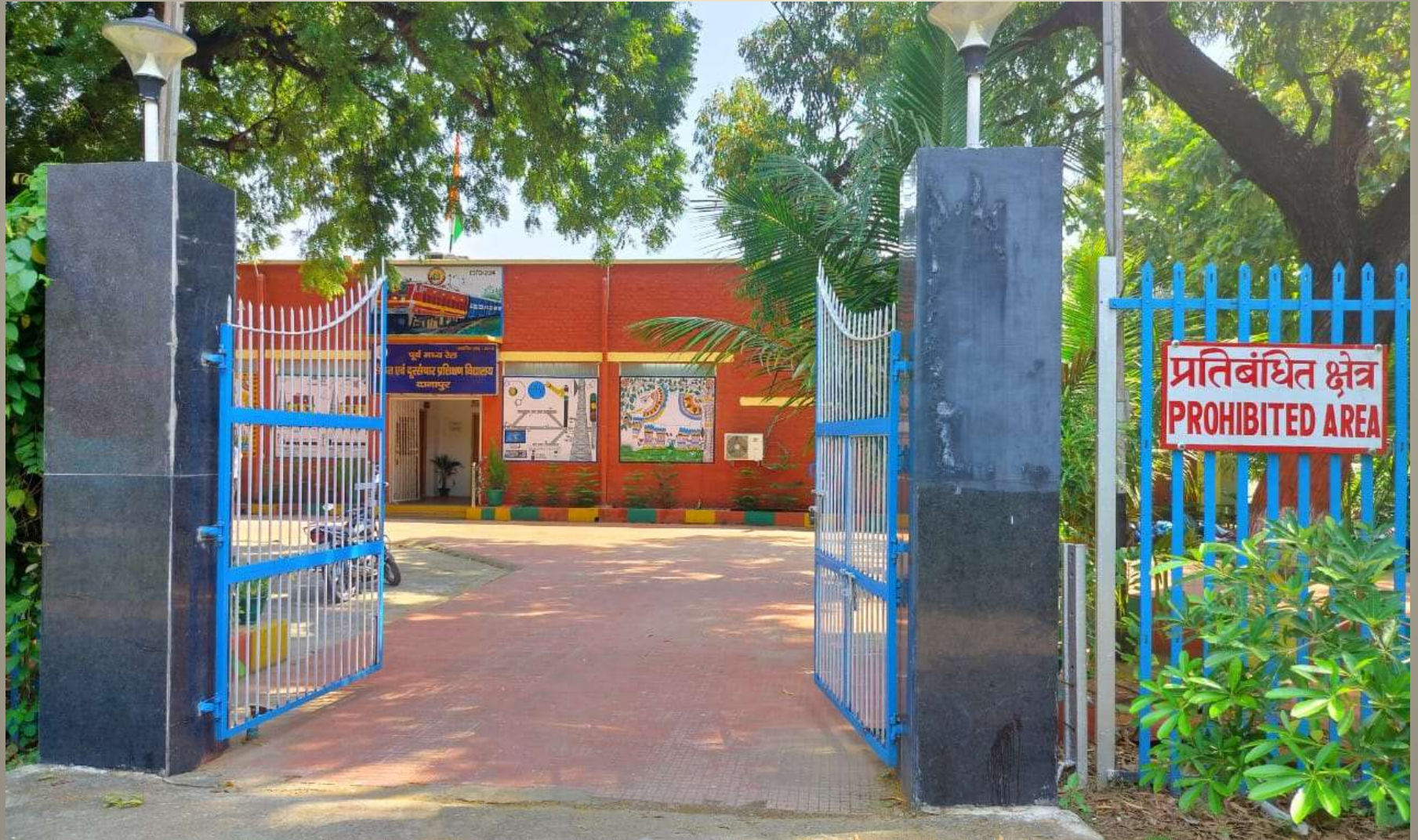


SIGNAL AND TELECOM TRAINING CENTRE, DANAPUR (AT A GLANCE)



Entrance



Selfie Point



Selfie point at STTC.

Fabricated with In-house resources and with zero budget



RKVY Class Room Main Gate.

Fabricated with In-house resources and with zero budget.

POPULATION OF SIGNAL EQUIPMENT IN ECR

DATALOGGER

Sl. No	Equipment Name	Make	Population (No of Equipment)
ECR			
1	DATALOGGER	EFFTRONICS	585
		SIRVEEN	03
		HBL	21
		CGL	17

AXLE COUNTER

Sl. No	Equipment Name	Make	Population (No of Equipment)
ECR			
1	HASSDAC	G.G TRONICS	1440
		CEL	788
2	MSDAC	FRAUSCHER	570
		ELDYNE	1495
		SIEMENS	554
		CEL	28
		G.G TRONICS	44

IPS

Sl. No	Equipment Name	Make	Population (No of Equipment)
ECR			
1.	IPS	AMARARAJA	763
2.	IPS	HBL	74
3.	IPS	STATECON	101
Total =938			

Division	Total No. of Station	CPI	RR	EL/SSI	End Panel	IBH
DHN	154	69	3	81	1	13
DNR	102	56	3	43	0	12
DDU	50	15	4	23	8	1
SEE	70	34	2	32	2	5
SPJ	113	59	0	54	0	0
ECR	489	233	12	233	11	31

Sr. No.	Items	Details
1	Name of the Training Institute	Signal & Telecom Training Centre, Danapur/ECR
2	Date of Setting up	28.11.14 (Recognized by Railway Board vide RBE No 52-2015)
3	Location of the Training Institute	Located in Neora Colony, North – West of Danapur Railway Station.
4	Objective of the Training Institute	Upgrading Technical Knowledge of S&T Staffs& RKVY Trainees through Quality Training.
5	Broad Category of staff being Trained	1. SIMs 2. TCMs 3. Assistants of S&T Deptt. 4. JE/Signal(Promoted under 40%)& JE Tele (Promoted under 30% quota) 5. Rail Kaushal Vikash Yojna (RKVY)
6	Total area of Training Institute	3.63 Acres Total Covered Area (sq. meter) – 801 sq. mtr. Total open Area (sq. meter) – 13,899 sq. mtr.
7	Number of Class Rooms	03
8	Average Class Room Capacity	25
9	Training Aids	a) Over Head Projector – 01 No. b) White Board – 05 No. c) TV/Projection TV – 01 No. d) Public address system – 01 set
10	Numbers of Computers	08
11	Recreational Facility	Volleyball, Badminton, Cricket, Carom
12	Hostel Capacity	50 (50 coats, 50 mattress, blanket
13	Area of Hostel Campus	1.03 Acres
14	No. of Rooms in Hostel	04 (Dormitories)
15	Mess with Dinning Hall	30 sets

IPS(Amara Raja) AND BATTERY ROOM



INTEGRATED POWER SUPPLY

DOI- 05-11-2014

Make-Amara Raja

Population in ECR- 459 nos

RDSO/SPN/165/2015 Ver-3

IPS consists of FRBC , ACDP and DCDP panels used for charging 110V DC battery bank for providing centralised power supply for all signalling gears.



Battery Bank for IPS

DOI- 05-09-2020

Make-Southern

56 number of 2V/300AH
LMLA cells are connected
in series to form the
battery bank for
Integrated power supply.

All the cells are
numbered and installed
on wooden frame for
proper maintenance and
testing.

OUTDOOR LAB



LC GATES



LC Gate

Electric lifting barrier
type (110 V DC)

Make: Urban Electro
System

Pvt Ltd)

DOI-12-02-2017

Population in ECR: 429

ELB is installed in
outdoor lab of
STTC/DNR to provide
Hands-On training
experience to the
trainees.



LC Gate

Mechanical Lifting
barrier type

DOI- 28-11-2014

Population in ECR:
281

Mechanical Lifting
barrier type LC gate
is installed in
outdoor lab of
STTC/DNR to
provide Hands-On
training experience
to the trainees.

DC track circuit is
also available in
outdoor lab.

