NHSRCL
National High Speed Rail Corporation Ltd.

Overview of Training Institute at Vadodara for National High Speed Rail Corporation Ltd.(NHSRCL)

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Project Background

NHSRCL plans to develop a Training Institute at Vadodara City to train staff of High Speed Rail. The facility shall be used for providing training (Japanese style) and lodging. The construction works have been divided into 3 packages:

- TI-1 (This Package)
- TI-2 (Training Slab Tracks) – Already awarded
- TI-3 (Lodging Building) – Already awarded

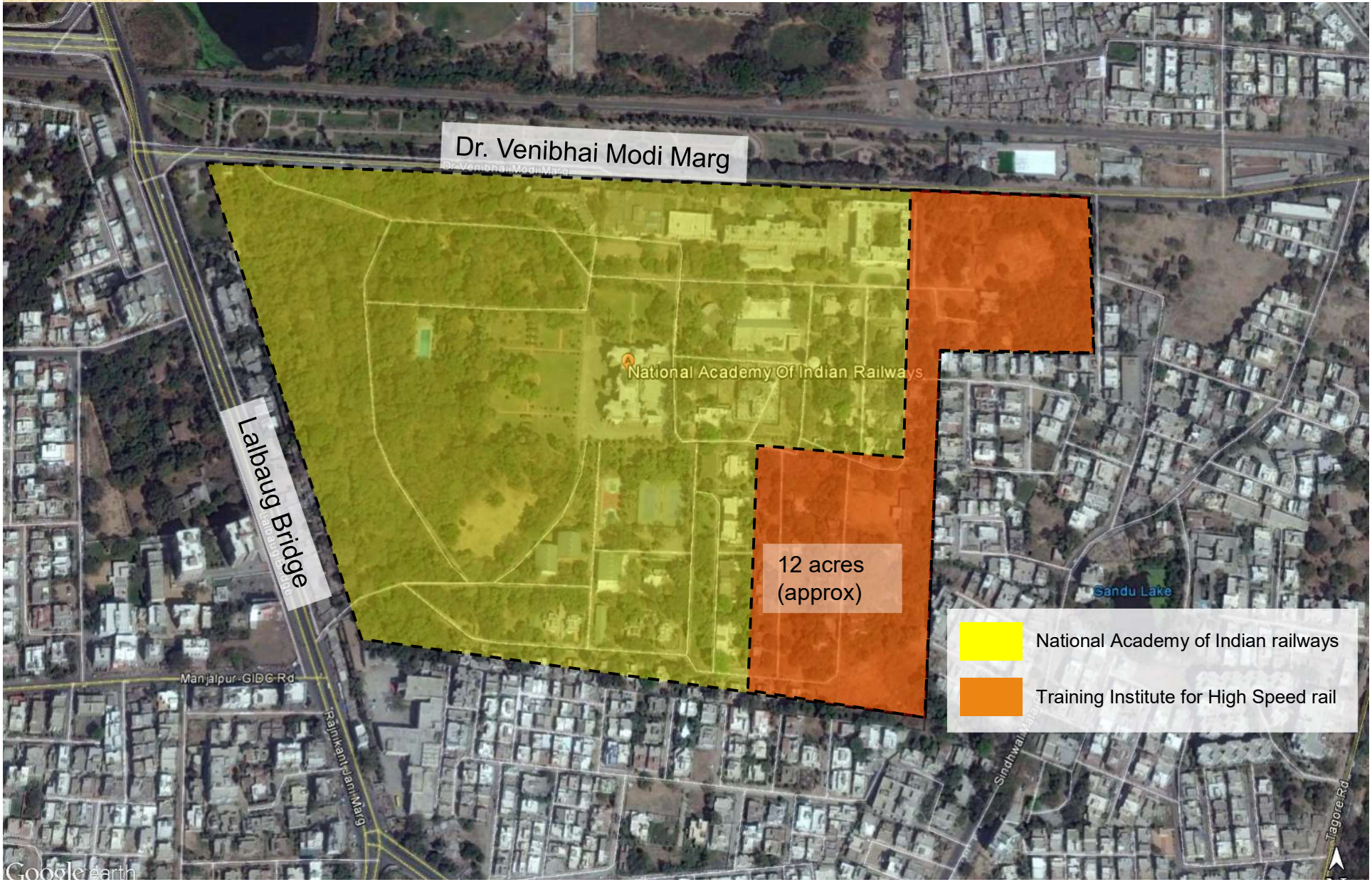
(Construction work for TI-2 and TI-3 has already started on site)

The Contractor for TI-1 Package is expected to interface with TI-2 and TI-3.

Design and Construction Duration: 24 months

Site Location

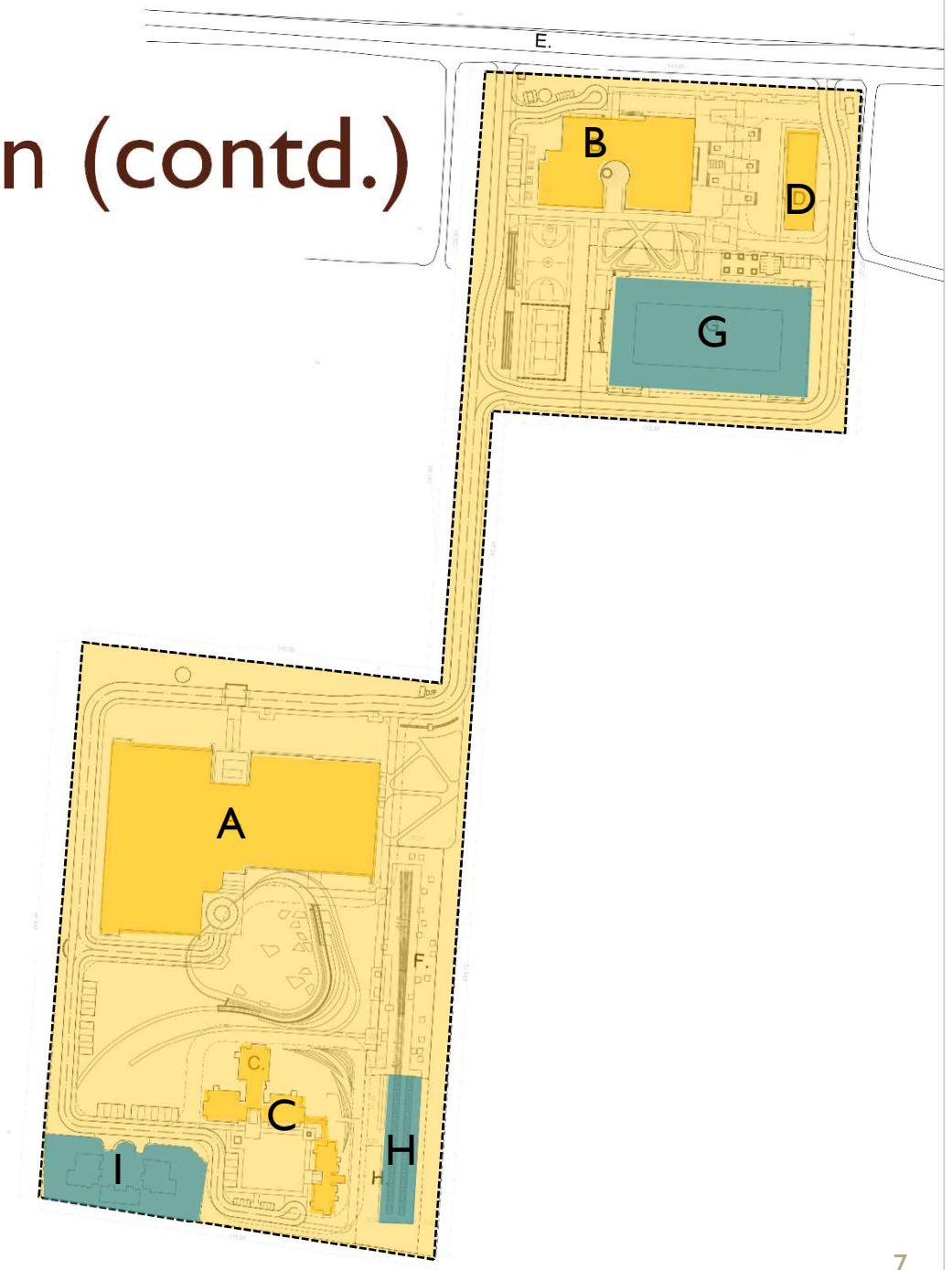
Site Location (within the campus of existing 'National Academy of Indian railways (NAIR' at Vadodara, Gujarat)



Site Location (contd.)

TI – I	
Area No.	Title
A	Main Building
B	Canteen Building
C	Residential Building
D	Utility Building
	Landscape Areas

Exclusions	
Area No.	Title
G	TI3 – Lodging
H	TI2 - Slab Track
I	Existing Residences



Scope of Works for TI-1

Main Bldg.	Residential Bldg.	Canteen Bldg.	Utility Bldg.	Landscape Works	Gate House

BUILDING SERVICES

Mechanical Installations	Electrical Installations		Structural Aspects
A/C Ventilation Plumbing Fire Protection STP	LV Power Earthing/Bonding Lighting & Control LV Small Power Lightning Protection Electrical Substation Solar PV system Emergency Generator System	UPS System Voice, Data, &TV Cabling Security System Fire detection & Alarm Smoke detection System Public Address/Voice Alarm Building Management System Audio-Visual Devices	Str. Design Str. Scheme Methods Materials
			Architectural
			Architectural works Furniture, Kitchen Equipment

Coordination

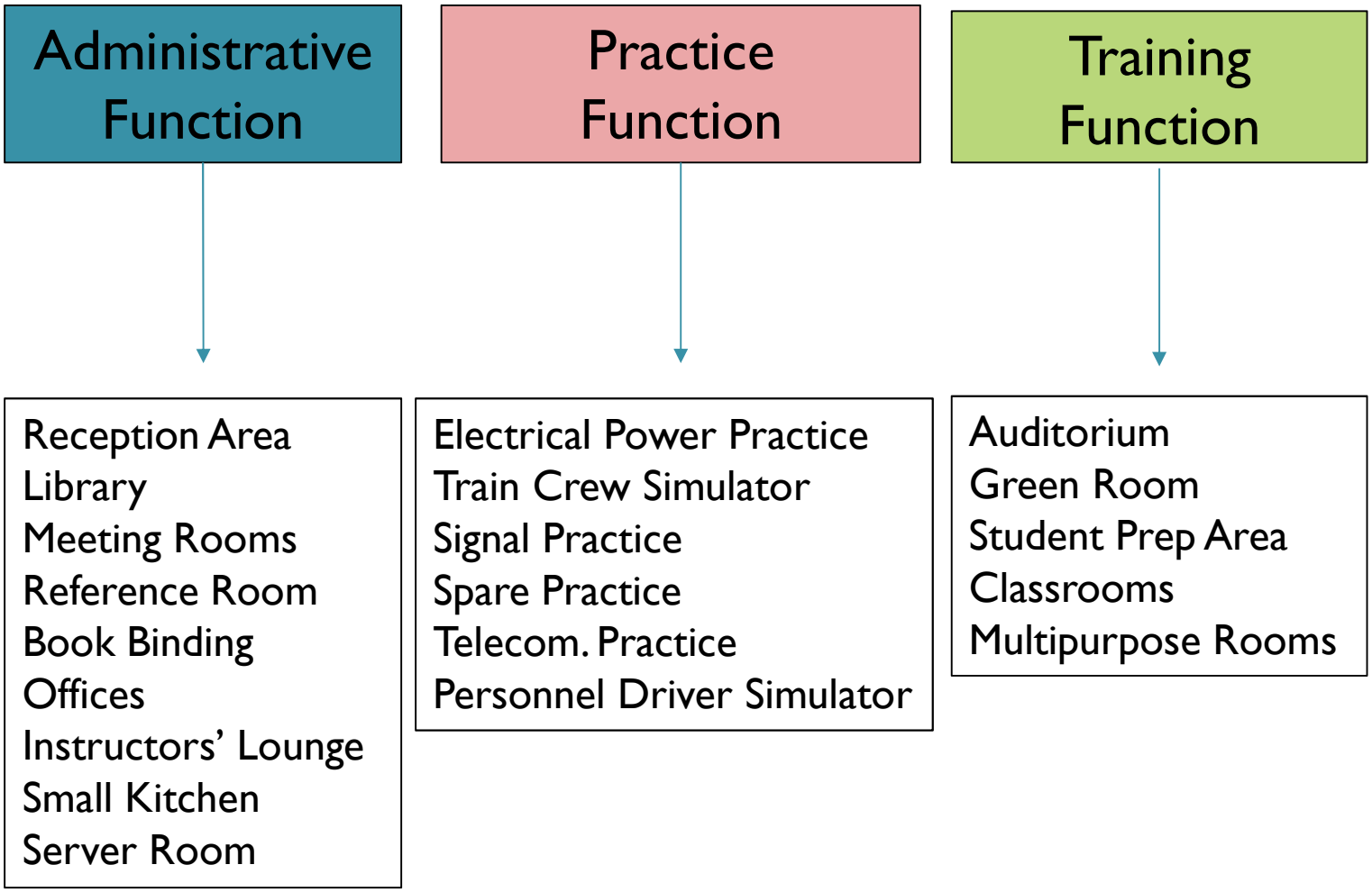
- Coord. With Public Utilities
- Coord. With TI-03
- Coord. With TI-02

Equipment

- Train set Simulator 2 types
- Track turn out and Expansion joint
- Power Supply
- Signalling
- Telecommunication

Facility Outline

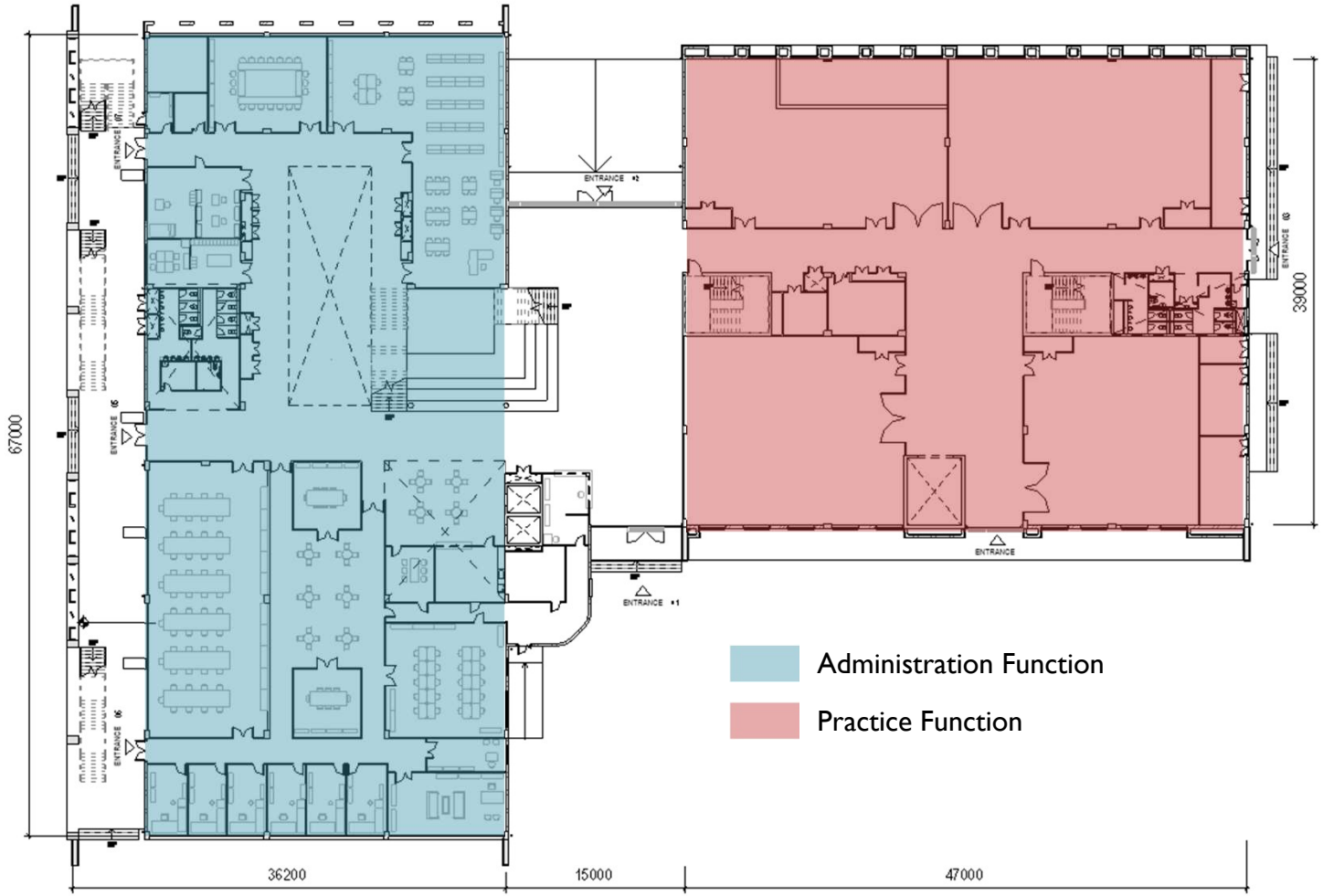
Main Building



Summary of Main Building

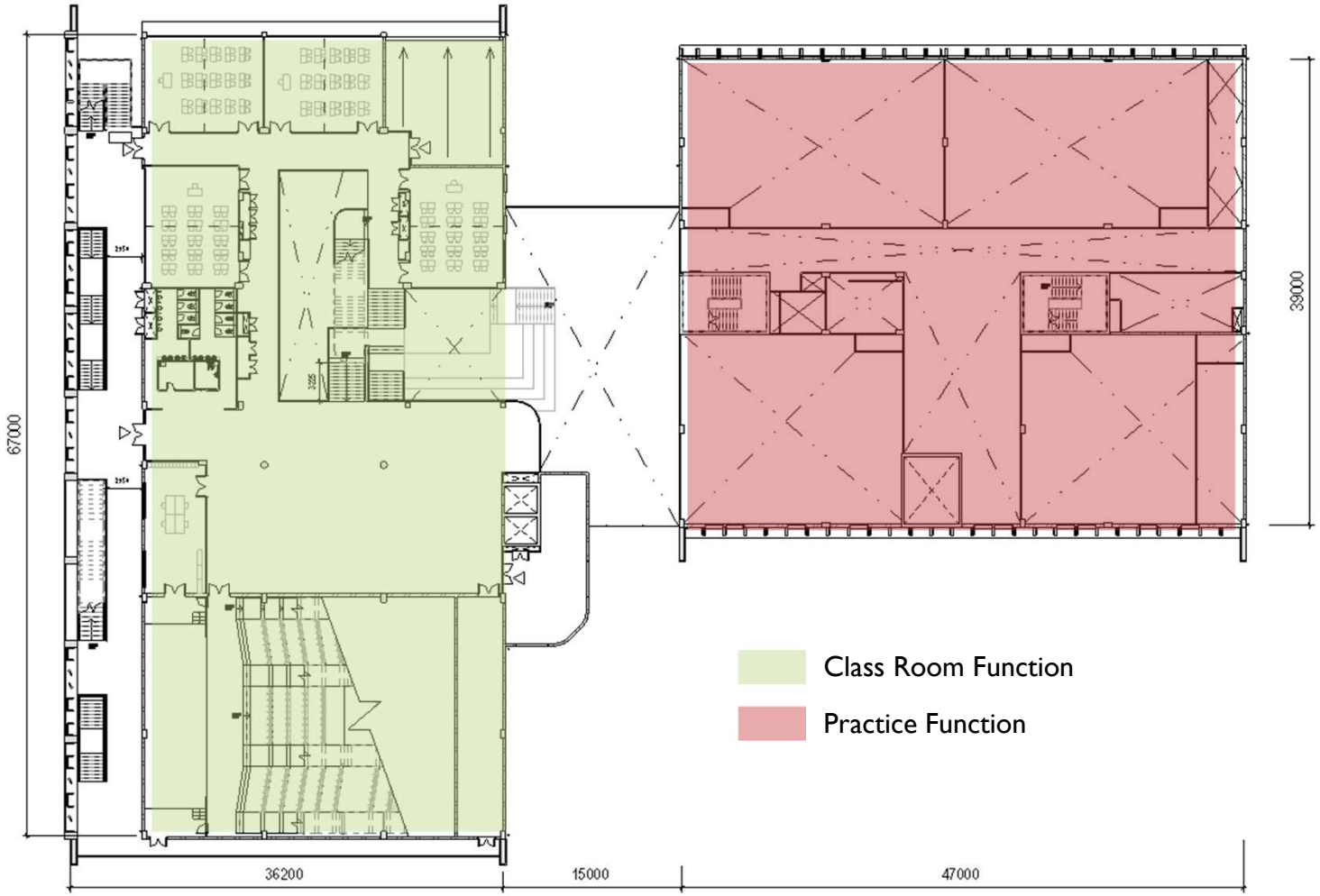
Scope	Requirement
Architecture	• 6 Practice rooms and 2 large storage rooms • 250 seater auditorium • Administration Area • 12 classrooms and 3 Multipurpose rooms • 13 persons Passenger Lift x 2 • 3000kg Cargo Lift x 1 • Design considering equipment in the practice room • Furniture supply included
Structure	• Column & Beam Structure
Electrical	• Power supply system distributed through multiple strategically placed pipe shafts • Power supply for Training Equipment shall be through distribution board
Mechanical	• Municipal water pumped from underground tanks to OHT • Sunken slabs in toilets for accommodating services • VRF HVAC System

Main Building



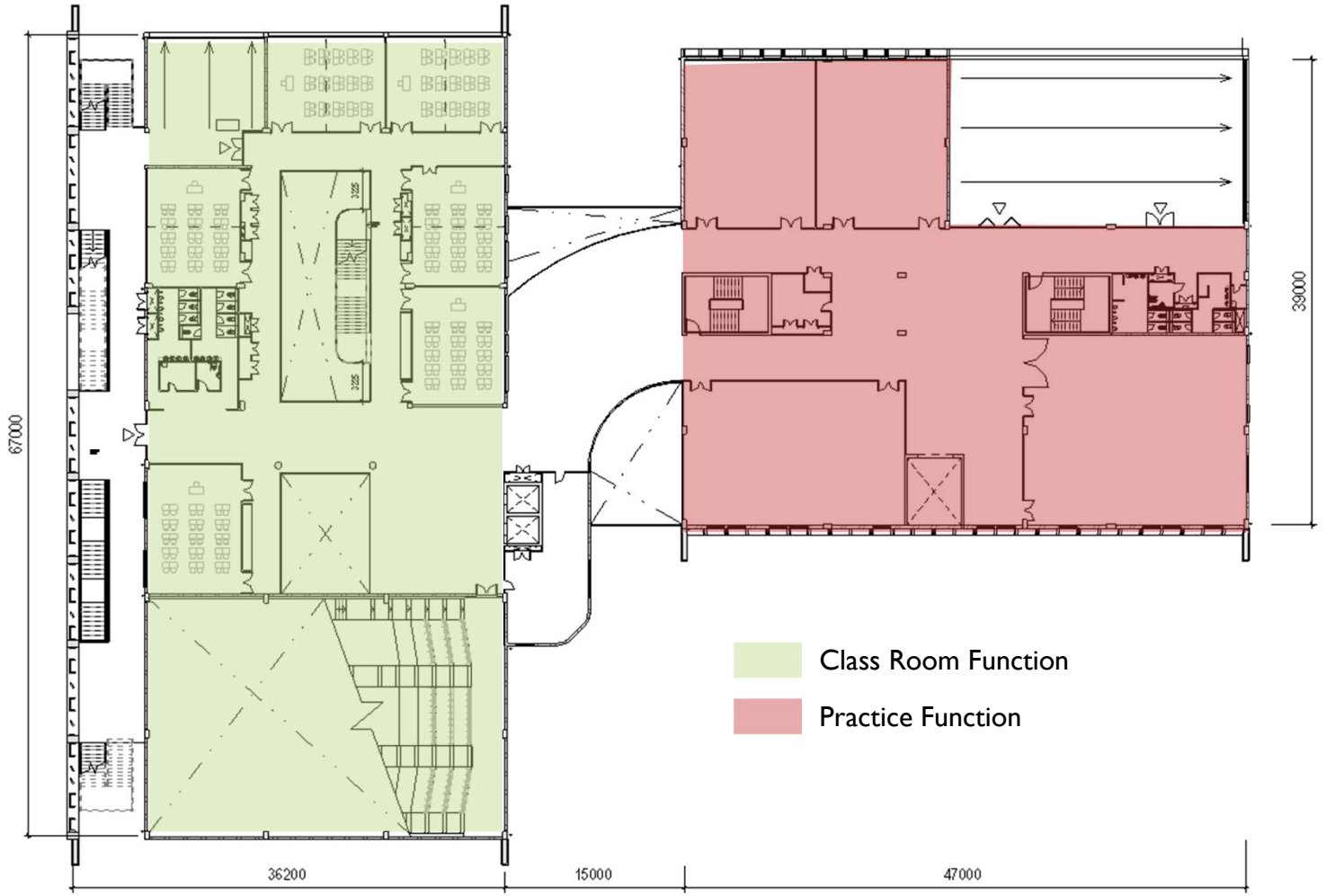
Ground Floor

Main Building



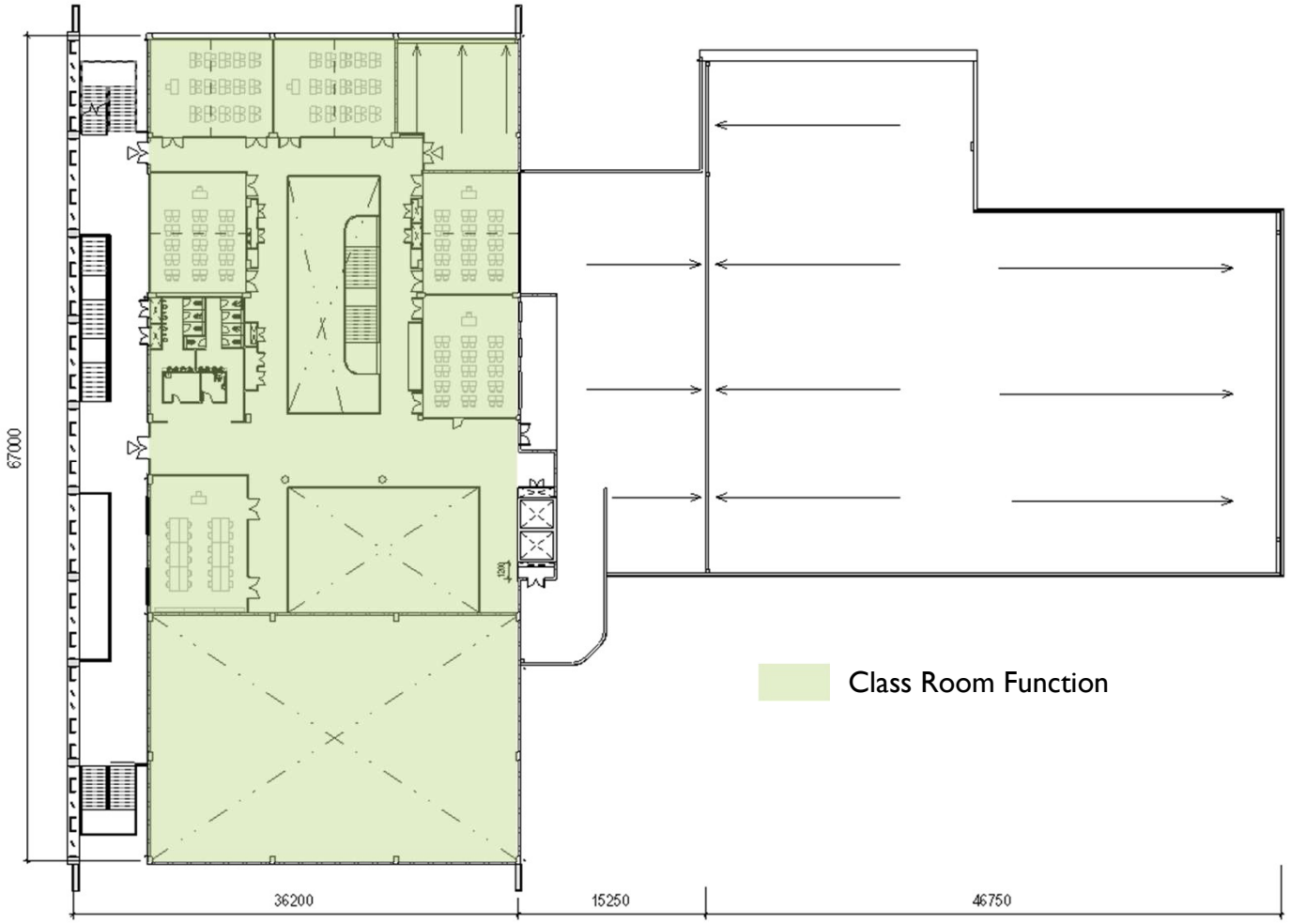
1st Floor

Main Building



2nd Floor

Main Building

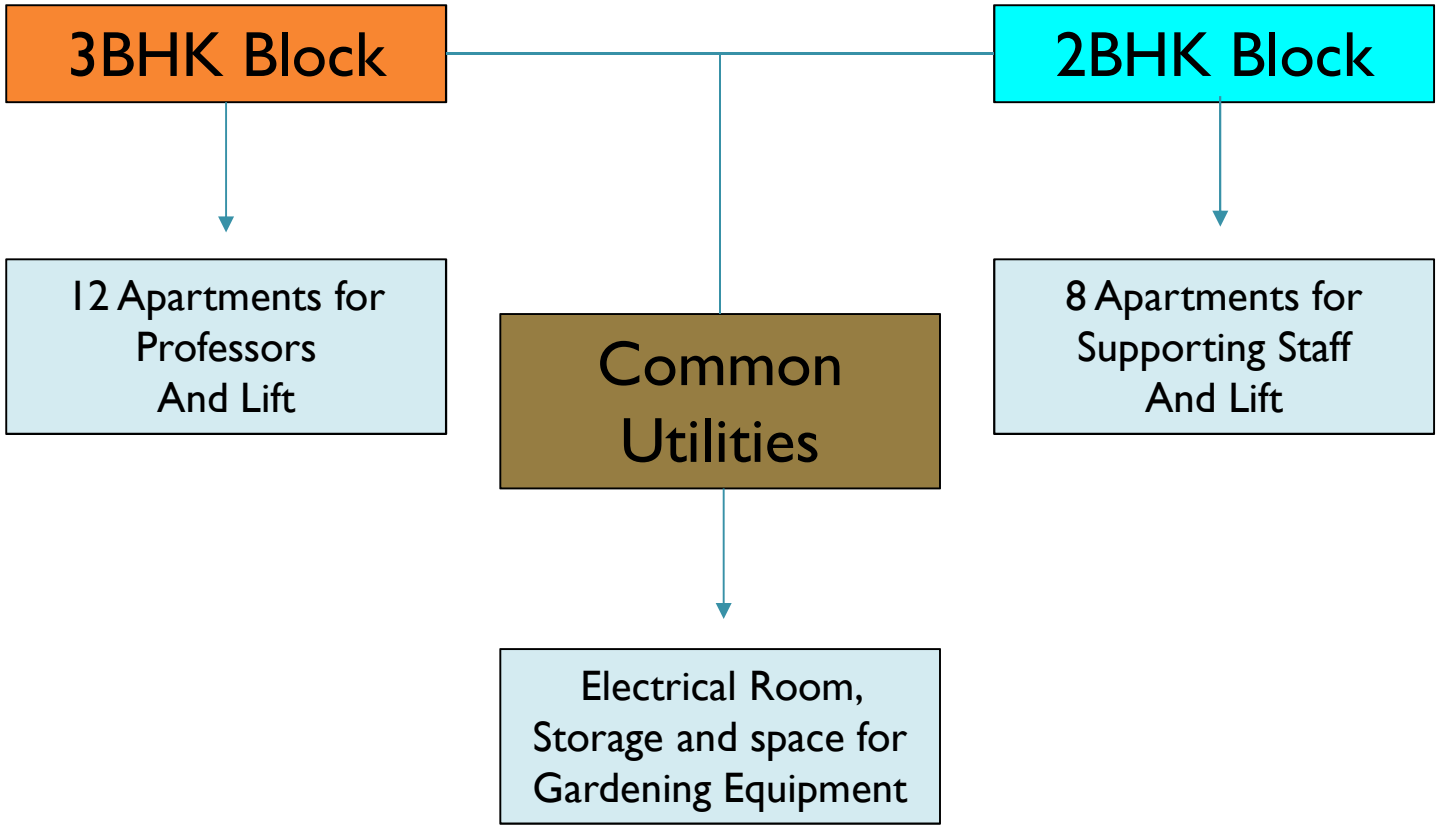


3rd Floor

3D view of Main Building (option 1)

3D view of Main Building (option 2)