SIEMENS EI MARK-II





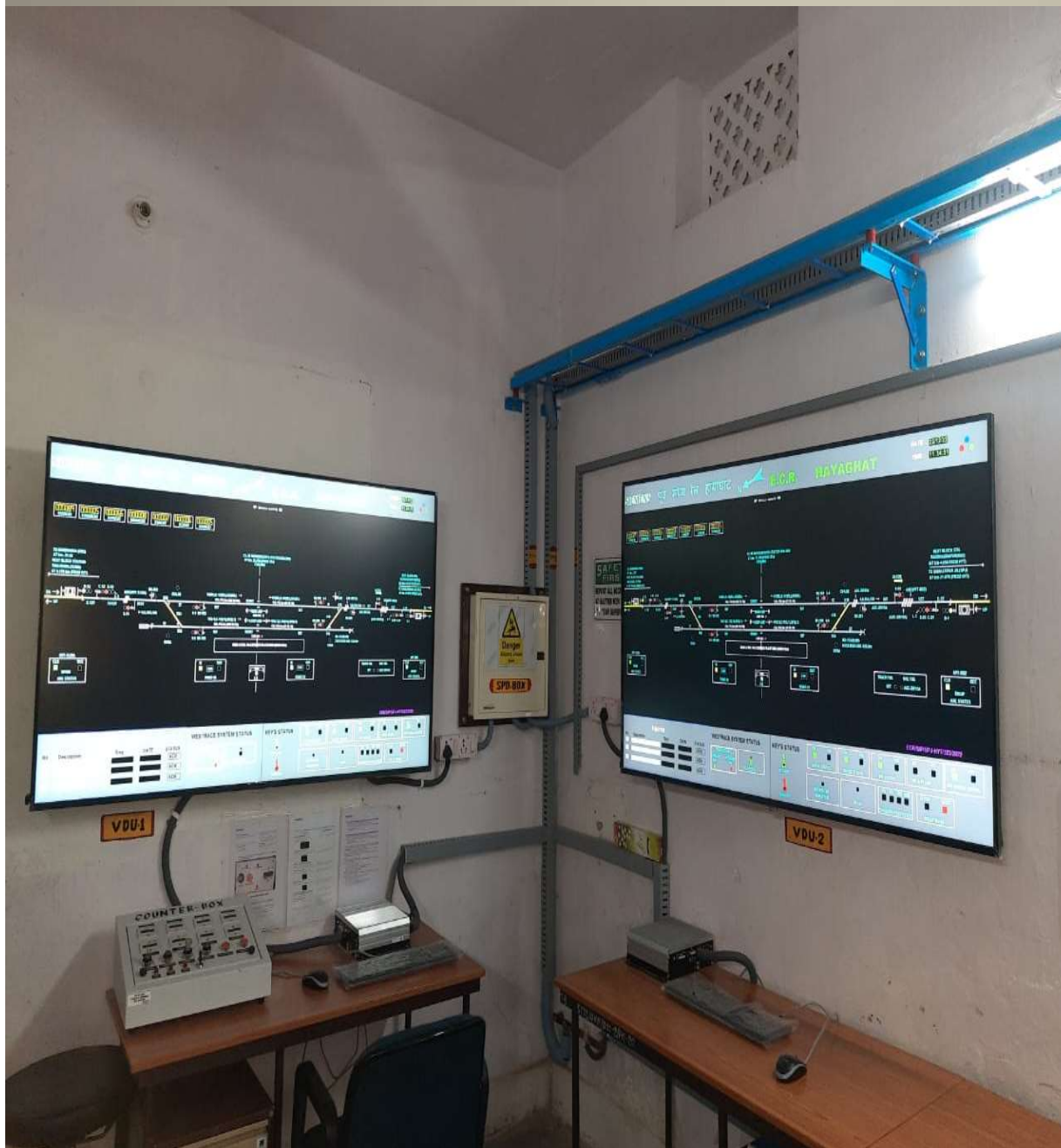
SIEMENS EI (Electronic Interlocking) (Mark-II)

DOI- 26-11-2022

Make- SIEMENS

Population in ECR:
150

Siemens MARK-II is a processor based vital signalling system. All modules can be removed and replaced, while Westrace Mark-II interlocking is running - no configuration of new module is required.



SIEMENS EI (Mk-II)

Specifications

Total no of Routes = 24

Total number of input cards(PIM) = 8

Total number of output cards(ROM) = 5

Total number of Processor cards(PM) = 2

Number of operating VDU = 2

Number of moviolaw' PC = 1

Simulation Panel = 1

Total number of counter box = 1

Total number of Points = 2

Total number of main Signal = 10

Total number of Shunt Signal = 02

Total number of track circuit =16

Total number of Calling On Signal = 2

Number of SIEMENS EI rack = 1

Number of Relay rack = 02

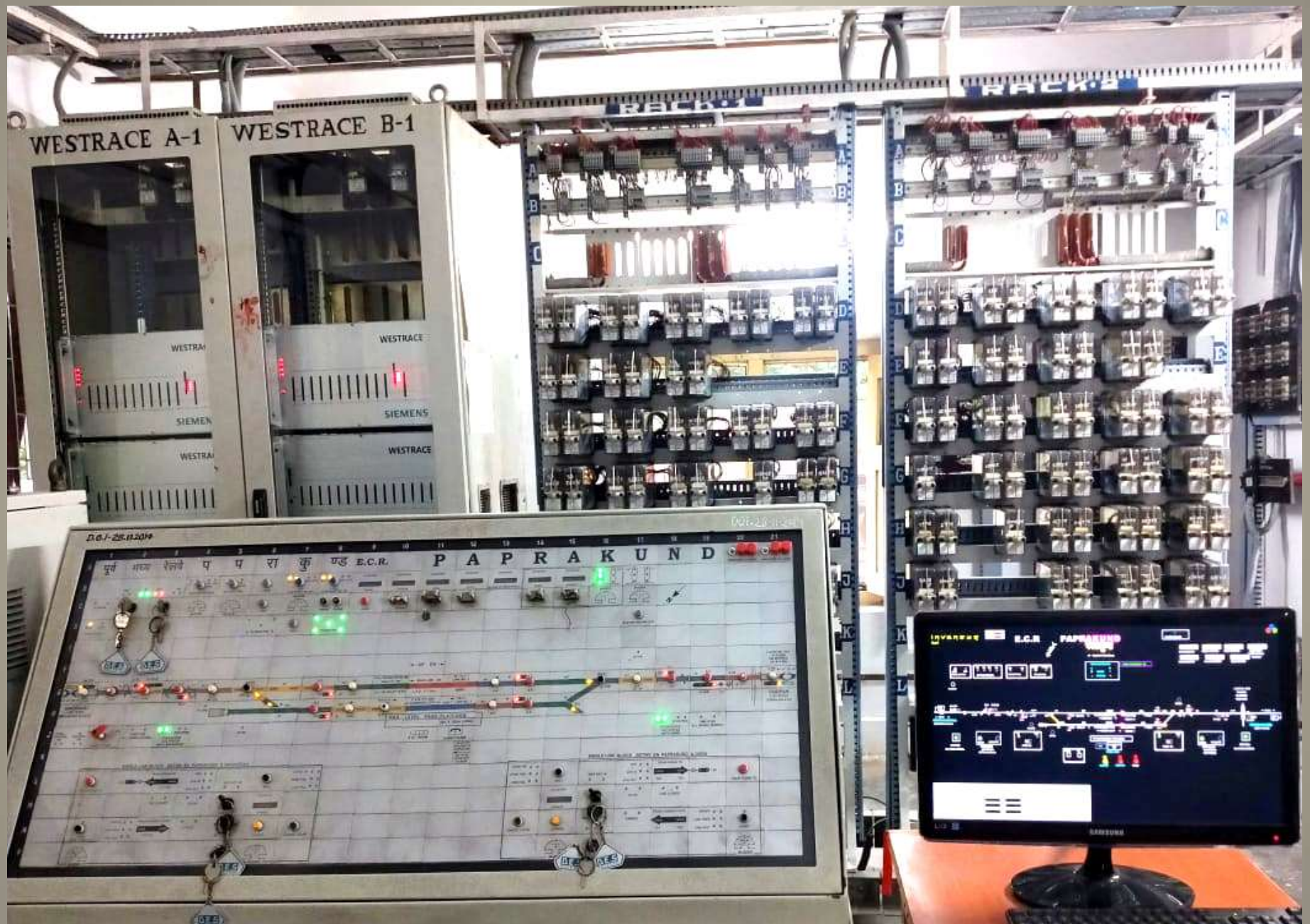
Number of CTR = 01

Number of Data logger with protocol converter
= 01(Digital input = 512, Analog Input = 24)

Relay room door is synchronized with EI-MK-II

SIEMENS EI MARK-I





Model Relay Rack



Model relay rack

DOI- 26-11-2022

Model relay rack (Different type of terminals, wago, fuse, EKT, installed at Block – B

Purpose : It helps different types of circuit wiring , Signal control circuit, Point circuit wiring practice and circuit tracing .