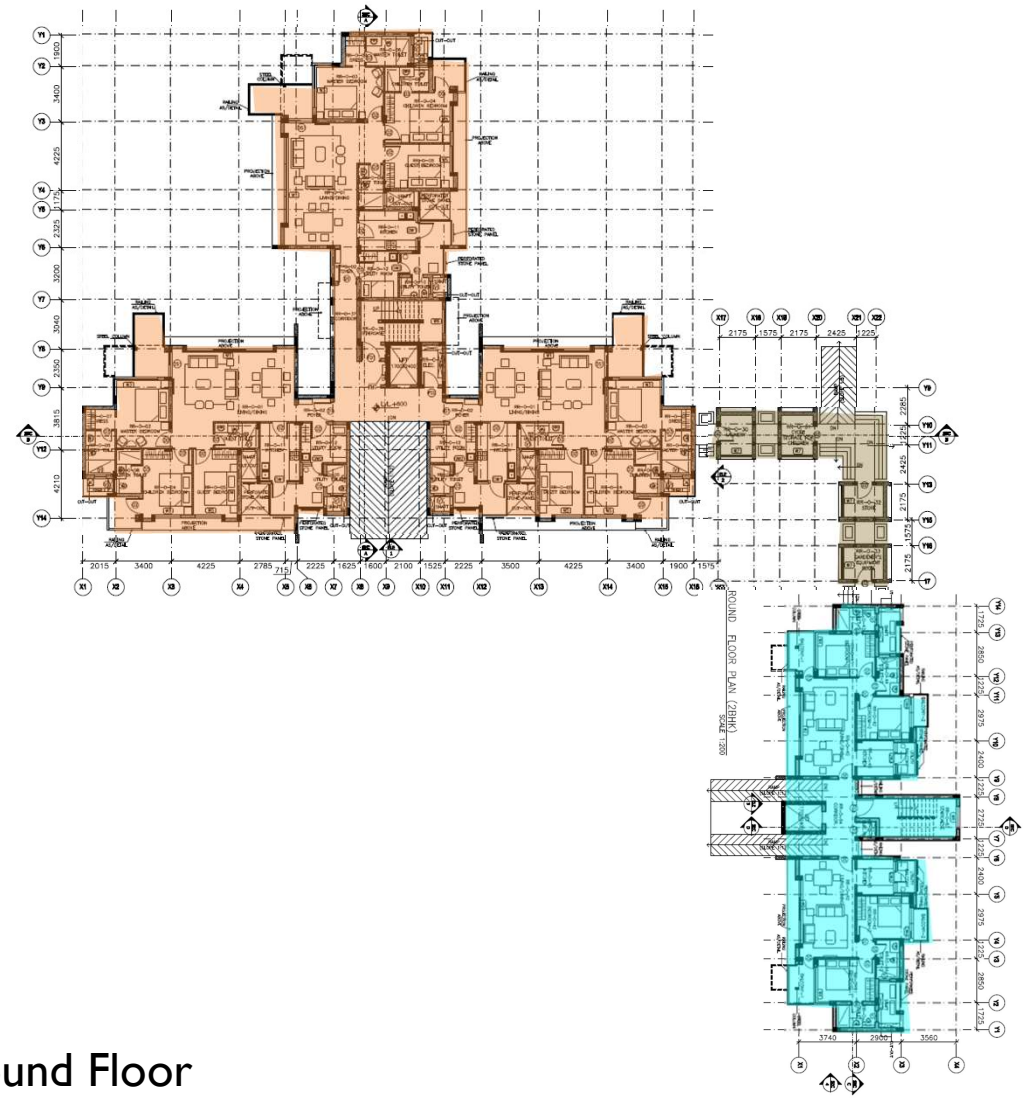
Residential Building



Summary of Residential Building

Scope	Requirement
Architecture	• 12 Furnished Apartments for Professors and Lift • 8 Furnished Apartments for Supporting Staff and Lift • Electrical room, Storage and Gardening Equipment • No furniture
Structure	• Column & Beam Structure
Electrical	• Supply to all units from electrical room in core area
Mechanical	• Municipal water pumped from underground tanks to OHT • AC units shall not be provided, only provision shall be made for wall mount split AC units with required wiring/ conduits and water drainage

Residential Building



3BHK Block

2BHK Block

Common Utilities

Ground Floor

Canteen Building

Canteen Function

Kitchen	Seating Area	Party Room	Terrace
Serving up to 400 people, 3 Meals per day and Fixed kitchen equipment	Tables and Chairs for 170 Diners	Food Service for 60 people	Spill over area

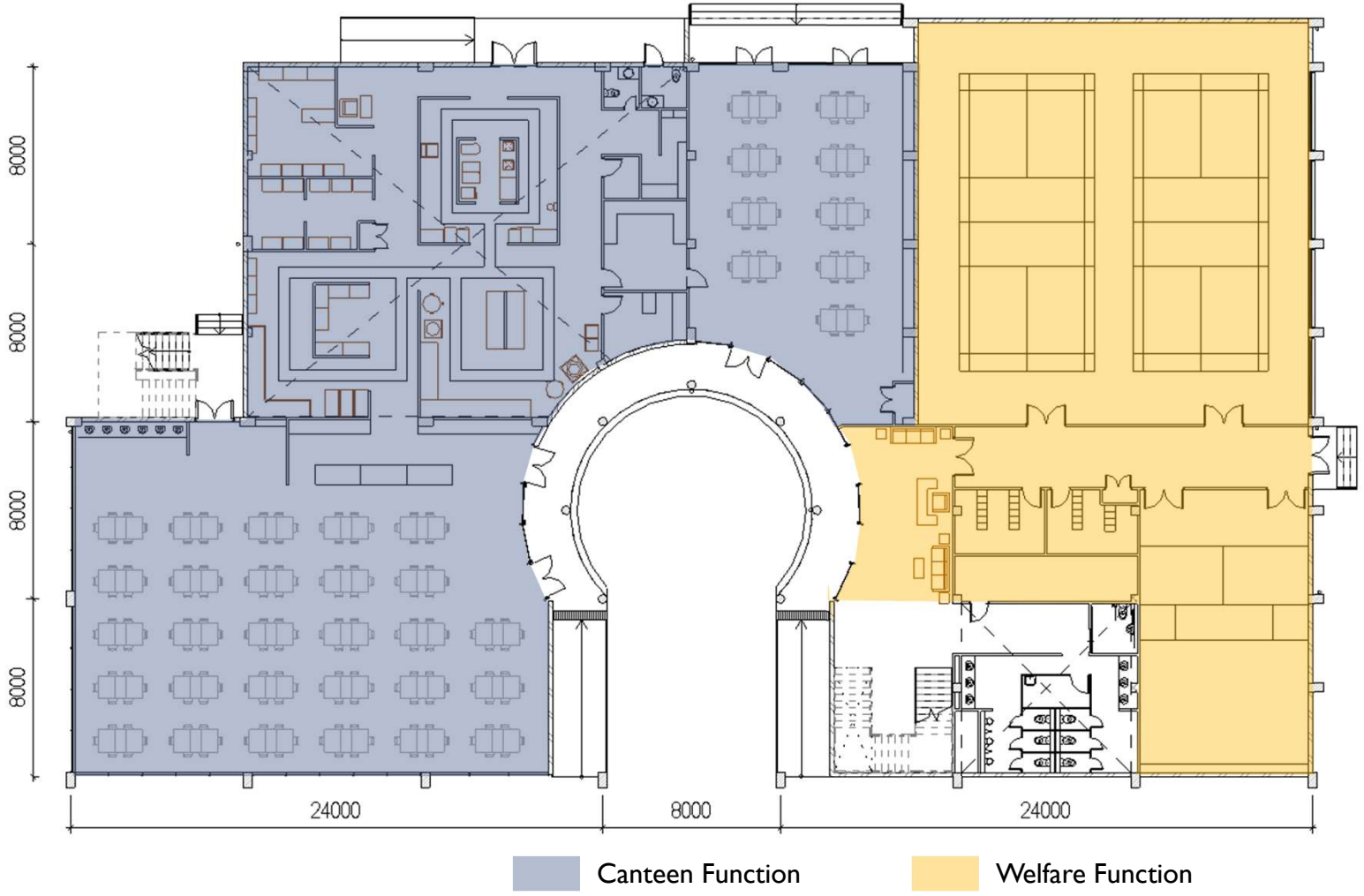
Welfare Function

Badminton Court	Squash Court	Gym	Snooker
2 nos. Courts	1no. Unobstructed Court	For Basic standard equipment	Billiards Table popularly used in India

Summary of Canteen Building

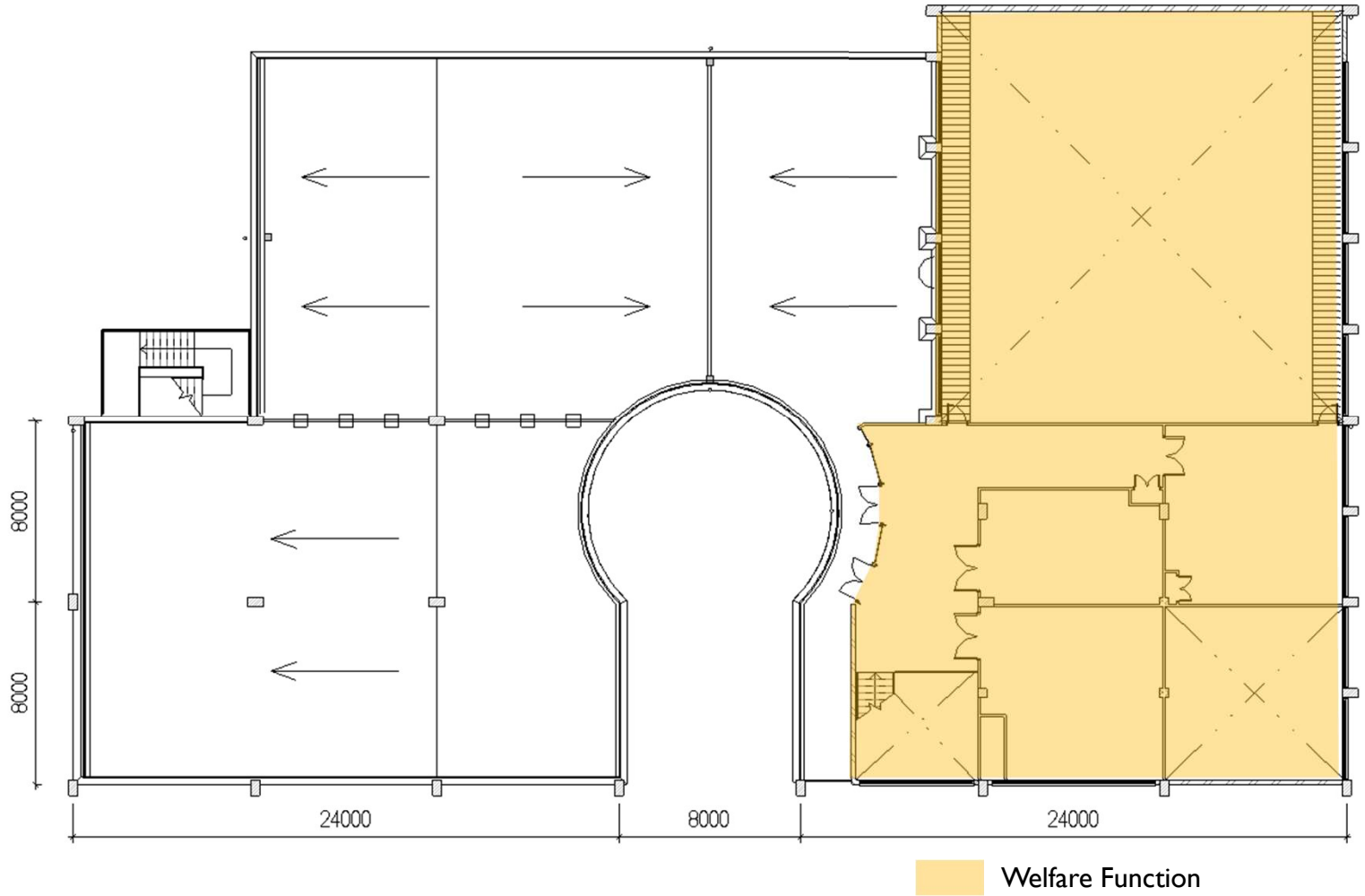
Scope	Requirement
Architecture	• Serving up to 400 People, 3 meals per day and Fixed equipment for kitchen • Tables and Chairs for 170 Diners for seating area • Food Service for 60 people for party room • Two Badminton courts • One Squash court • Gym (No equipment to be provided) • Snooker Room (No Billiards Table to be provided) • The existing neem tree shall be preserved and incorporated in the courtyard
Structure	• Column & Beam Structure
Electrical	• Supply to all spaces from electrical room
Mechanical	• Overhead water tank receiving water supply from utility building • Packaged and split type DX (direct expansion) air conditioning system

Canteen Building



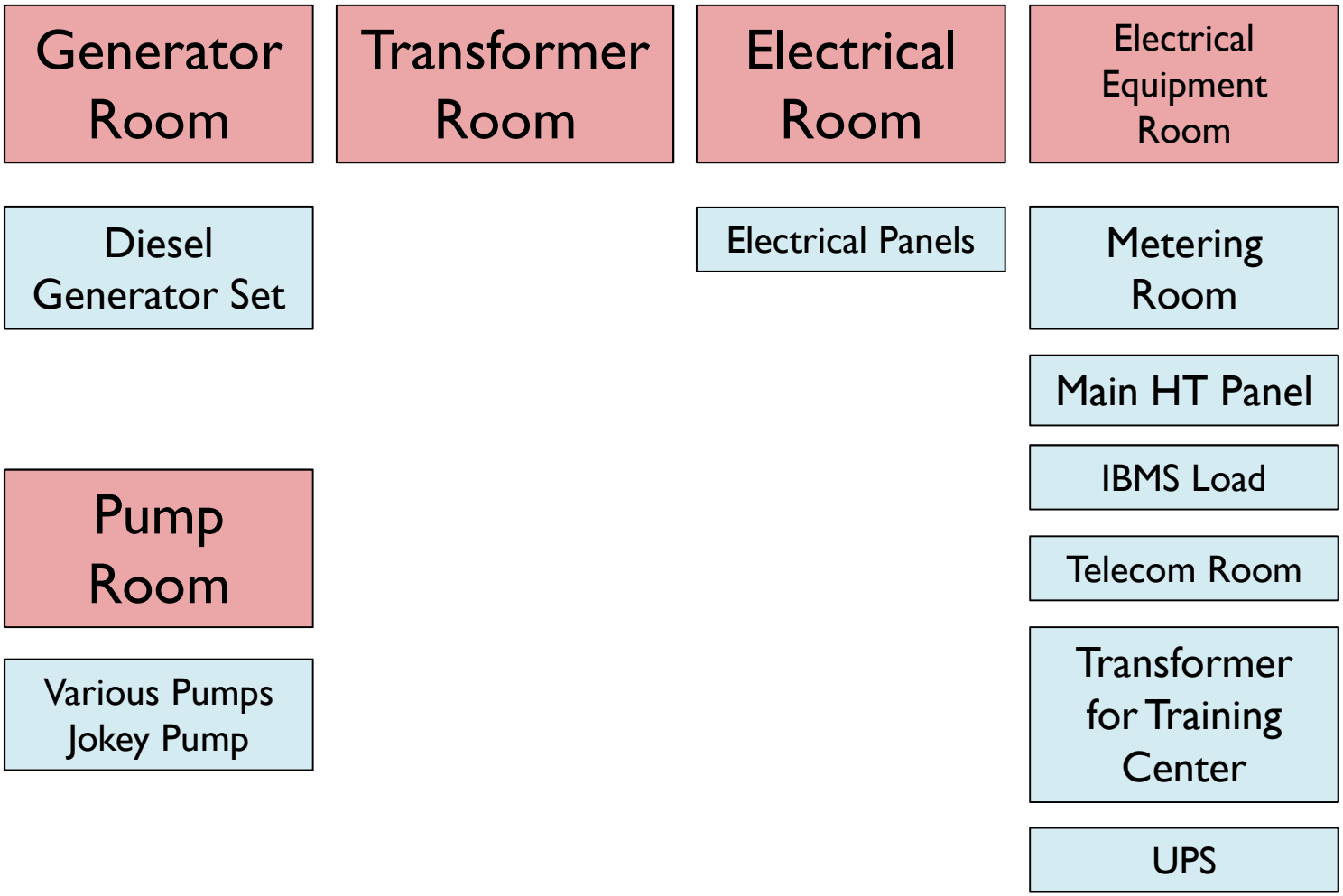
Ground Floor

Canteen Building

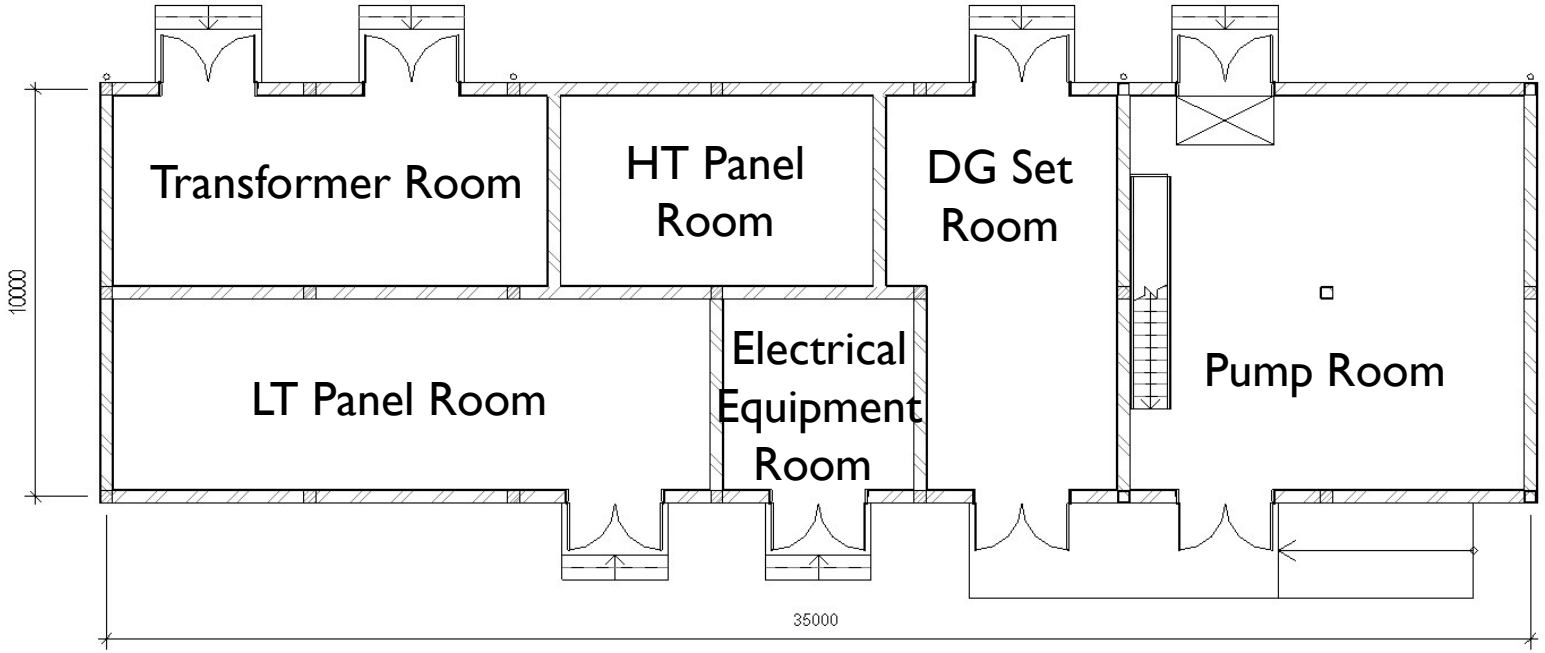


Terrace Floor

Utility Building



Utility Building



Ground Floor

Landscape

Site Works

Site Roads | Fire Tender Paths | Street & Landscape Lighting

Planting | Pathways | Gate | Boundary Walls

North Side Areas (L-1 to L-4)

Canteen Bldg. Block | Sports Block | Lodging Bldg. Block | Utility Bldg. Block

South Side Areas (L-5 to L-7)

Main Bldg. Block | Residential Building Block | Outside Equipment Block

Landscape

Overall Landscape area = 35007 sqm (8.7 acres) approx.