EI (KYOSAN MAKE)

Installation of KYOSAN make EI system at STTC/DNR has been approved and work has been awarded to M/s JMC-KPTL-EESPL(JV), KPTL office and yard, beside Kajri station, Kajari, Palamu, Jharkhand vide letter No. GM/S&T/RVNL/RNC/GHD- PTRU/3rd Line/Pkg-3/21-22/555 Date: - 14/09/2022



No. GM/S&T/RVNL/RNC/GHD-PTRU/3rd Line/Pkg-3/21-22/555

Date: - 14/09/2022

To,
JMC-KPTL-EESPL(JV)
KPTL office and yard,
Beside Kajri Station, Kajari
Palamau, Jharkhand.
Pin- 822123

Subject:-"Construction of Roadbed, bridges, Supply of ballast, Insulation of Track (excluding Supply of Rails and track sleepers), Electrical (General Electrification), Provision of OHE Signalling and Telecommunication work in connection with 3rd Line Garhwa Road (Including) Km 319.04 And Barwadih (including) Km 258.51 (Total 60.53) in Dhanbad Of East Central Railway, Jharkhand, India", in package-3:- **Regarding provision of EI System (Kyosan make) Make at STTC/Danapur.**

Ref: - (i) PCSTE letter no. ECR-HQ05nT(TSC)1/2020; Dated:- 03.12.2021
(ii) GM/S&T/RVNL/RNC/GHD-PTRU/3rd Line/Pkg-3/21-22/305; Date: - 13/12/2021

In apropos to above subject matter, P.C.S.T.E./HJP has requested to provide one additional EI System (Kyosan make) is to be installed in STTC/Danapur so that maintainers and supervisors can be imparted training in EI of Kyosan make. Moreover, 1 additional EI variation is approved vide reference (ii). **The EI for STTC/Danapur will be as replica of Tolra station.**

Therefore, you are requested do necessary action in this regards.

KAILASH
CHAND
SHARMA
(K.C. Sharma)
GM/S&T/RVNL/RNC

Copy to:-

- (i) ED/S&T/RVNL/CO for kind information please.
- (ii) CPM/RVNL/RNC for kind information please
- (iii) PD/Pkg-3 for information and N.A. please
- (iv) PM/PMC/DTO for information and N.A. please

IPS (HBL)



INTEGRATED POWER SUPPLY

DOI- Under installation

Make-HBL

Population in ECR- 18

nos

RDSO/SPN/165/2012 Ver-3

IPS consists of FRBC , ACDP and DCDP panels used for charging 110V DC battery bank for providing centralised power supply for all signalling gears.

WEBFIL UFSBI



**UFSBI[Universal Fail
Safe Block Interface]**

Single line

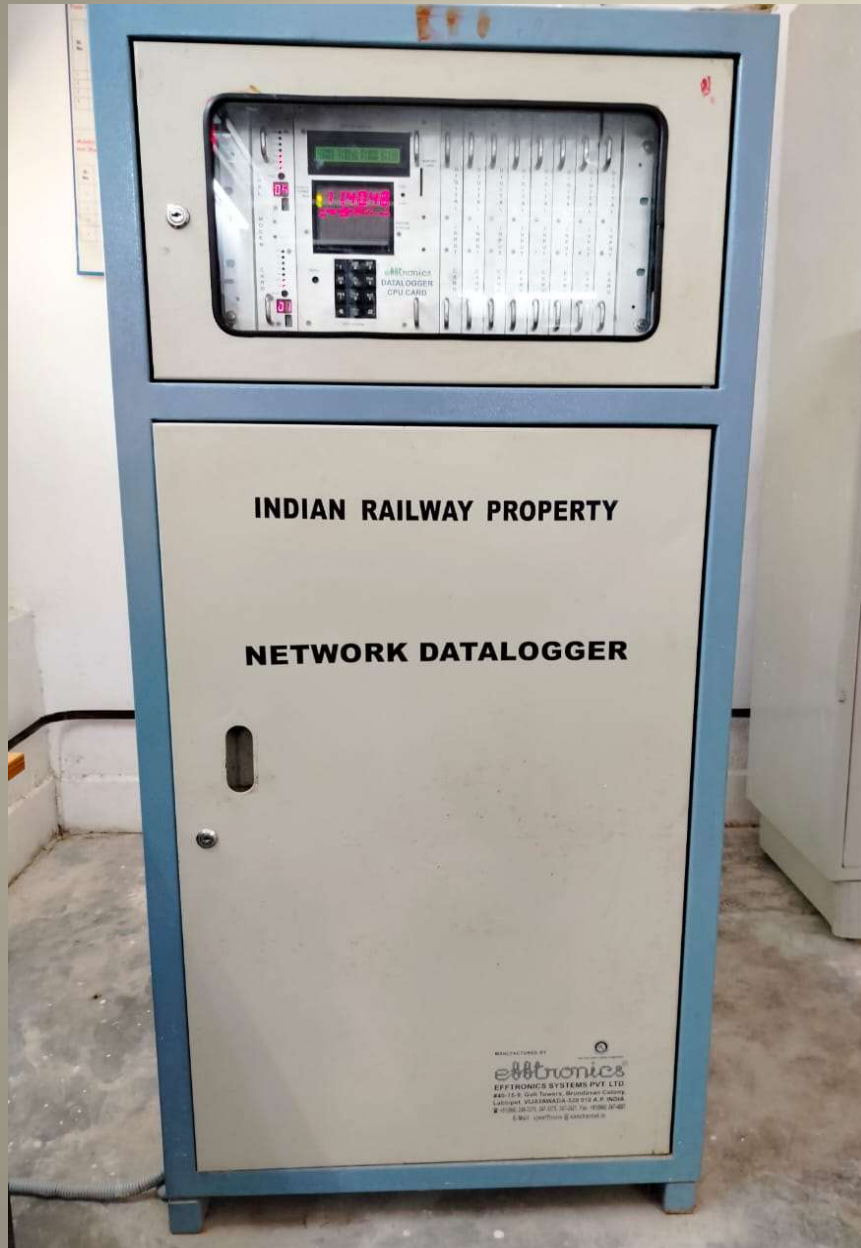
MAKE: WEBFIL

Population in ECR: 173

DOI : 20/09/2022

It is a Non co-operative, user friendly type block instrument. It works on the principle of absolute block working system.

DATA LOGGER



DATA LOGGER

DOI- 28-11-2014

Make- EFFTRONICS

Population in ECR: 455

Data logger monitors and records all activities in the signalling system of a station. It acts as a black box which can scan, store and process the data for generating various user friendly reports.

BLOCK SIGNALLING LAB



**UFSBI (D/L)[Universal
Fail Safe Block
Interface]**

MAKE: DELTRON

Population in ECR: 198

DOI : 28 Nov 2014

RDSO/SPN/188/2004

It is a Non co-operative, user friendly type block instrument capable of providing the last vehicle detection in double line section.



DLBI [Double Line Block Instrument]

Make- MSW Howrah

Population of DLBI in ECR: 79

DOI- 28-11-2014

It is a Non co-operative, type block instrument capable for all operation at receiving end with the help of commutator handle that consists of three positions Line close, Line clear and Train on line.



FM Handle type Tokenless Block Instrument (SL)