TI – I – Landscaped areas		
Area No.	Title	Footprint (in sqm) approx.
1	Basketball and Tennis courts	1425
2	Plaza	3400
3	Open Air Theatre	2115
4	Residential greens	500
Total		7440 (1.8 acres)

Landscape Components	
Hardscape	Softscape
Pathways + FTP	Lawns
Plaza	Mounds
Roads + Parking	Shrub beds
Play courts	Plants + trees

Architectural Specification Requirements

	MAIN BUILDING								
	ADMINISTRATION		PRACTICE ROOMS		TRAINING		COMMON AREAS		
	Lecturer's Office, Administration Office, etc.	Professor Office, Director Office, etc.	(Ground Floor) Electric Power Practice Room, Train Crew Simulator Room, etc.	(2nd floor) Personal Driver Simulator Room, Telecom Practice Room, etc.	Class Room, Multi Purpose Room, etc.	Auditorium	Toilet, Toilet for differently abled, House Keeping, Kitchen, etc.	Corridor	Storage
Floor Finish	Vitrified Tile - Double charge, polished tile	Vitrified Tile - Double charge, polished tile	Epoxy Terrazzo flooring	High Pressure Laminate with Raised Access Floor	Vitrified Tile - Double charge, polished tile	Hard Wood Flooring	Vitrified Tile – GVT, matt, anti-skid	Vitrified Tile – GVT, matt, anti-skid	Kota Stone
Ceiling Finish	Calcium Silicate False Ceiling	Calcium Silicate False Ceiling	Emulsion Paint	Emulsion Paint	Calcium Silicate False Ceiling	Curved Metal False Ceiling	Metal False Ceiling for high moisture areas	Metal False Ceiling	Oil Bound Distemper
Wall Core	Brick + Cement	Brick + Cement	Dry Wall	Dry Wall	Brick + Cement	Brick + Cement	Brick + Cement	Brick + Cement	Brick + Cement
Wall Finish	Emulsion Paint	Emulsion Paint	Emulsion Paint	Emulsion Paint	Emulsion Paint	Acoustic wall panel in high density fiber board	Ceramic Tile	Emulsion Paint	Oil Bound Distemper
Skirting	Vitrified Tile - Double charge, polished tile	Vitrified Tile - Double charge, polished tile	Epoxy Terrazzo	Kota Stone	Vitrified Tile - Double charge, polished tile	Hard Wood	-	Vitrified Tile – GVT, matt, anti-skid	Kota Stone

	UTILITY	CANTEEN		RESIDENTIAL
	Generator Room, Transformer Room etc.	Canteen (Seating Area)	Welfare Area (Badminton Court, Squash Court, etc.,)	Bed Room, Living/Dining
Floor Finish	Non-metallic floor hardener	Vitrified Tile, GVT, matt	Wooden Floor with shock absorption pads	Vitrified Tile, double charge, polished
Ceiling Finish	Oil Bound Distemper	Metal False Ceiling	Emulsion Paint	Emulsion Paint
Wall Core	Brick + Cement	Brick + Cement	Brick + Cement	Brick + Cement
Wall Finish	Oil Bound Distemper	Emulsion Paint	Emulsion Paint	Emulsion Paint
Skirting	Non-metallic floor hardener	Vitrified Tile, GVT, matt	Wood	Vitrified Tile, double charge, polished

Structural Specification Requirements

Structure for the various building types

	Main Building	Canteen Building	Residential	Utility
Structural Material	RCC	RCC	RCC	RCC
Structural Scheme	Column and Beam (SMRF)	Column and Beam (SMRF)	Column and Beam (SMRF)	Column and Beam (SMRF)
Foundation	Isolated/ Strip Footing	Isolated Footing	Isolated/ Strip Footing	Isolated Footing
Importance Factor	1.5	1.5	1.2	1.5
Response Reduction Factor	5.0	5.0	5.0	5.0
Long Span Solution	Pre-cast Slab	Pre-Cast Slab	-	-
Expansion Joint	Shall be provided	-	Shall be provided	-

Structural drawings given in the bidding document are indicative only and the Contractor shall prepare detailed structural drawings

Electrical Design Scheme

Items	Design Scheme
Lighting	All lighting systems shall use LED as per NBC guidelines
Socket outlet	Shall be provided in adequate numbers
Telephone system	IP telephone system, IPBAX, , Shall be provided in all buildings
LAN/ WAN	LAN/ WAN shall be provided in all buildings
Audio-visual devices	**Auditorium – 1 room** - 1 set of projector and screen - 1 set of audio system **Large meeting room – 1 room** - Audio conferencing system with microphones - 3 nos. LED screen and projector with motorized screen - HD video conferencing system **Class room – 16 rooms** - 1 set of public announcement system - 1 set of projector and motorised screen **Director's room and small meeting room – 3 rooms** - Audio conferencing system with microphones - LED screen and projector with motorized screen - HD video conferencing system
Computer System	60 sets of CPU, monitor, software and necessary system
BMS	BMS service shall be integrated with "HVAC Plant - VRF System", "Electrical", "Tank and Water Pumps", "Fire Pumps", Fans", "Lift", "Fire Fighting System", "DG", "Fire Alarm and AV systems", "Automation Layer", "Management Layer", "Field Peripherals".
TV outlet	TV out let shall be provided in Office, Auditorium, Canteen, Living/Dining etc.,
Lightning Load	Follow NBC
Fire Alarm System	Follow NBC

Electrical Design Scheme

Items	Design Scheme
Lighting	All lighting systems shall use LED. Lighting illumination shall be as per IS 3646,IS.SP.72 and NBC guidelines.
Socket outlet	Shall be provided in adequate numbers.
Telephone system	IP telephone communication system including IPABX, active and passive components. IT Shall be provided in all buildings
LAN/ WAN	IT and Data network system including LAN/ WAN, router, switches, cabling and internet connections to be provided in all buildings.
Audio-visual devices	**Auditorium – 1 room** - 1 set of projector and screen - 1 set of audio system **Large meeting room – 1 room** - Audio conferencing system with microphones - 3 nos. LED screen and projector with motorized screen - HD video conferencing system **Class room – 16 rooms** - 1 set of public announcement system - 1 set of projector and motorised screen **Director's room and small meeting room – 3 rooms** - Audio conferencing system with microphones - LED screen and projector with motorized screen - HD video conferencing system
Computer System	60 sets of CPU, monitor, software and necessary system
BMS	BMS service shall be integrated with "HVAC Plant - VRF System", "Electrical", "Tank and Water Pumps", "Fire Pumps", Fans", "Lift", "Fire Fighting System", "DG", "Fire Alarm and AV systems", "Automation Layer", "Management Layer", "Field Peripherals".
CA/ SMA TV System	CA/ SMA system including Dish Antennae, head end equipment , cabling, set top box, and TV outlet. It shall be provided in Main Building, Canteen and residential buildings.
Lightning Load	Follow NBC.
Fire Alarm System	Follow NFPA 72 and IS 2189

Mechanical Specification Requirements

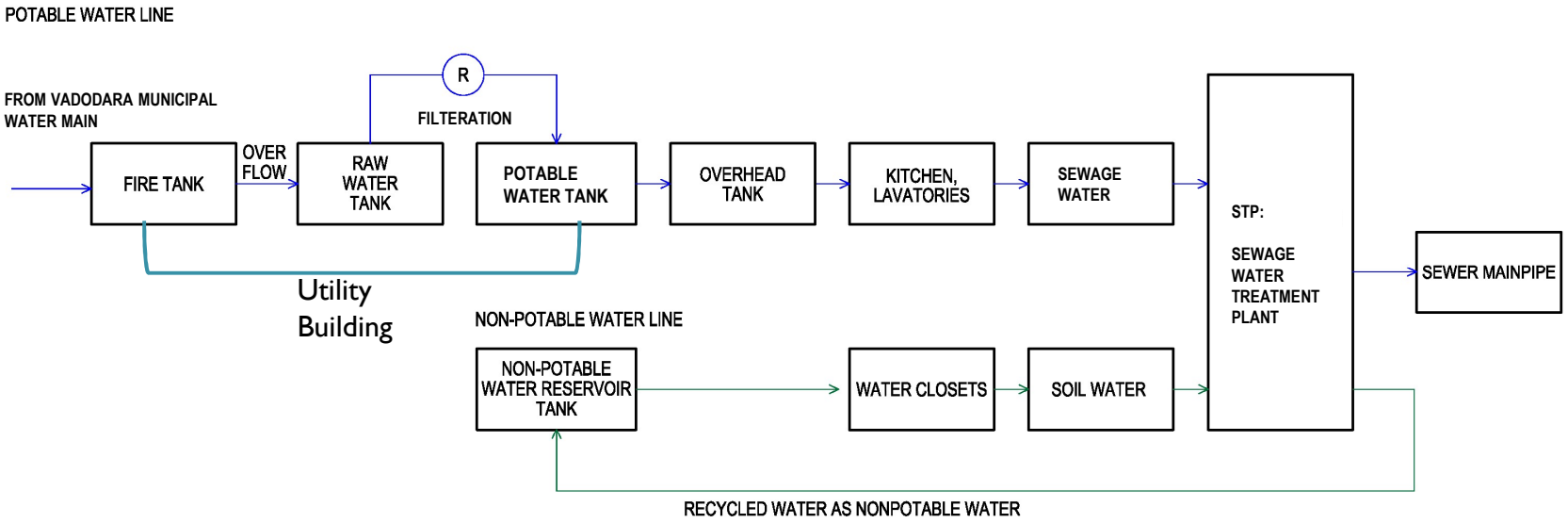
Mechanical Design Scheme

Items	Design Scheme
Water Supply System	Water from municipality shall be collected in underground water tank (UGT). Water shall be pumped from UGT to Overhead Water Tanks (OHT) which are placed over the different buildings. Water from OHT shall be supplied to the building areas through gravitational flow.
Rain Water Drainage System	Rain water shall be drained off from the entire site into the NAIR drainage line Rain water harvesting pits shall be provided following NBC
HVAC System	Using VRF system Indoor unit for practice room shall be Duct System for protection of equipment Auditorium shall have mixed-use HVAC and Total Enthalpy Heat Exchanger
Ventilation System	Follow NBC
Smoke Control System	Follow NBC
Kitchen Equipment	Supply and Install equipment
Sanitary	Adequate number of Sanitary fixtures shall be provided (including all accessories)

Mechanical Design Scheme

■ Water Supply and Sewage System

- Gravitational water supply system
- Water recycling system for non-potable water.



Water Supply and Sewerage System Diagram

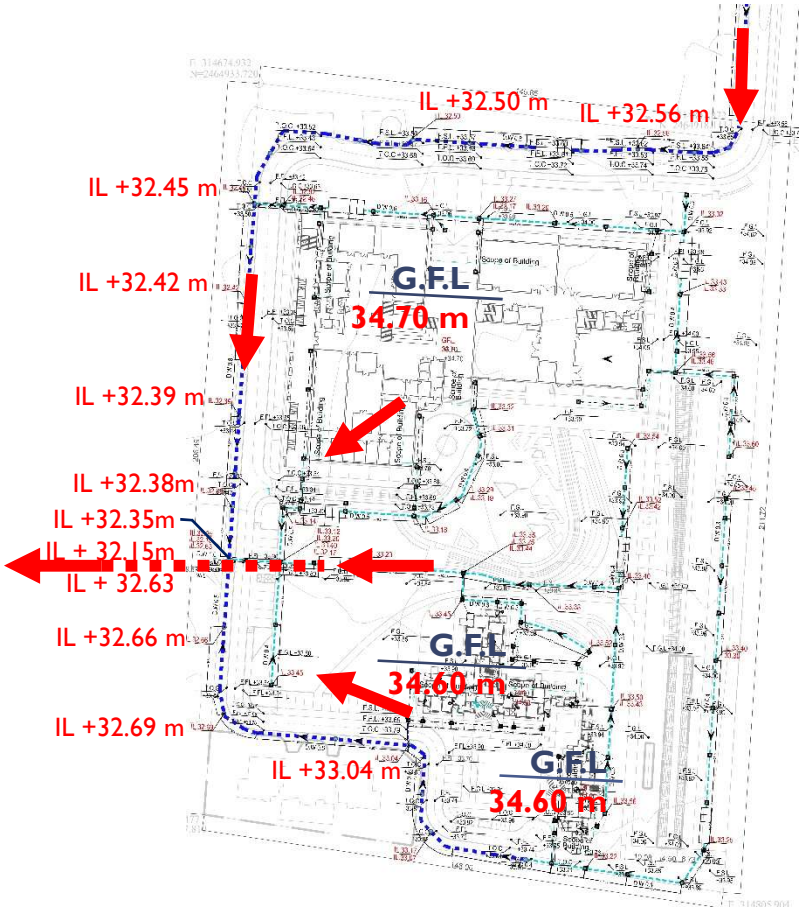
Mechanical Design Scheme

■ Storm Water Drainage System

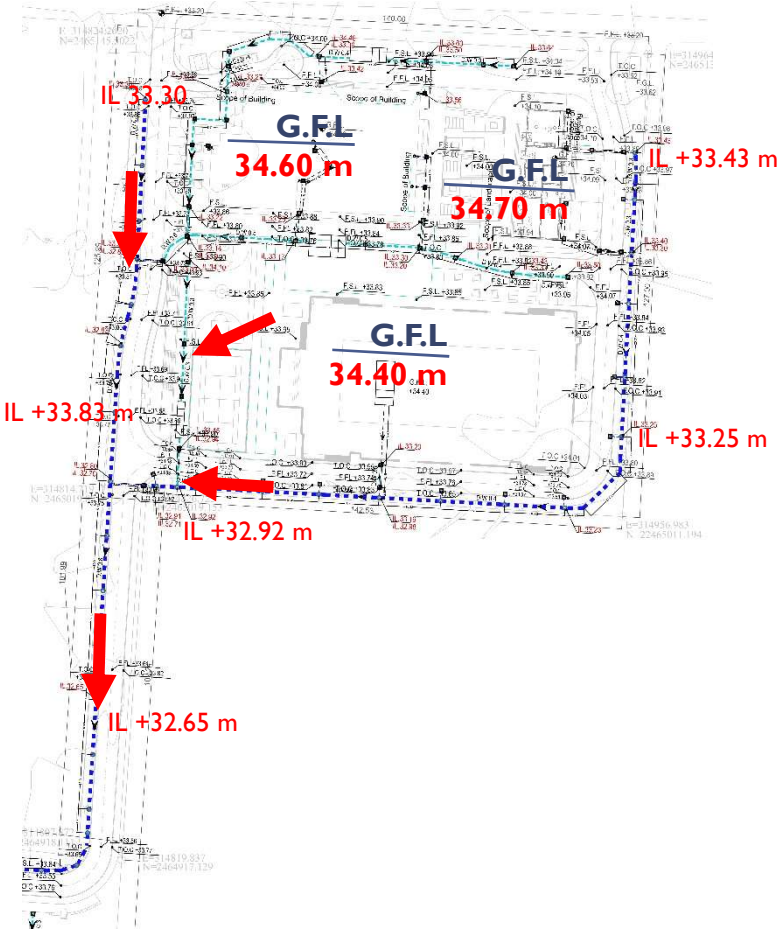
Storm Water shall be released to existing NAIR drainage line.