Make- Signal Workshop
HWH

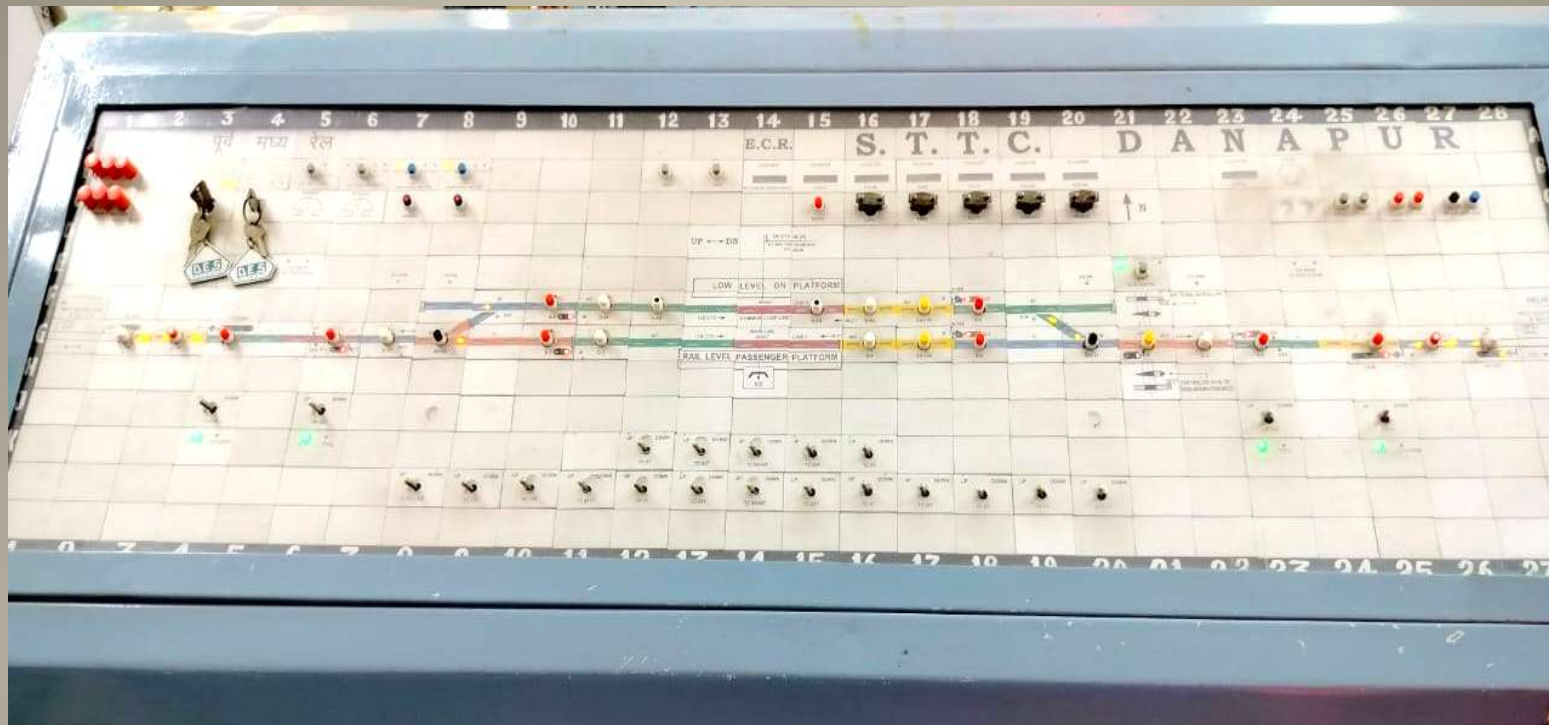
Population of TLBI in
ECR: 128

DOI- 28-11-2014

IRS-S98-2001

It is co-operative type
block instrument
designed to work on
frequency modulation
(cf- 1800 Hz or 2700 Hz)
(mf- 65 Hz and 85 Hz)

PANEL INTERLOCKING LAB



Dominos Panel

Make- Deltron

Population in ECR: 317

DOI- 26-11-2015

Dominos panel consists of self-restoring type buttons for the operation of points, signals, L/C gates, Crank Handle operation and releasing of routes and Signal cancellation etc.



Earth Leakage Detector

DOI- 01-07-2022

Make-Anu Vidyut

Population in ECR:
83

ELD is used for monitoring of on-line cable insulation and earth leakage resistance of cable.

SSBPAC



SSBPAC (Solid State Block Proving by Axle Counter)

DOI- 18-07-2023

Make- EFFTRONICS

Population in ECR:
50 (25 Pairs)

SSBPAC Electronic block instrument , suitable for single & double line block working based on the Principles of absolute block working system . Safety integrity level- SIL4

SSBPAC

(Solid State Block Proving by Axle Counter)