Release to NAIR Drainage line

Invert Level of Existing Drain at NAIR - **32.093m**



South Side

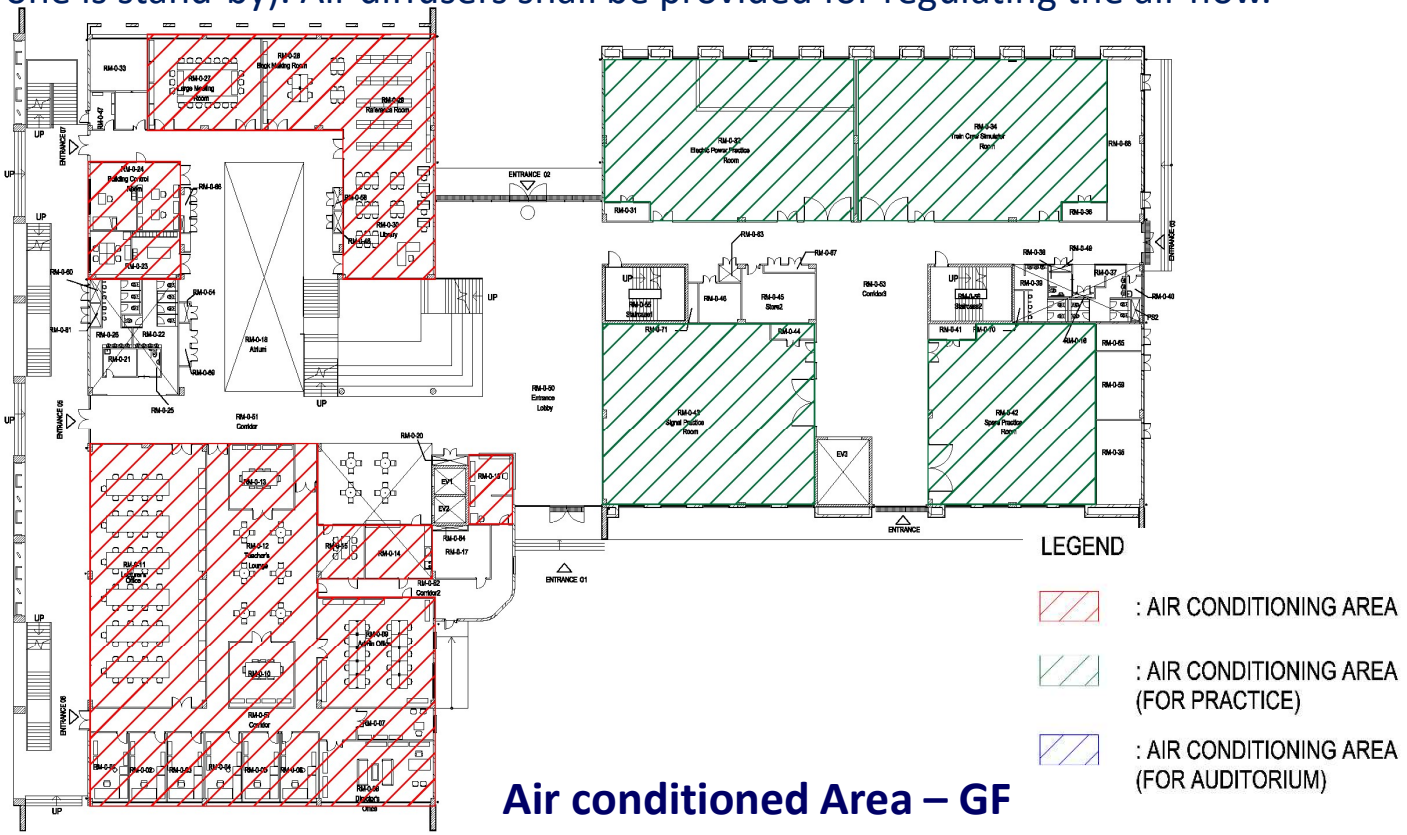


North Side

Mechanical Design Scheme

■ Air Conditioning System Ground Floor Plan

All occupied space will be provided with air conditioning and ventilation.
Variable Refrigerant Flow type air conditioners are suitable, considering their energy efficiency and operability from a maintenance point of view.
The practice room shall be provided with 2 nos. of floor mount type air conditioners (out of these, one is stand-by). Air diffusers shall be provided for regulating the air flow.



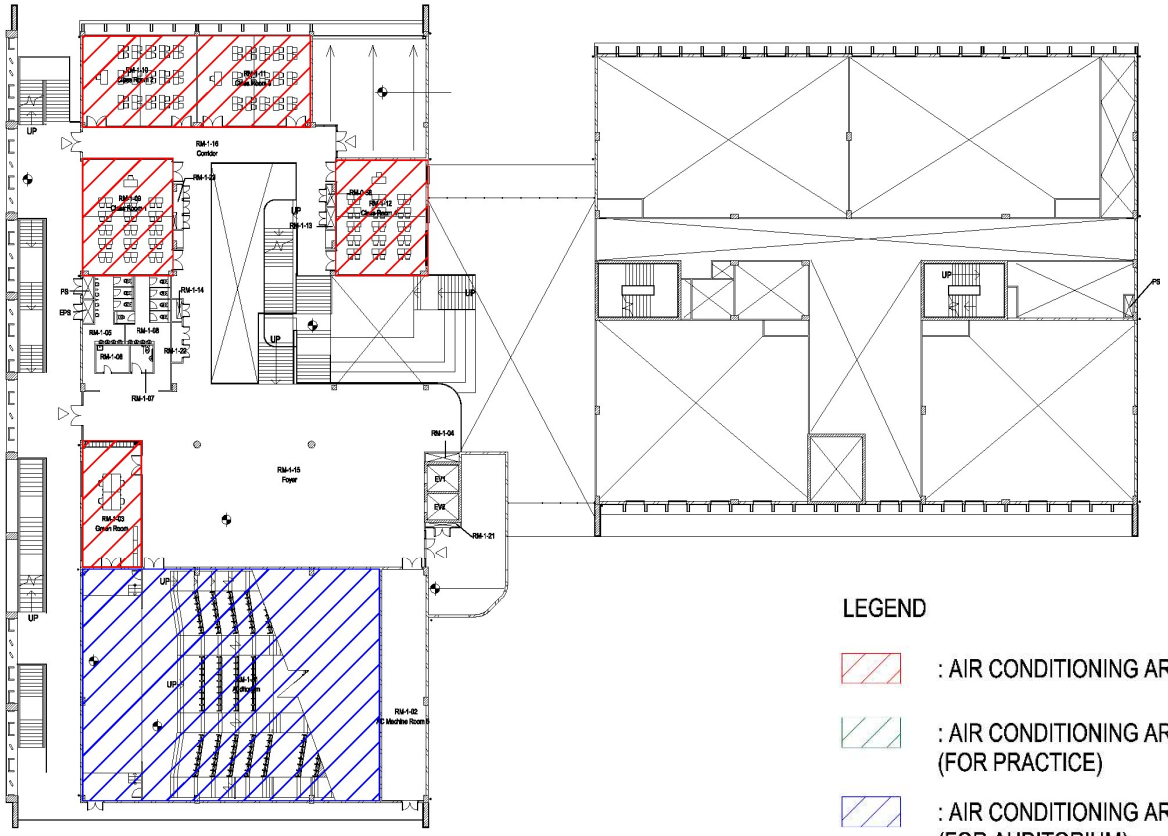
Air conditioned Area – GF

Mechanical Design Scheme

■ Air Conditioning System 1st Floor Plan

The Auditorium shall be provided with flow mount type air conditioner. Air flow shall be regulated by installing the air diffusers and inlet grating on the floor.

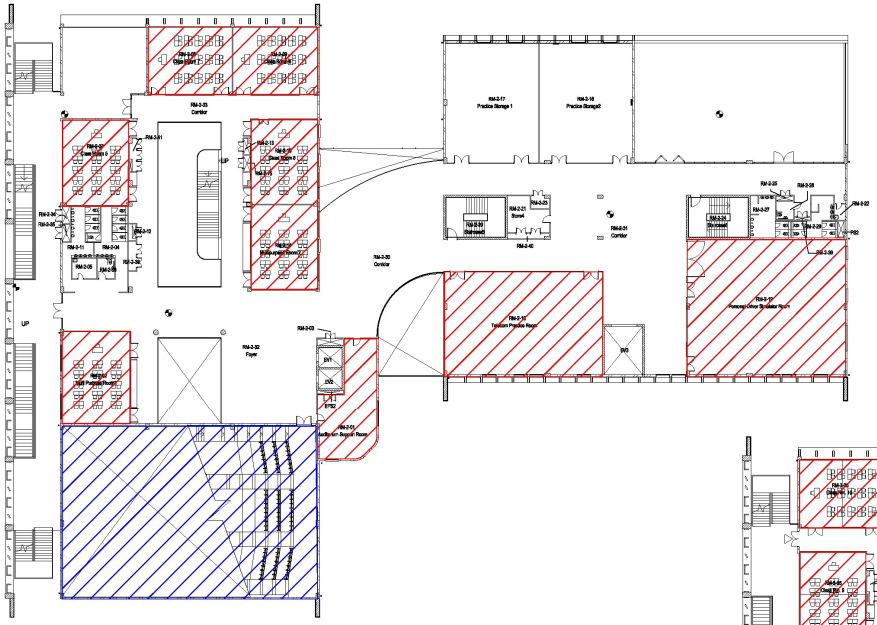
Indoor unit
(Ceiling cassette type)



Air conditioned Area – 1F

Mechanical Design Scheme

■ Air Conditioning System 2nd and 3rd Floor Plan



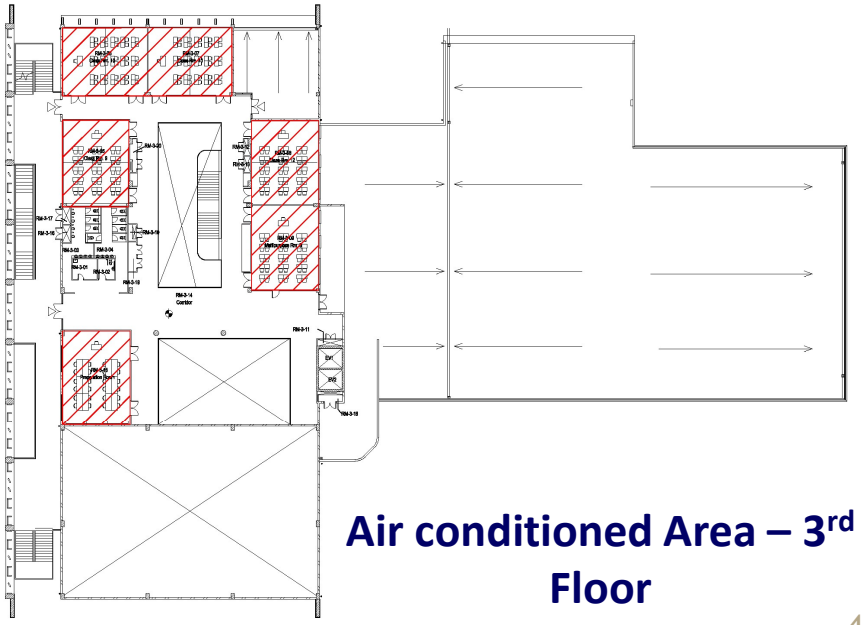
LEGEND

: AIR CONDITIONING AREA

: AIR CONDITIONING AREA (FOR PRACTICE)

: AIR CONDITIONING AREA (FOR AUDITORIUM)

Air conditioned Area – 2nd Floor

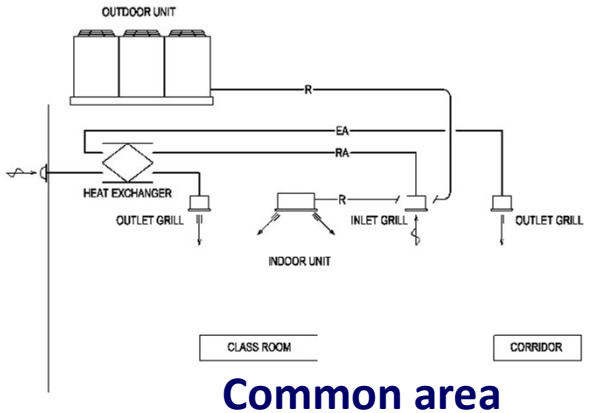


Air conditioned Area – 3rd Floor

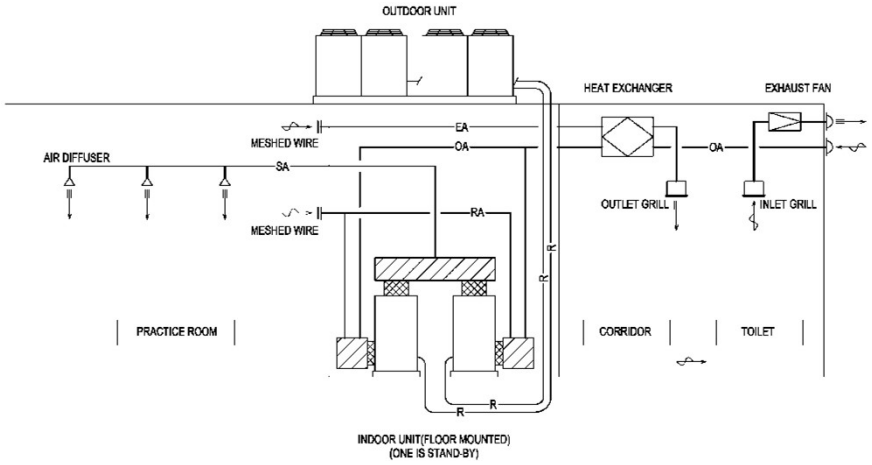
Mechanical Design Scheme

■ Schematic diagram for Air Conditioning System

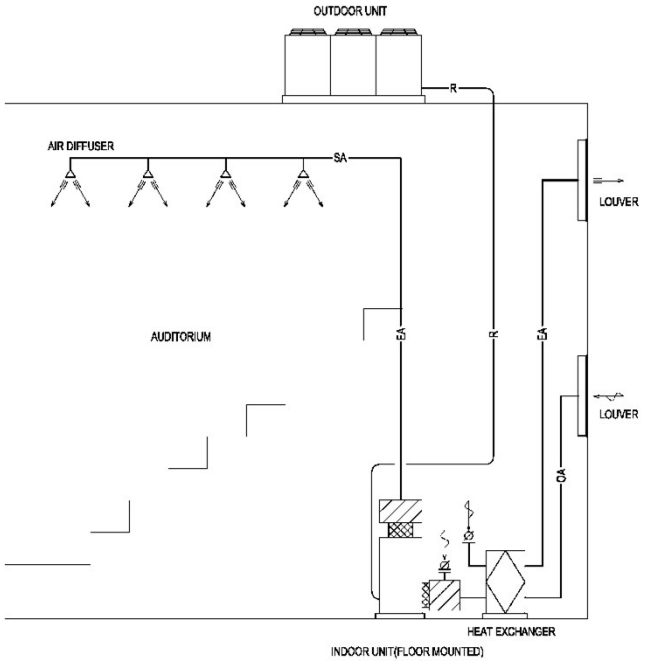
*These are only suggestive/ tentative line diagrams



Common area



Practice room



Auditorium

Kitchen Equipment (Mechanical Design Scheme)

Kitchen Equipment List

Function	Item
VEG. PREPARATION	WORK TABLE WITH SINK
	REFRIGERATOR
NON VEG. PREPARATION	WORK TABLE WITH SINK
	REFRIGERATOR
HOT KITCHEN	TILTING RICE COOKER with EXHAUST HOOD
	TILTING BRAISING PAN with EXHAUST HOOD
	4-BURNER RANGES with EXHAUST HOOD
	CHAPPATI PLATE WITH PUFFER
	CLAY TANDOOR WITH EXHAUST HOOD
	HAND SINK
BAKERY AND SWEETS	BAKING OVEN
	2-BURNER STOCK POT RANGE
	EXHAUST HOOD
	PROVING CHAMBER
	REFRIGERATOR
	HAND SINK

Kitchen Equipment (Mechanical Design Scheme)

Kitchen Equipment List

Function	Item
DEEP FREEZER STORAGE	WALK- IN-COOLER
	DEEP FREEZER
TROLLEY WASHING	FLUSHING HOSE UNIT FOR TROLLEY WASH
UTENSIL WASHING	3-SINK (600 x 600 x 350) DISH WASHING UNIT
	CLEAN DISH TABLE
OUTSIDE EQUIPMENT	GAS BANK
	GREASE TRAP

Flexibility for Detail Design Stage

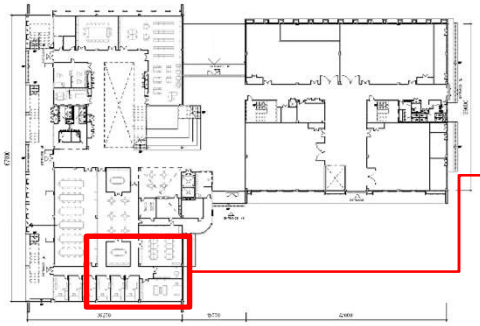
Items	Possibility to Change	Note
Site Plan	Yes	Maximum 2 m for each building for saving trees
Floor layout	No	Minimum change allowed only after approval from Engineer
Room size	Yes	+/- 5% * If design requirement mentions room width and length, contractor shall follow that as a minimum requirement.
Floor to Floor Height	Yes	• Maintaining minimum clear height for utility • No beam cutting
Ceiling Height	Yes	Following Minimum clear height
Elevation	Yes	Follow Material palette Can change design following Engineer's approval
Materials	No	
Structure	Yes	Following concept, can change size as per load calculation
MEP works	Yes	Following concept, can change design as per load calculation
Landscape	Yes	Following concept, horticulture works and plant selections as per contractor

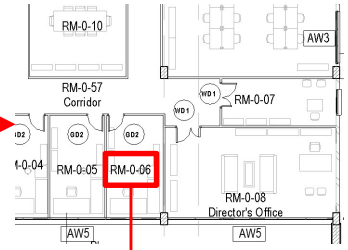
Specification (Sample)

Ceramic Tile

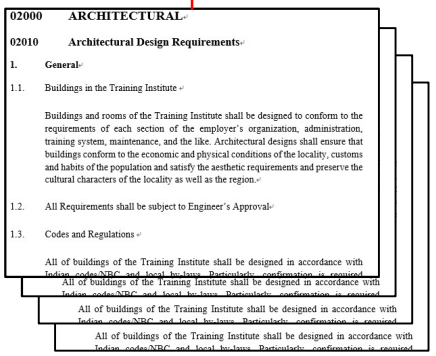
1. **Requirements**
   - Waterproofing behind tiles in wet areas
   - Ceramic tile with matt finish
   - Thickness: 6 mm (min)
   - Back: Ribbed back
   - Size: 300 x 450 mm (min)
   - Rectified edge for joint free application
   - Colour and texture as per Engineer's approval
   - Base: Cement mortar as per CPWD and Engineer's approval
   - There shall be no obvious colour/ shade variation within the tiles for use in each area/ room
   - PVC trims to be used for covering outside corners of walls and for finishing edges
   - Additional stock to be provided (quantity explained at beginning of section for architectural requirements)
2. **Technical Data**
   - Comply with IS:15622
   - Comply with CPWD Vol 1/ sub head 11.18
3. **List of makes**
   - Vendor - 1
   - Vendor - 2
   - Vendor - 3

Scheme of Bidding Document





Drawings



02000 ARCHITECTURAL

02010 Architectural Design Requirements

1. General

1.1. Buildings in the Training Institute

Buildings and rooms of the Training Institute shall be designed to conform to the requirements of each section of the employer's organization, administration, training system, maintenance, and the like. Architectural designs shall ensure that buildings conform to the economic and physical conditions of the locality, customs and habits of the population and satisfy the aesthetic requirements and preserve the cultural characters of the locality as well as the region.