**SPEC: RDSO/SPN/175/2005
VER - 1**

Specifications

Total number of input cards = 03

Total number of output card = 02

Total number of Processor cards = 03

Number of operating Block Panel = 02

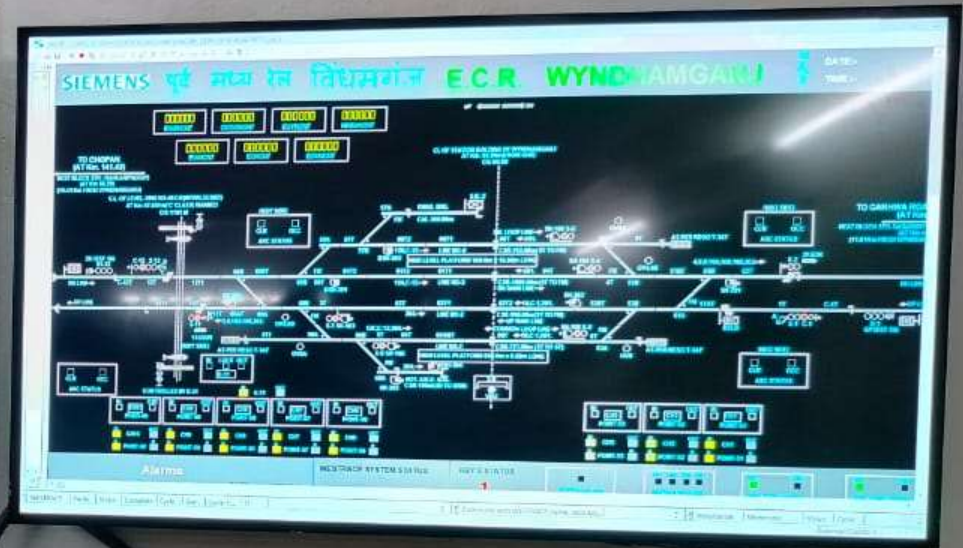
Number of Voter Card = 01

Number of Communication Card = 01

Number of ACCU Card = 01

Number of Relays= 11+11

C FAT

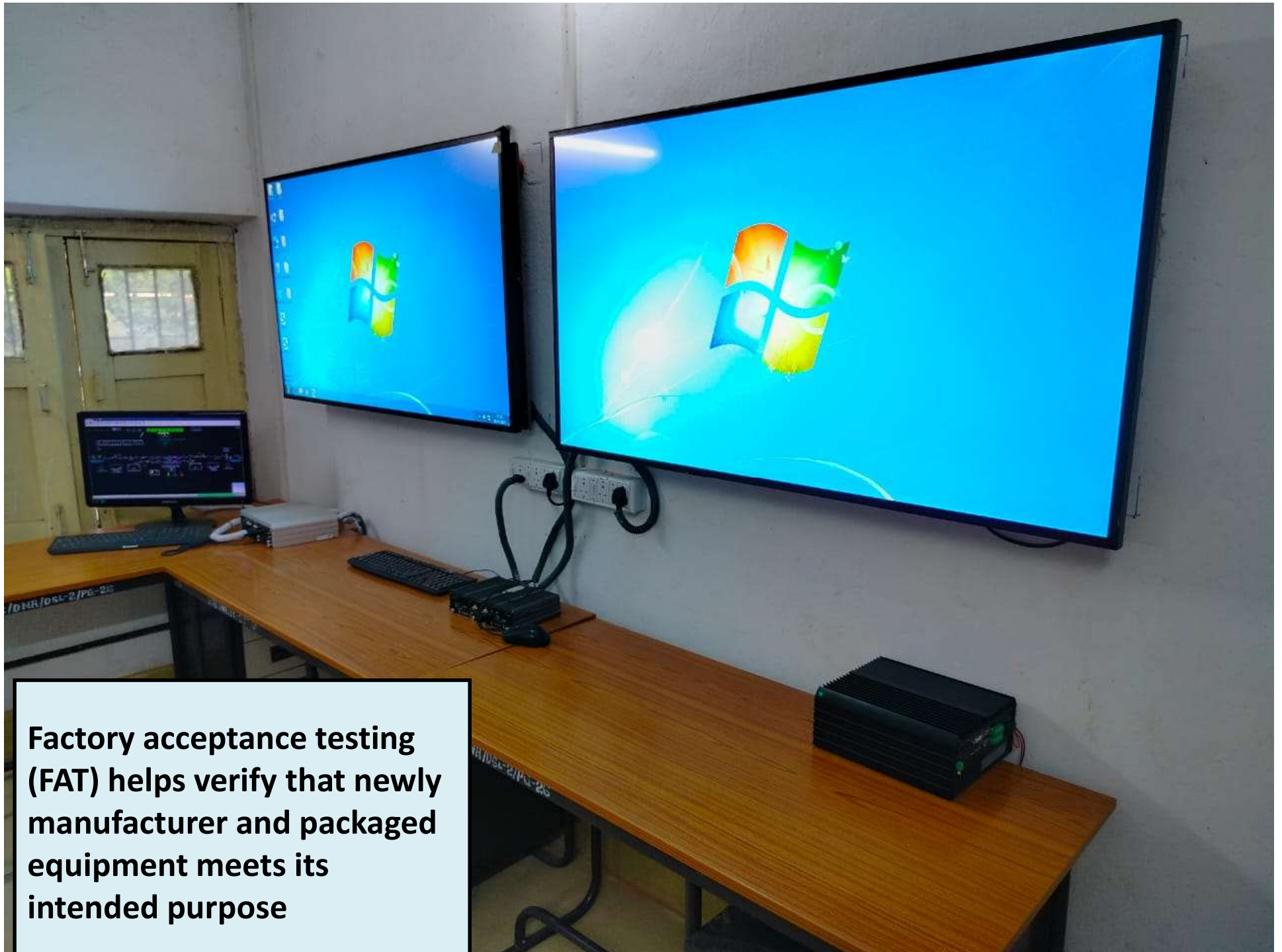


Installed at STTC/DNR

Total number of VDU = 02

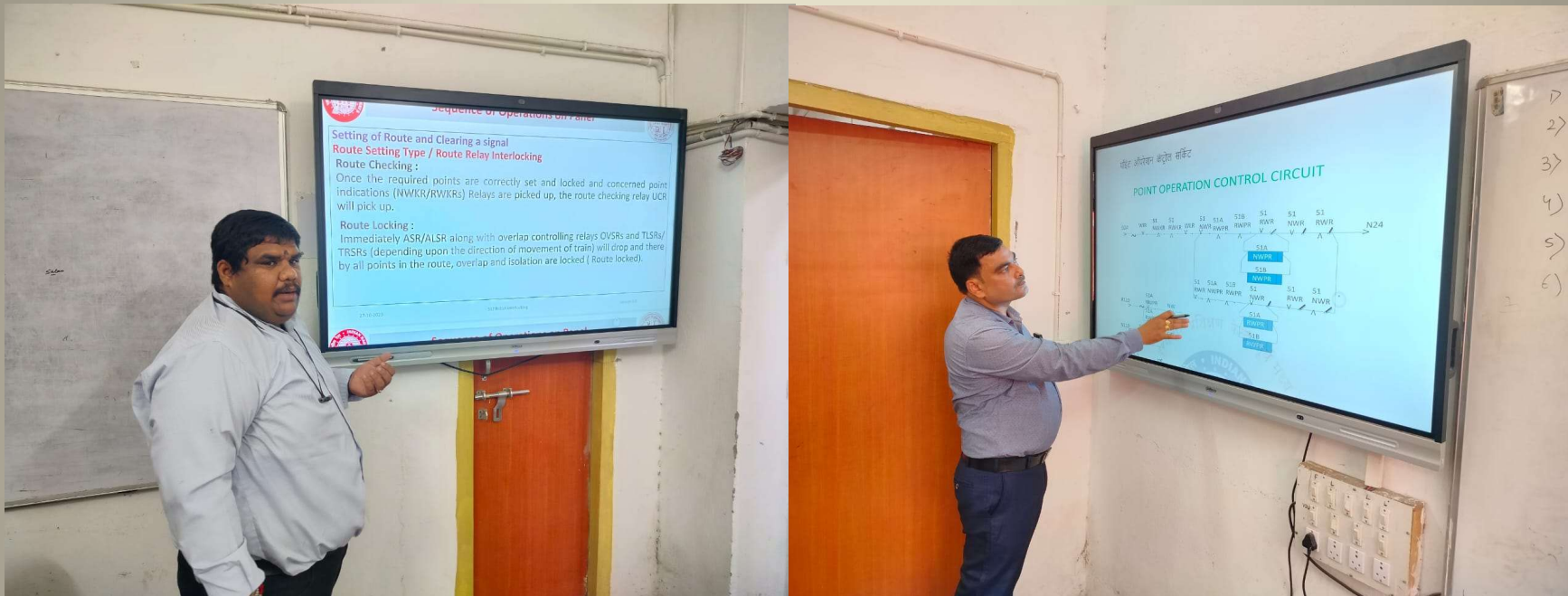
Total number of Industrial CPU = 02

Size of VDU = 55"



Factory acceptance testing (FAT) helps verify that newly manufacturer and packaged equipment meets its intended purpose

Smart Interactive Display Board

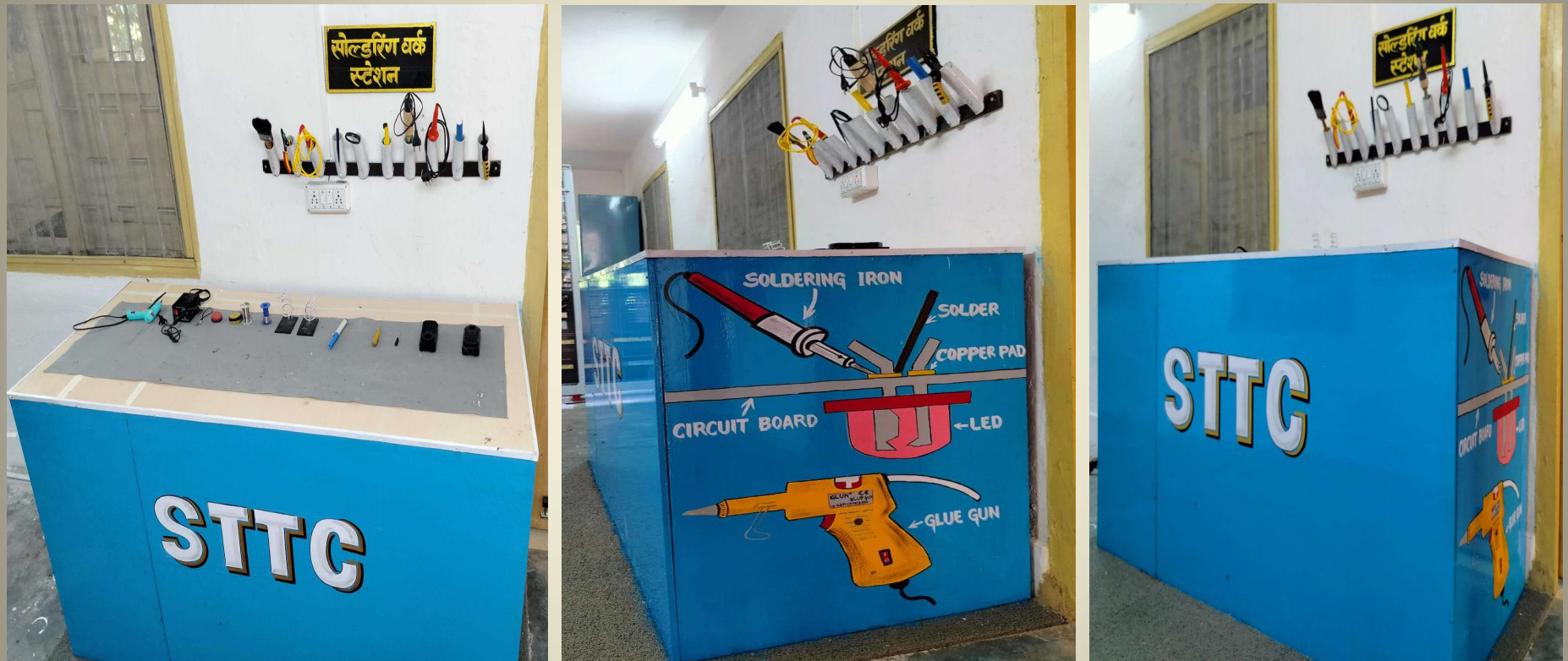


Smart Interactive Display Board in class room 1 & 2

Make : ajhua Technology

D.O.I. : April-2023

Soldering Work Station

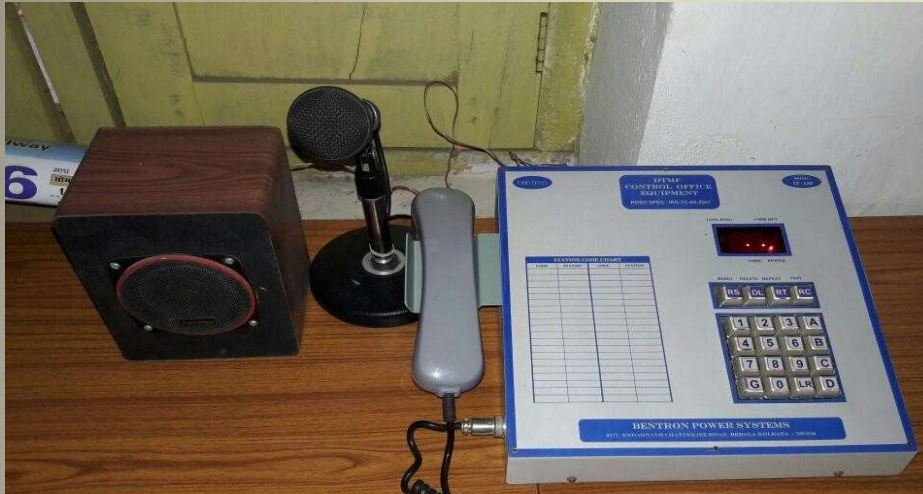


DOI :- April – 2023

Purpose :- For Gaining Hands on experience of different aspect of soldering techniques.

TELECOM LAB

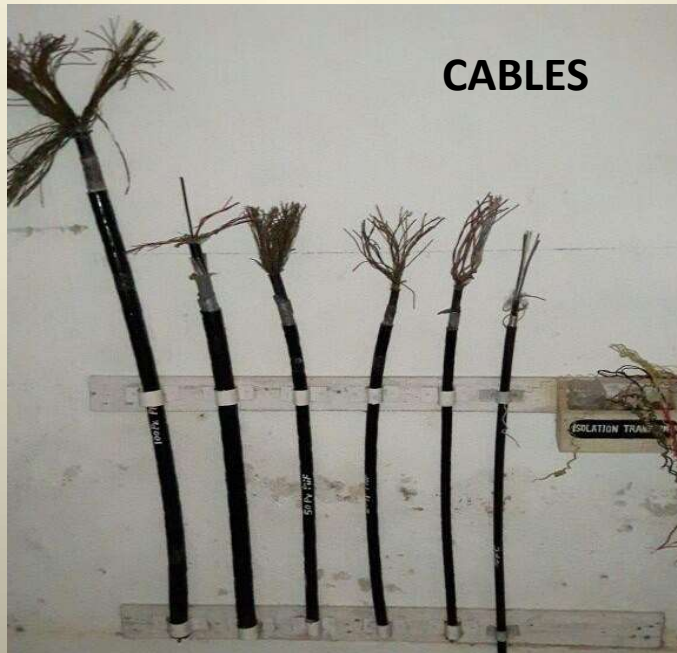
HEADQUARTER CONTROL EQUIPMENT



P/A SYSTEM EQUIPMENT



CABLES



TEJAS STM-1 AND WEBFIL PD MUX



TELECOM LAB

Date of setup-28-11-2014

Various Telecom equipments are installed in Telecom Lab to provide Hands-On training experience.

Population in ECR: Bentron Tejas STM-I—296, Tejas STM-4—211, HQ equipment(Bentron)- 19

Telecom lab is equipped with STM-1(Tejas make), STM-4(Tejas make), CISCO router and switch, Various types of cables, OTDR, Splicing Machine, cable route tracer, cable fault locator, Head quarter control equipment(Bentron make), way side control equipment(Bentron make), Selective calling gate phone, Magneto Telephone, megger, earth resistance tester etc .

IP TELEPHONY



D.O.I – 12-01-2023

IP Exchange Server connected with IP Telephony on Railnet backbone

OFC Splicing Machine



**Make: TUMTEC
Fusion splicing
machine at
Telecom lab.**

OTDR Setup

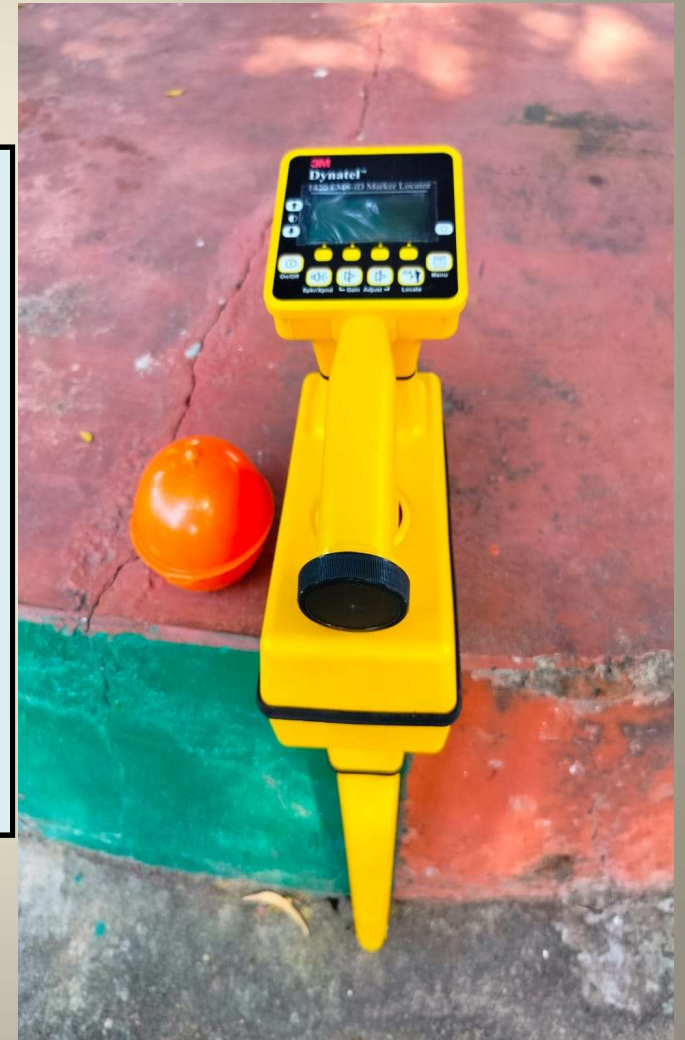


Make: Yokogawa
Purpose: To locate faults of OFC cable

Smart RFID Marker and Locator



Make: 3M
Purpose:
Imparting
training
regarding geo
tagging and
digital mapping
of underground
cables



Smart RFID Marker and Locator



Make: Stanley
Purpose:
Imparting
training
regarding geo
tagging and
digital mapping
of underground
cables

Cable Fault Locator



Make: Stanley
Purpose : To
locate different
type of faults in
underground
copper cables .

Cable Route Locator



Make: C.Scope
Purpose: To trace route and locate depth of underground cables

Hostel and Mess





STTC Hostel and Mess

50 bed Hostel with mess is available.

50 no. of coats with mattress, pillow, blanket etc are used for providing accommodation to the trainees.

Mess with 30 seat capacity, with various utensils is also available.

Badminton court



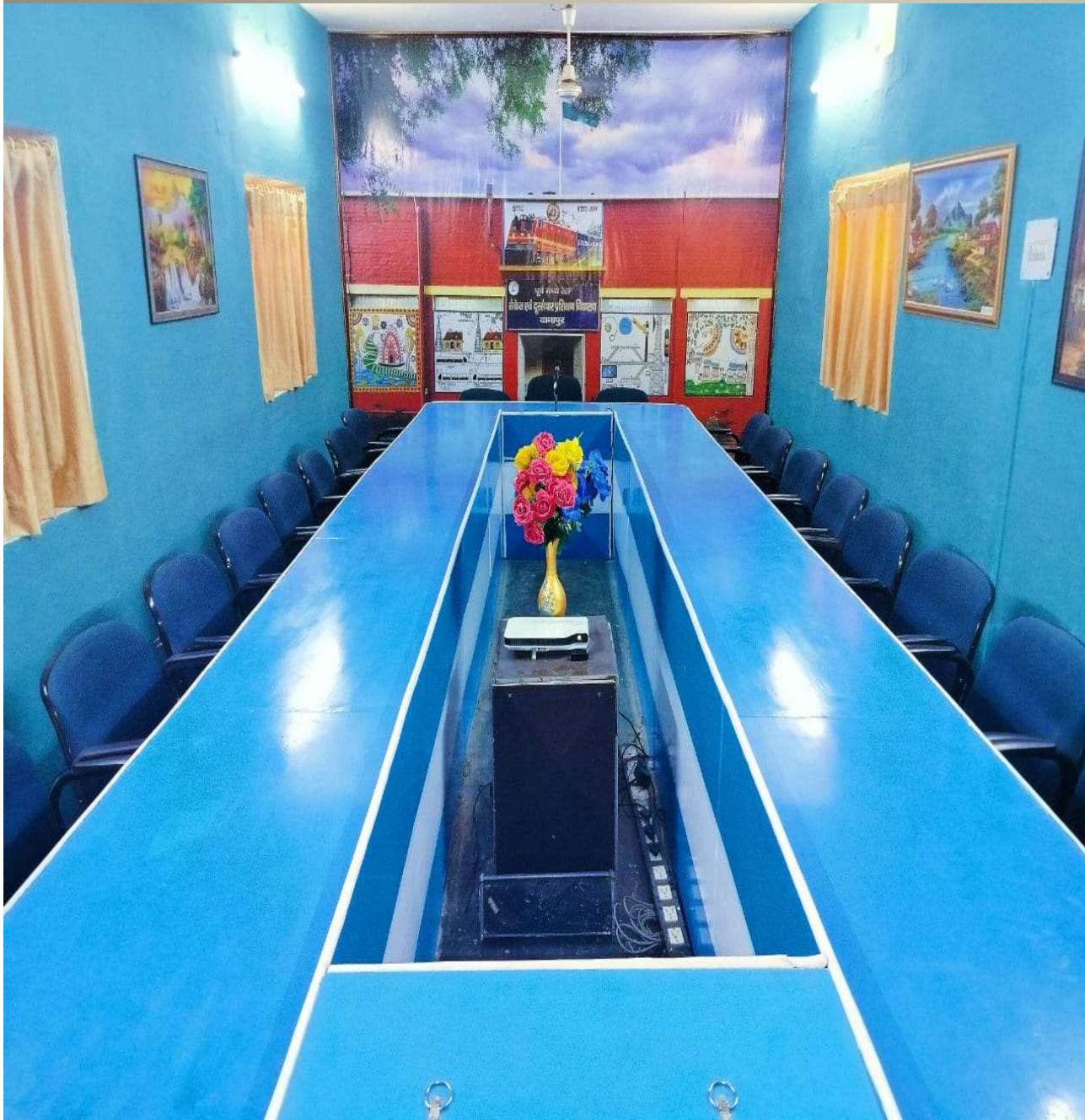
VolleyBall Court



Tender for construction of NEW HOSTEL having 60-bedded capacity within campus of S&T Training Centre, Neora colony, Roadno-15 Danapur has already been awarded (Letter no: DANAPUR DIVISION ENGINEERING/W7Etend11 Opendnr21-22-8/00843910046619 dated -