1.2. All Requirements shall be subject to Engineer's Approval

1.3. Codes and Regulations

All of buildings of the Training Institute shall be designed in accordance with Indian codes/NBC and local by-laws. Particularly, confirmation is required.

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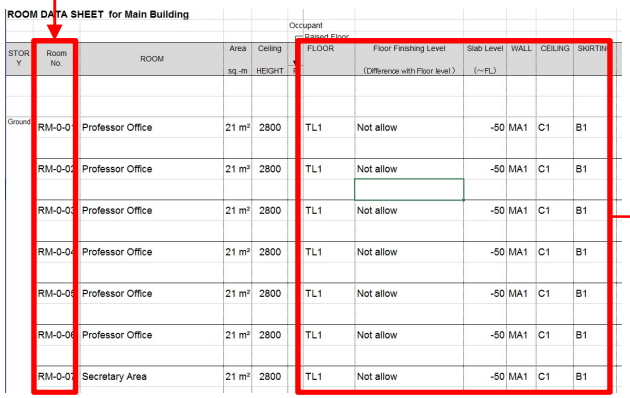
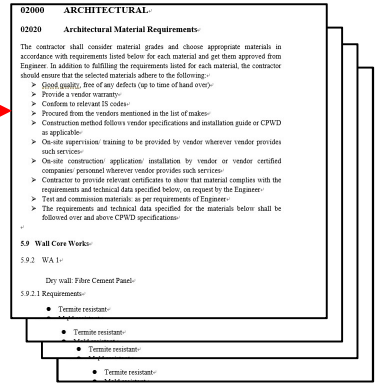


ROOM DATA SHEET for Main Building

STORY	Room No.	ROOM	Area sq.-m	Ceiling HEIGHT	Occupant Raised Floor FLOOR	Floor Finishing Level (Difference with Floor level)	Slab Level (~FL)	WALL	CEILING	SKIRTING
Ground	RM-0-01	Professor Office	21 m²	2800	TL1	Not allow	-50	MA1	C1	B1
	RM-0-02	Professor Office	21 m²	2800	TL1	Not allow	-50	MA1	C1	B1
	RM-0-03	Professor Office	21 m²	2800	TL1	Not allow	-50	MA1	C1	B1
	RM-0-04	Professor Office	21 m²	2800	TL1	Not allow	-50	MA1	C1	B1
	RM-0-05	Professor Office	21 m²	2800	TL1	Not allow	-50	MA1	C1	B1
	RM-0-06	Professor Office	21 m²	2800	TL1	Not allow	-50	MA1	C1	B1
	RM-0-07	Secretary Area	21 m²	2800	TL1	Not allow	-50	MA1	C1	B1



02000 ARCHITECTURAL

02020 Architectural Material Requirements

The contractor shall consider material grades and choose appropriate materials in accordance with requirements listed below for each material and get them approved from Engineer. In addition to fulfilling the requirements listed for each material, the contractor should ensure that the selected materials adhere to the following:

- Good quality, free of any defects (up to time of hand over)
- Provide a vendor warranty
- Confirm to relevant IS codes
- Procured from the vendors mentioned in the list of makes
- Construction method follows vendor specifications and installation guide or CPWD as applicable
- On-site supervision/ training to be provided by vendor wherever vendor provides such services
- On-site construction/ application/ installation by vendor or vendor certified companies/ personnel wherever vendor provides such services
- Contractor to provide relevant certificates to show that material complies with the requirements and technical data specified below; on request by the Engineer
- Test and commission materials as per requirements of Engineer
- The requirements and technical data specified for the materials below shall be followed over and above CPWD specifications

5.9 Wall Core Works

5.9.2 WA 1

Dry wall: Fibre Cement Panel

5.9.2.1 Requirements

- Termite resistant
- Termite resistant
- Termite resistant
- Termite resistant

Design Requirement
(Vol IV Section 11)

Room Data sheet
(Vol IV Section 11)

Technical Specification
(Vol IV Section 12)

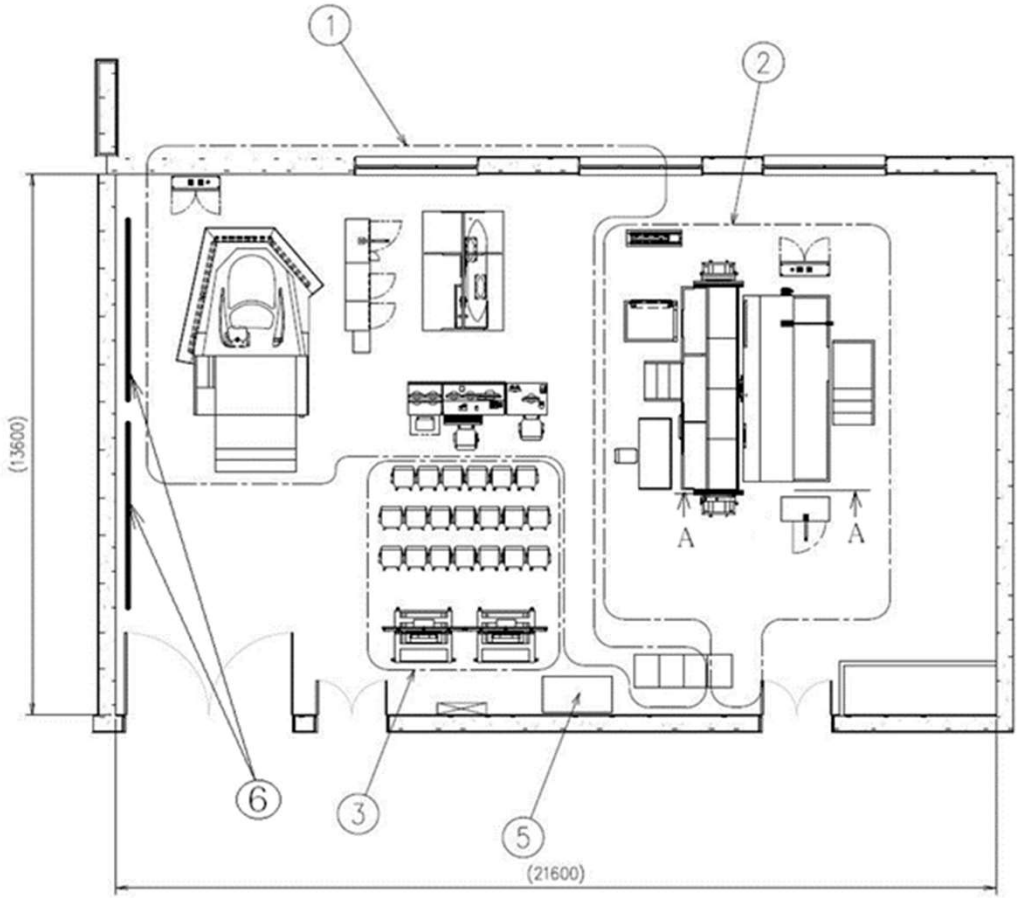
Documents

Training Equipment Outline

Concept（Training Equipment)

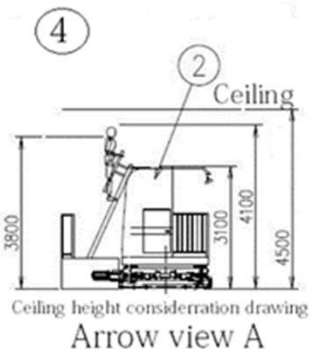
1. **Education method**
   - ✓ Training at the training institute
   - ✓ Subsequent practical training at completed facilities
2. **Instructor for Training Institute**
   - ✓ Core staff shall play the leading role of instructor at institute.
   - ✓ Core staff shall train at JR East General Education Center.
   - ✓ Core staff shall develop know-how from Japanese Instructor.
3. **The necessary Equipment for Institute**
   - ✓ Similar Training Equipment of JR East General Education Center is desirable.

1. MAHSR Train set Simulator(1)



NOTE:

Ancillary facilities are not shown

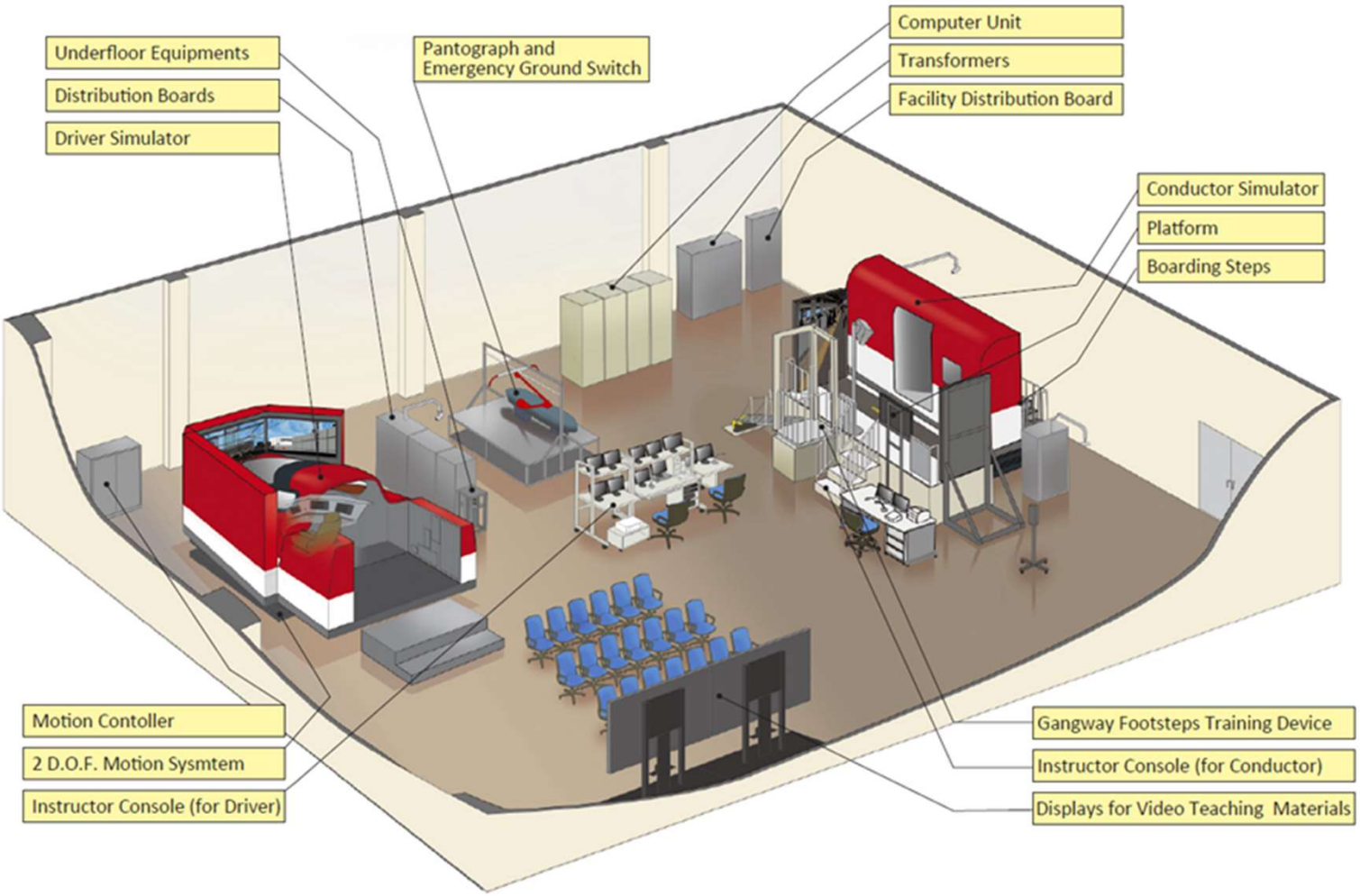


Ceiling height considerration drawing

Arrow view A

1. Simulator for Driver including pantograph device
2. Simulator for Conductor including passage plank training device
3. Indication system of teaching materials linked with simulator
4. Ancillary facilities
5. Transformer
6. Photo Panel

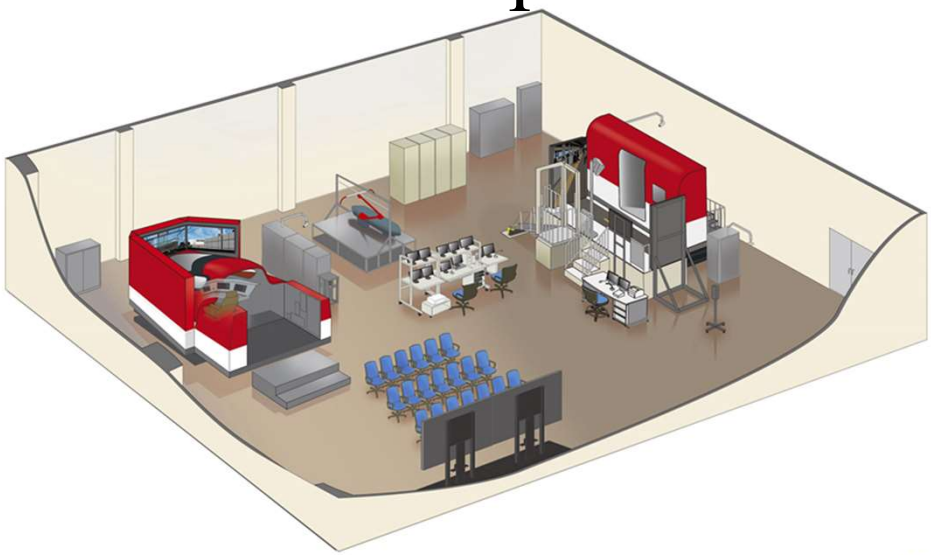
1. MAHSR Train set Simulator(1)



E5 Series Shinkansen Train Crew Training Simulator (Full Cab)
Sample Image (Reference Only)

1. MAHSR Train set Simulator(1)

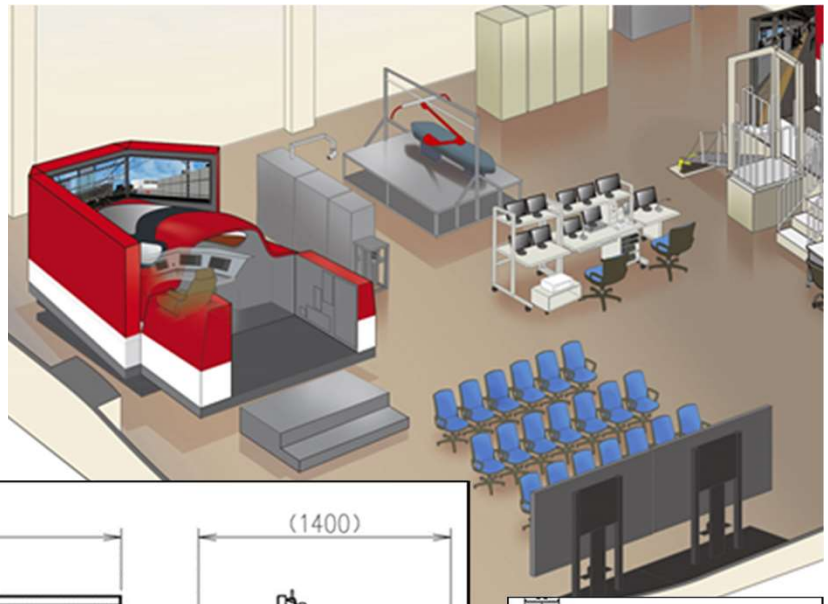
- Train crew training simulation system.
- Includes 1 Driver Simulator, 1 Conductor Simulator, 1 instructor and OCC controller, Visual aid displays and Pantograph.
- The conductor simulator has a platform training facility.