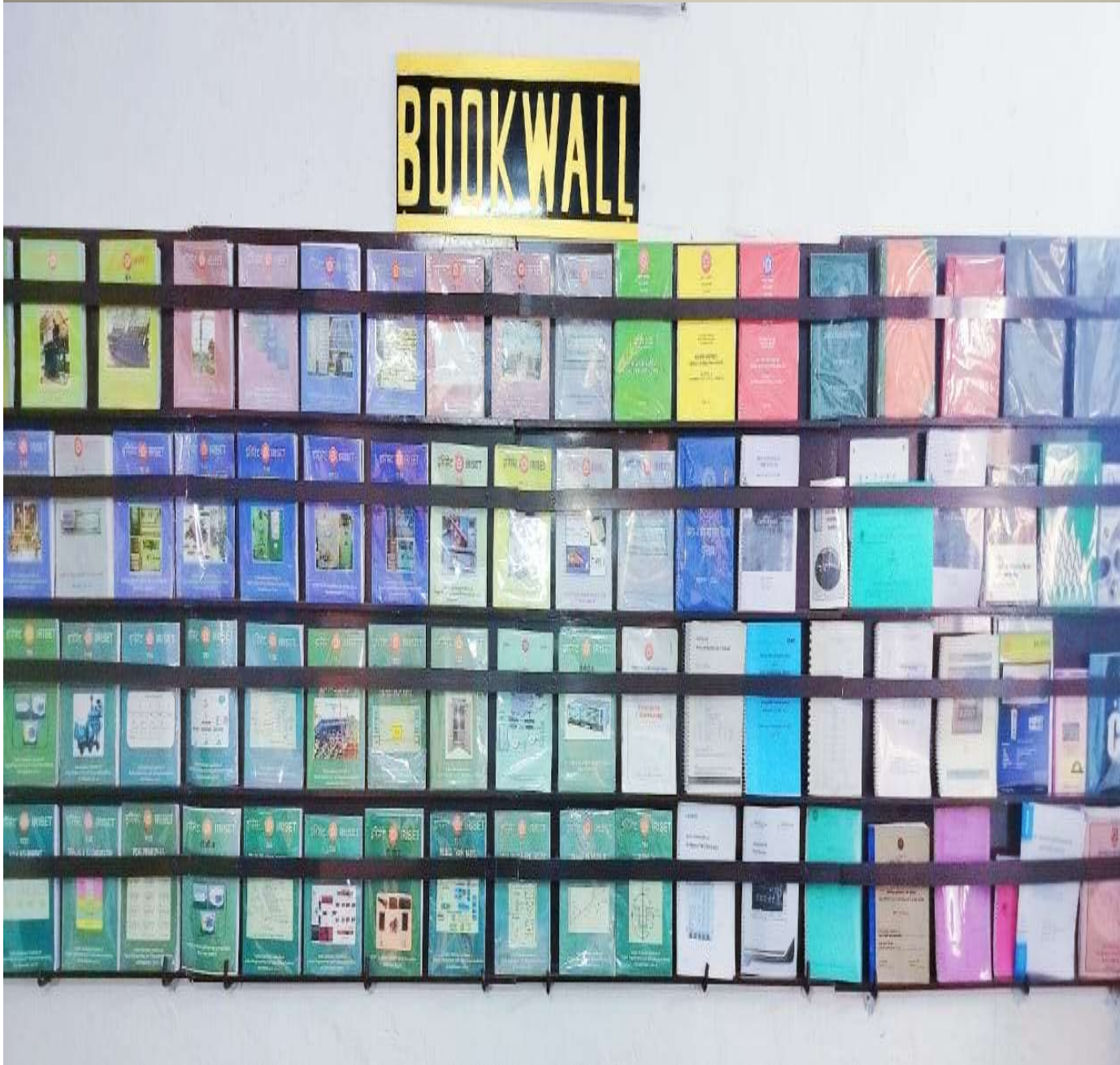
Conference Hall



Conference Hall of STTC equipped with Projector, Projector screen, PA system and PC.

Fabricated with In-house resources and with zero budget

BOOK WALL



BOOK WALL of
STTC

It contains IRISSET
Signal & Telecom
Notes, various
manuals
(SEM,TEM,G &SR
,Accident
manuals,
Operating
manuals of
Equipments
installed at
STTC/DNR

Fabricated with
In-house
resources and
with zero budget

WATER PURIFIER MACHINE



Water Purifier
cum Cold water
storage machine
at STTC.

Installed at North
–East side of
BLOCK -A

Fabricated with
In-house
resources and
with zero budget



Water Purifier
machine at STTC.

Installed at South
–West side of
BLOCK -A

Fabricated with
In-house
resources and
with zero budget



Reception Counter was fabricated at east facing side of STTC using in house resources and with zero budget .

Purpose : 1) For document verification of RKVY trainees .

2) Submission and collection of sparing letter, I-cards , competency certificates, by trainees of different courses

Water Purifier



Water Purifier
machine at STTC.

D.O.I. : September
-2023

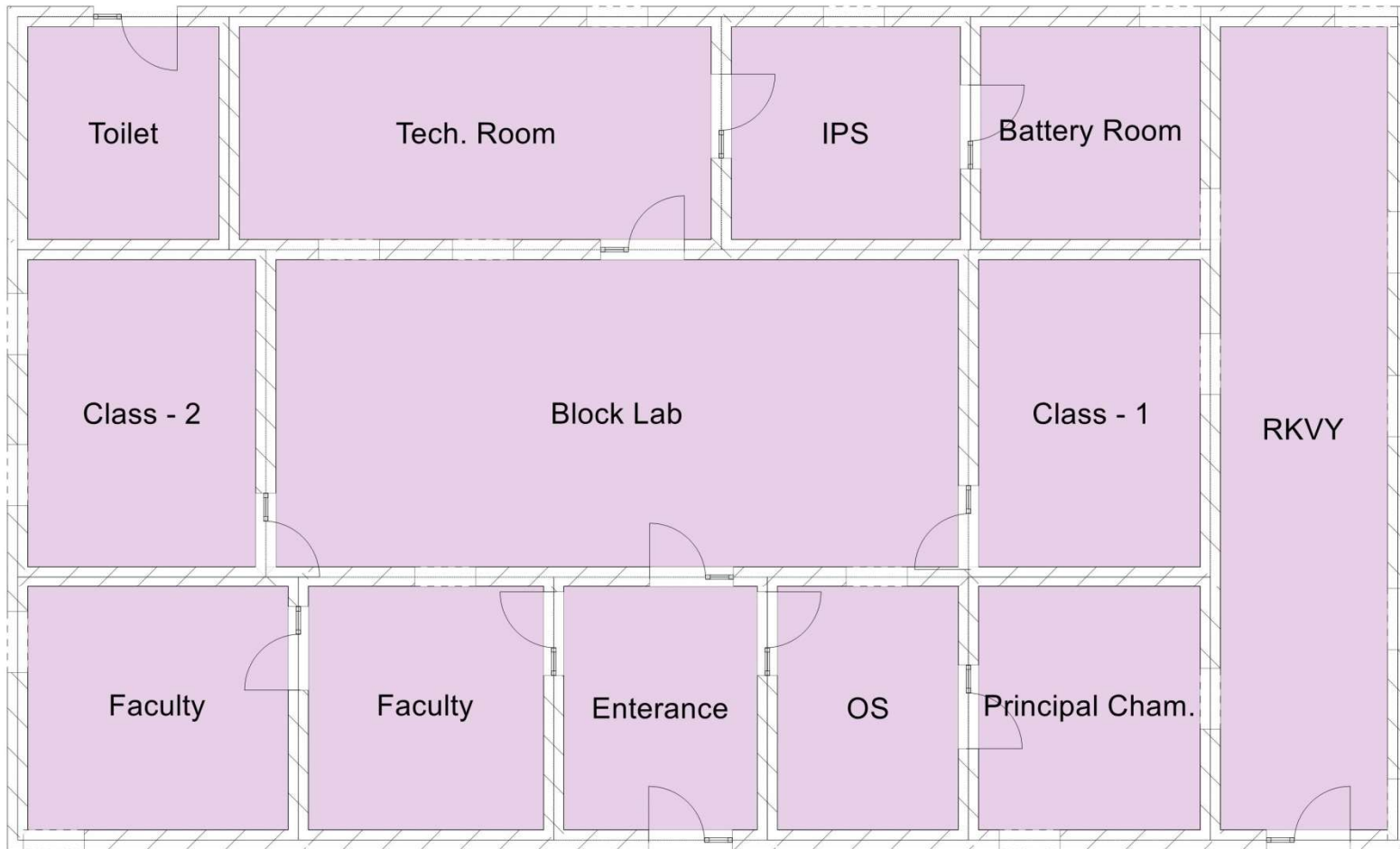
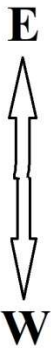
Water Purifier



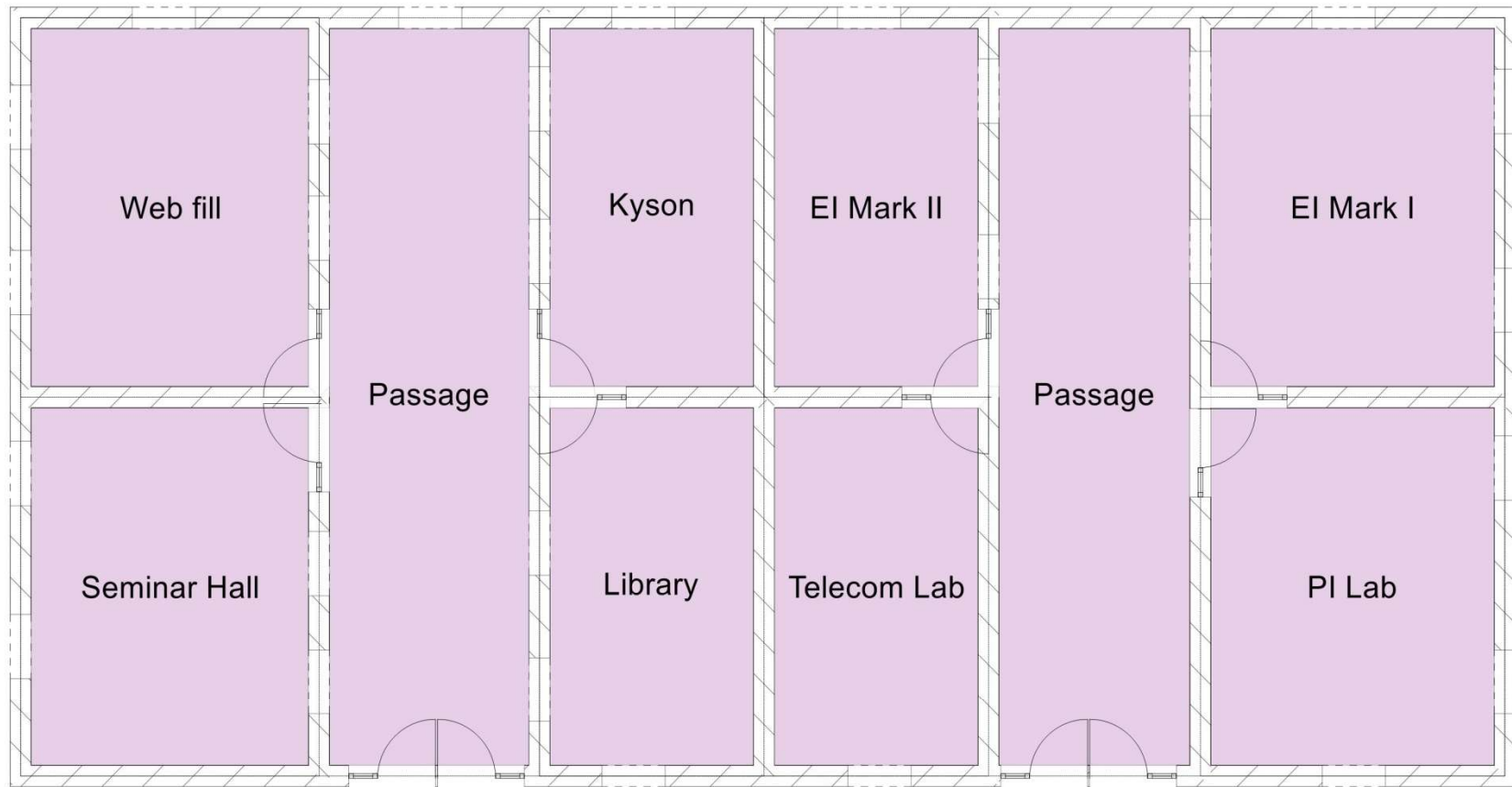
Water Purifier
machine at STTC.

D.O.I. : JUNE -
2024

BLOCK 'A'



BLOCK 'B'



W ← → E

TRAINING POSITION SUMMARY 2022-23

(JANUARY 2022 to APRIL 2023)

SIGNAL

Course	No. of candidates Trained
Initial Signal	38+9=47
Foundation Signal	34
Promotee JE/SIG(Promoted under 40% quota)	21
Refresher Signal	96(off line)+36(on line)+80(only Online Portion)=212 303+212=515
Refresher Help/Signal	22
Equipment Signal	271+158=429
Total	1068

TELECOM

Course	No. of candidates Trained
Initial Telecom	07
Foundation Telecom	18
Refresher Telecom	74+83(only on line Portion)=157
Refresher Help/Tele	38
Equipment Telecom	140+36=176
Total	358

GRAND TOTAL (Signal and Tele) 1426

VACANCY POSITION OF STTC/DNR AS ON 10.04.2023

Sr. No.	Post	Pay Band	Grade Pay	Sanction Post	Man on Roll	Vacancy
01	Principal (JAG)	***	***	01	01	00
02	SSE/Signal	9300-34800	4600	05	04	01
03	SSE/Tele	9300-34800	4600	03	02	01
04	JE/Signal	9300-34800	4200	01	01	00
05	OS	9300-34800	4200	01	00	01
06	Sr Clerk	5200-20200	2800	00	01	+01(Excess)
07	SIM-I	5200-20200	2800	02	01	01
08	TCM-I	5200-20200	2800	02	02	00
09	SIM-II	5200-20200	2400	00	00	00
10	TCM-II	5200-20200	2400	00	02	+02(Excess)
11	SIM-III	5200-20200	1900	04	04	00
12	TCM-III	5200-20200	1900	03	00	03
13	Assistant(Sig/Tele)	5200-20200	1800	07	09	+02(Excess)
Total				29	27	02(Vacancy)

Note -(i) One Post MCM/Tele is to be posted vide GM(P)/HJP's Office order No.57/2023 dt. 06.03.2023 against one vacant post of SSE/Tele.

(ii) One Post ESM-I is to be posted vide GM(P)/HJP's Office order No.64/2023 dt. 20.03.2023

Sr.No.	Description
Signalling	
1	Automatic Signalling System
2	IBS Lab
3	TCAS (KAVACH) Lab
4	Requirement of thick web Switch (TWS)
5	Provision of cross over
6	MSDAC
7	AFTC
Telecom	
8	IP Telephony Exchange with VOIP phones (10 no.)
9	IP based CCTV System
10	IPIS system -01no.
11	Computer & Networking Lab-05nos.
12	IP-MPLS system-01no.
13	Interactive Video Wall- 04 no.
14	NVR
15	MAPLE
16	Voice Logger
General	
17	Landscaping of Playground in front of new Hostel
18	Covering of front Drainage system
19	Up gradation of Classrooms-04nos in additional 02 nos. Augmentation & up gradation of class room from existing 02no. to 04 no.
20	Provision of Four- wheeler/Two wheeler parking area
21	Provision of Indoor sports & Gymnasium facility for trainees
22	24 Hours Emergency Power supply at STTC/DNR
23	Provision of Flood light at back yard of STTC/DNR
24	Provision of AC in EI Mark-I &II, Conference Hall, Class Room 1 & 2
25	Construction of New Hostel & installation of EI (KYOSAN Make)

THANK
you