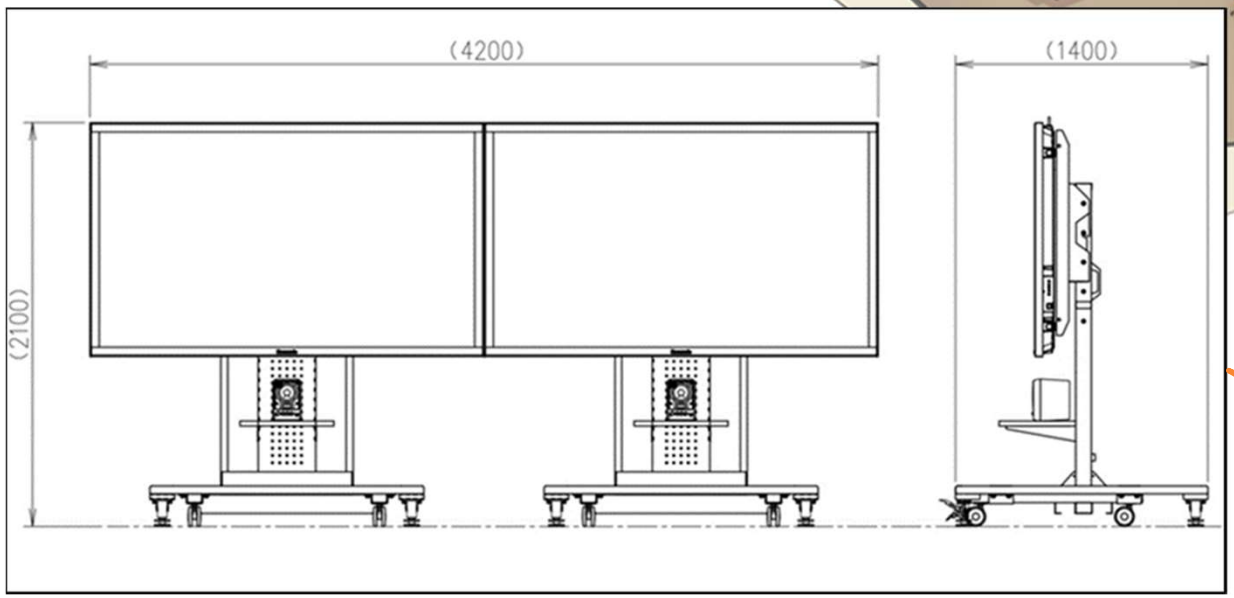


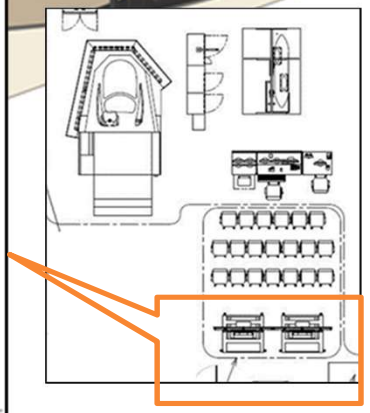
1. MAHSR Train set Simulator(1)

◆ Video teaching material

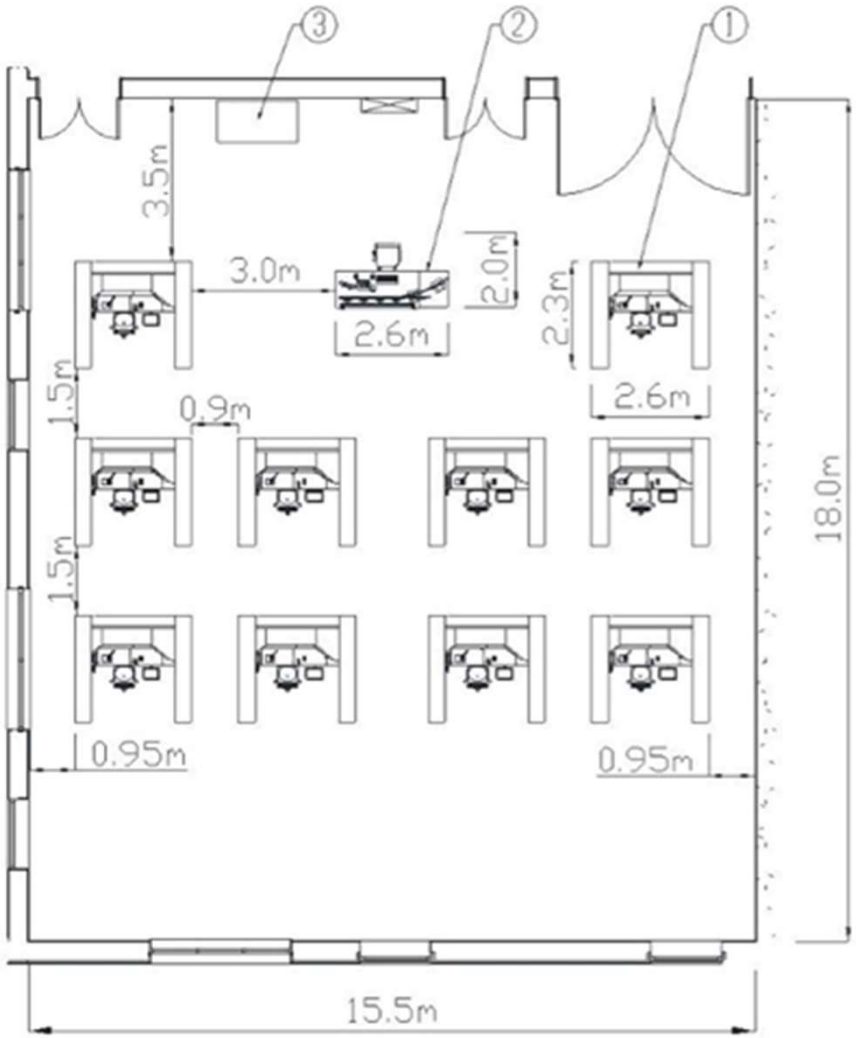
- Linked with the driving simulator.
  Displays 2-D data of Main circuit and Control circuit.
- Displays 3-D data of Rolling stock Structure.







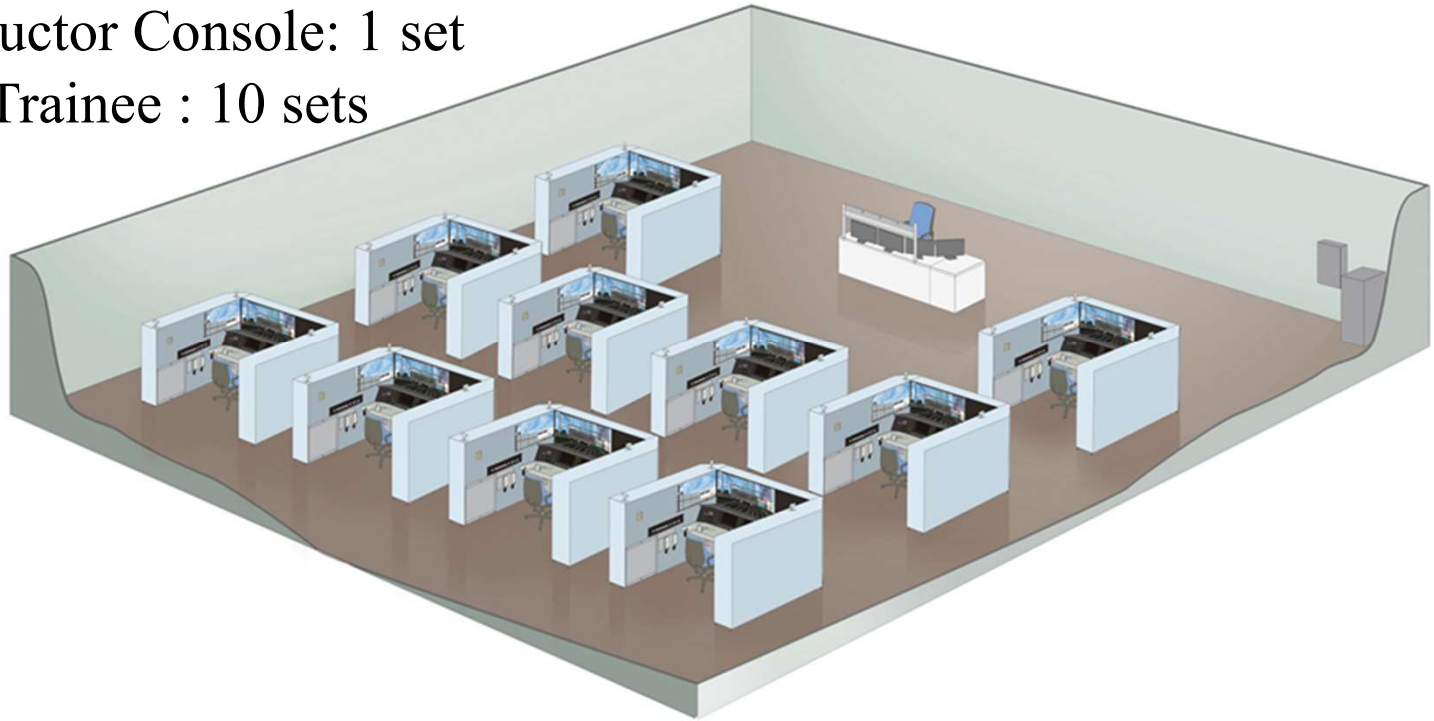
1. Simulator(2)-Classroom Type



1. Trainee's console; 10 units
2. Instructor's console; 1 unit
3. Transformer

1. Simulator(2)-Classroom Type

- Instructor Console: 1 set
- For Trainee : 10 sets

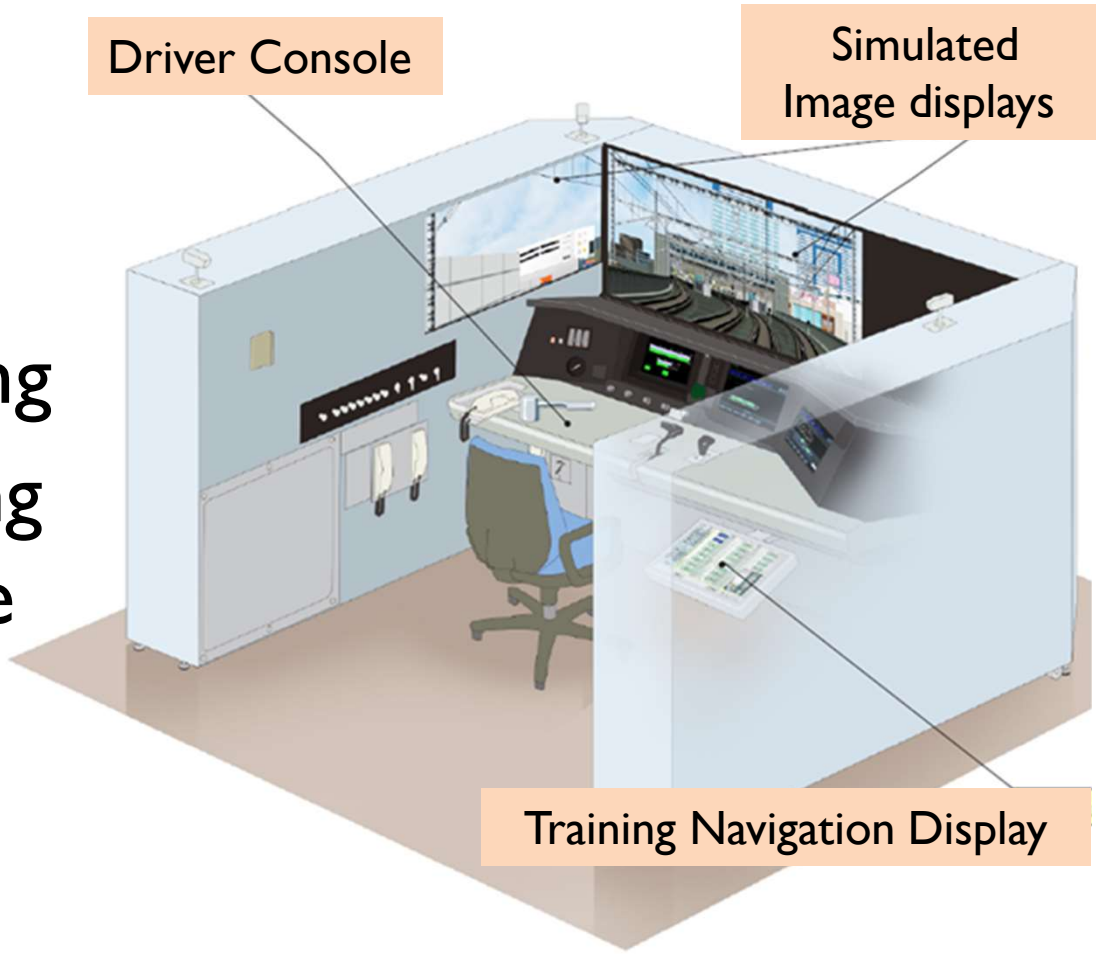


- This training equipment is used for learning basic knowledge and basic operation skills at the same time by instructor's guidance to the class.

1. Simulator(2)-Classroom Type

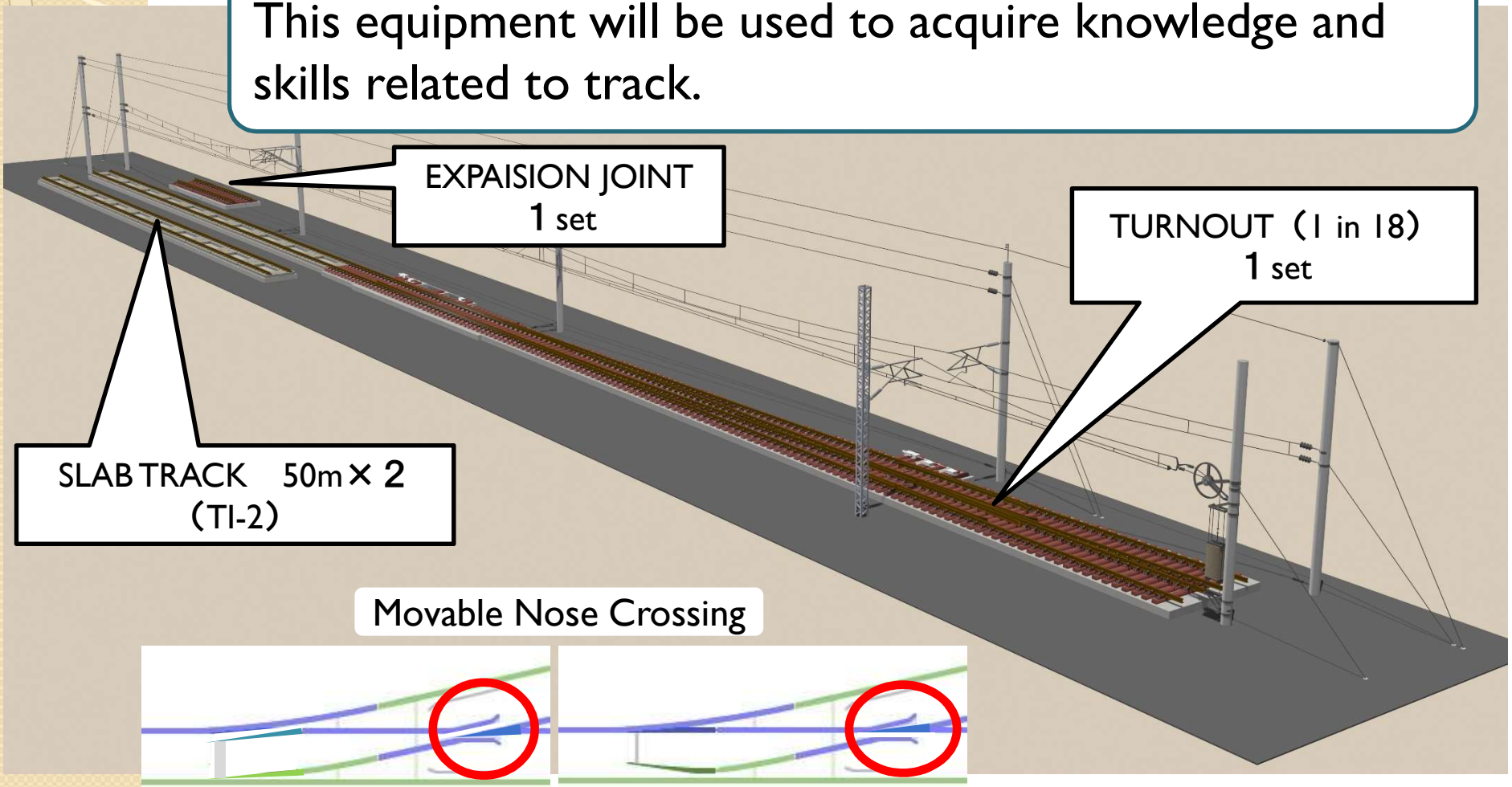
- 3 (Three)Training Modes

1. Collective lecture
2. Self-learning
3. Free driving experience



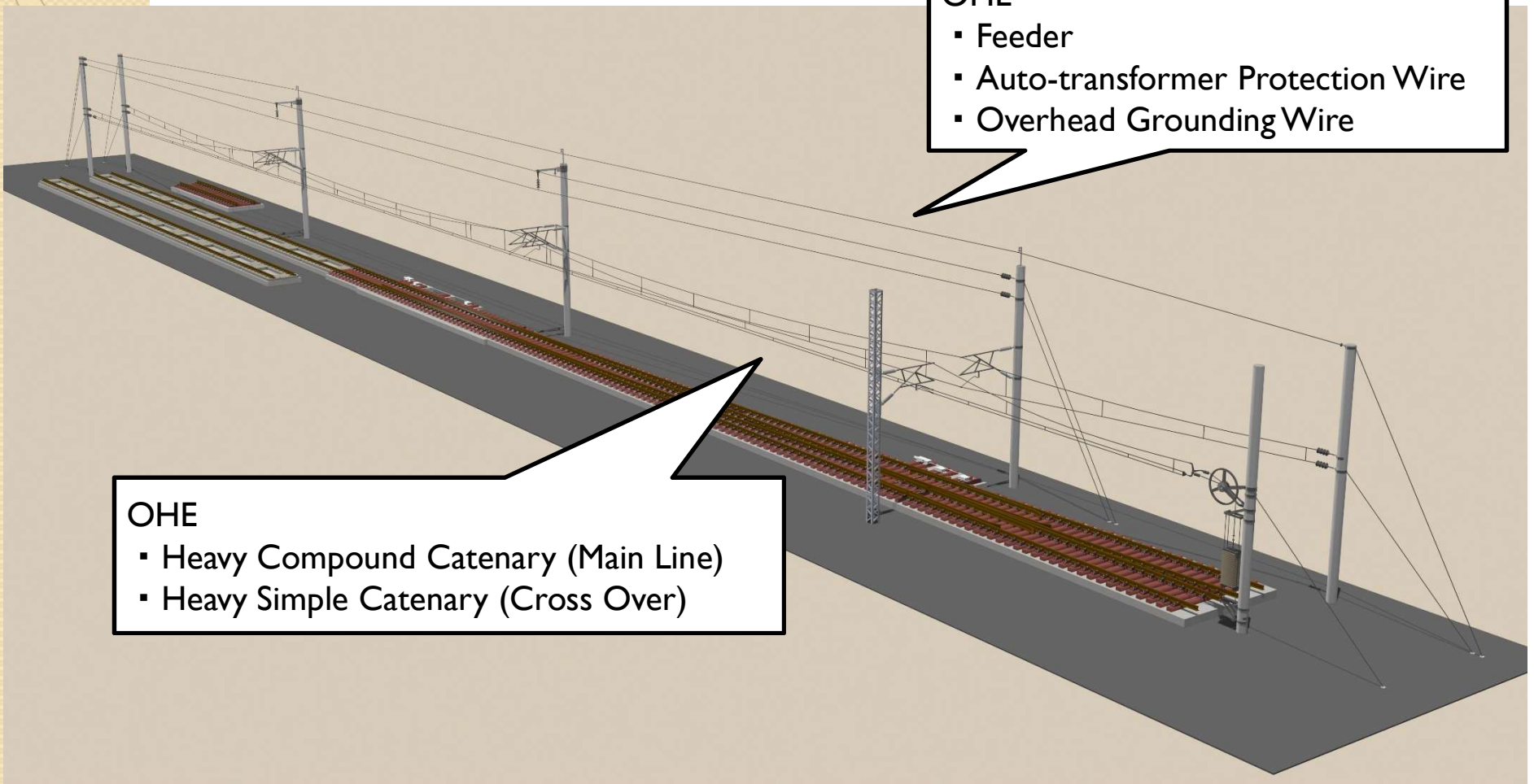
2. Track

This equipment will be used to acquire knowledge and skills related to track.



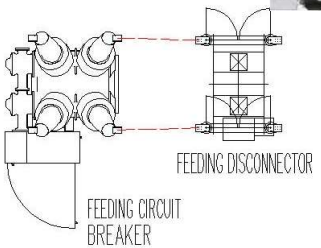
Movable Nose Crossing

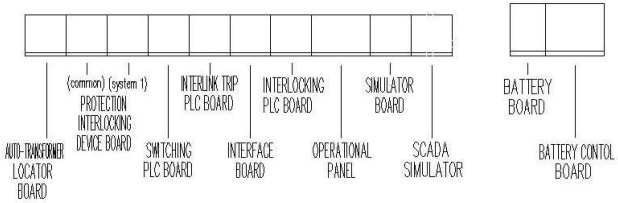
3. Power Supply (Outdoor)



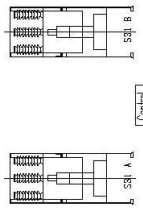
4. Power Supply (Indoor)

Traction Power System
- Switch Board
- Feeding Circuit Breaker
- Disconnector
- Change Over Switch

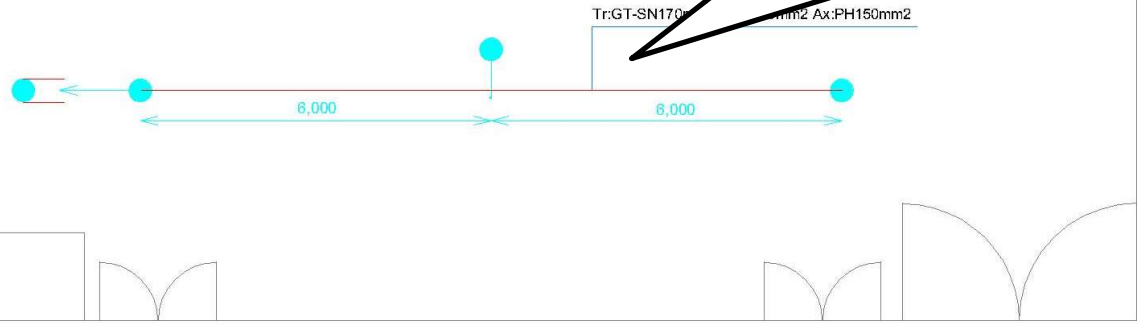




Symbol	Name
	Steel pipe mast
	Cantilever
	OHE Tr:GT-SN170mm2 M:St180mm2 Ax:PH150mm2
	Anchor (tunnel type)
	Foundation of Anchor (simulated tunnel type)
	Main circuit wiring PHAg150mm2



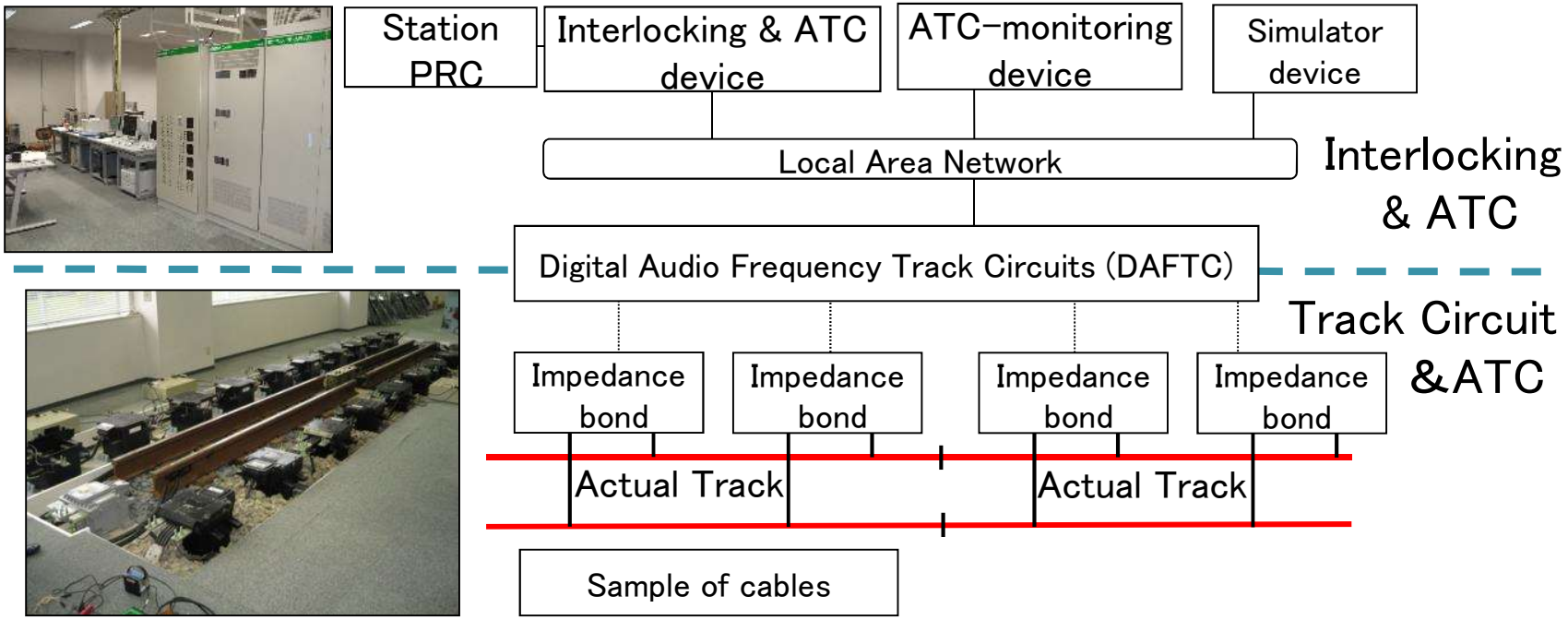
OHE
- Heavy Compound Catenary



5. Signalling

Proposed Training Equipment of Interlocking/ATC/Track Circuit

All of this training equipment is installed indoor

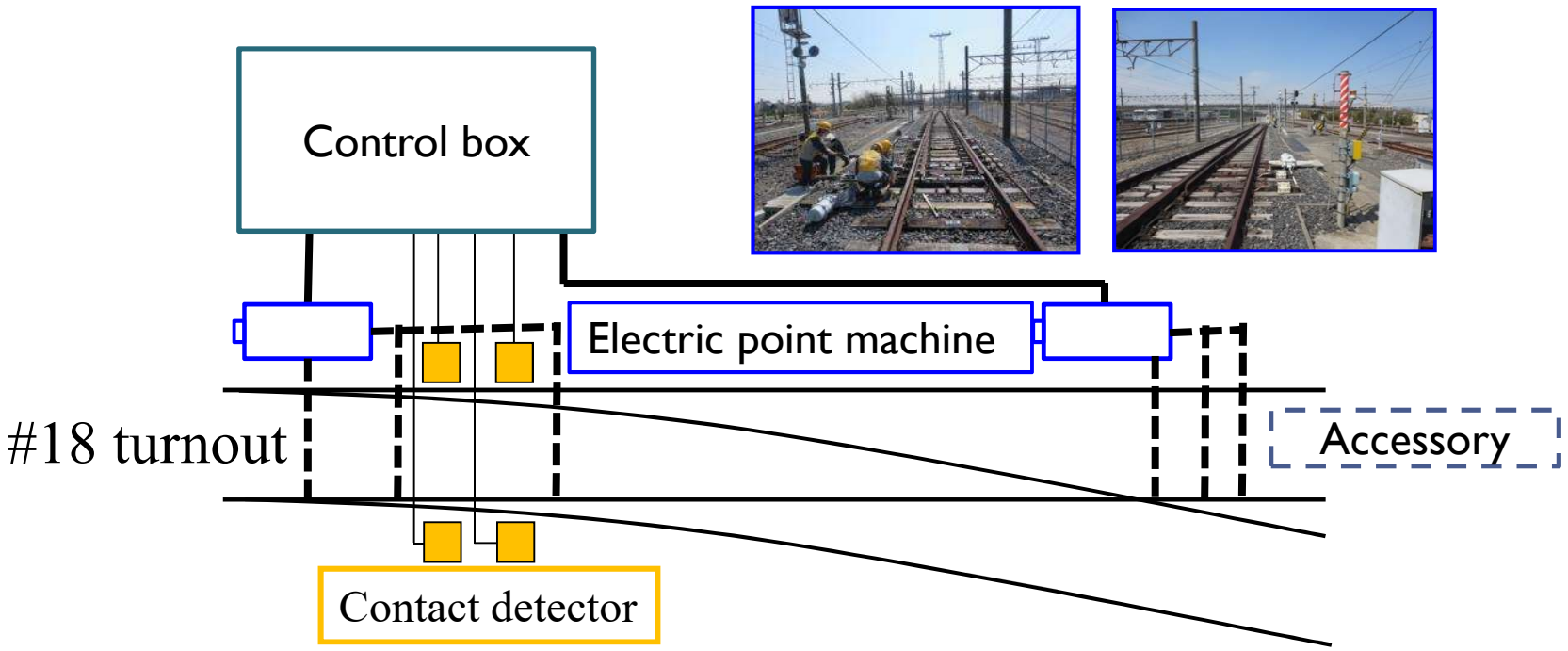


This equipment shall be used for providing training of major signal skills such as Interlocking, ATC and Track Circuit.

5. Signalling

Proposed Training Equipment of Electric point machine

All of this training equipment is installed in the field.

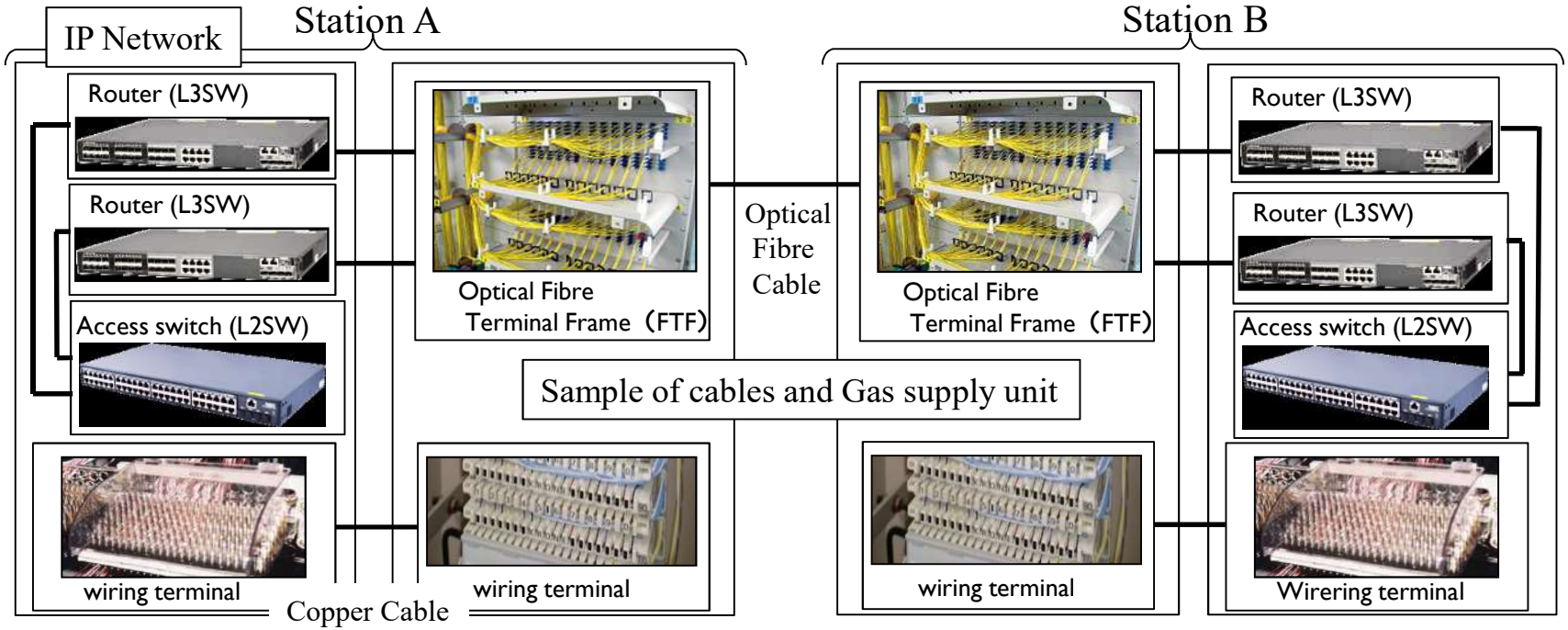


This equipment shall be used for providing training of major signal skills such as Electric point machine.

6. Telecommunication

Proposed Training Equipment of Telecommunication

All of this training equipment is installed indoor



This equipment shall be used for providing training of major telecommunication skills such as IP Network and Optical Fibre Cable.

Disclaimer

- The purpose of this presentation is merely to provide an overview on the Bid Documents for Training Institute Buildings (Phase – 2) for Mumbai-Ahmedabad High Speed Railway Project (Package No. MAHSR - TI-1).

- None of the information provided in this Presentation is to be considered either directly, indirectly or as a reference to be a substitute or supplement to the Bid Documents issued.