

**REPUBLIC OF INDIA
HYDERABAD METROPOLITAN DEVELOPMENT AUTHORITY/
HYDERABAD GROWTH CORRIDOR LIMITED**

**JICA SPECIAL ASSISTANCE
FOR
PROJECT IMPLEMENTATION (SAPI)
FOR
THE ASSISTANCE FOR
THE INTRODUCTION OF ITS
ON ROAD NETWORK
IN
HYDERABAD METROPOLITAN AREA
IN
INDIA

DRAWINGS**

March 2014

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
JICA STUDY TEAM Consisted by**

**N I P P O N K O E I C O . , L T D .
E A S T N I P P O N E X P R E S S W A Y C O . , L T D .
M E T R O P O L I T A N E X P R E S S W A Y C O . , L T D .**

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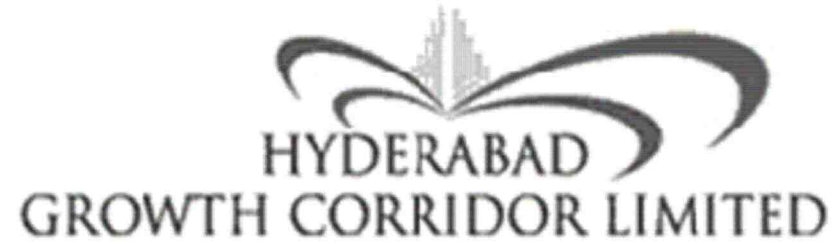
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HYDERABAD GROWTH CORRIDOR LIMITED

NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)



Design, Supply, Installation, Commissioning, Testing, Training, Warranty and Maintenance for Equipments and Related Facilities of Hyderabad City Intelligent Transport System (Hyderabad City ITS) in the state of Andhra Pradesh, India being taken up with the loan of assistance of Japan International Cooperation Agency under Phase-2 program.

REVISED DRAFT

SECTION VIII: EMPLOYER'S REQUIREMENT

DRAWINGS

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DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	 JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 HYDERABAD GROWTH CORRIDOR LIMITED	PROJECT :	NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)	
REVISION NO.	DATE	DESCRIPTION				TITLE :	GENERAL INDEX	
01	-	FIRST SUBMISSION		2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	SCALE: NOT TO SCALE	DWG. NO. G -01	

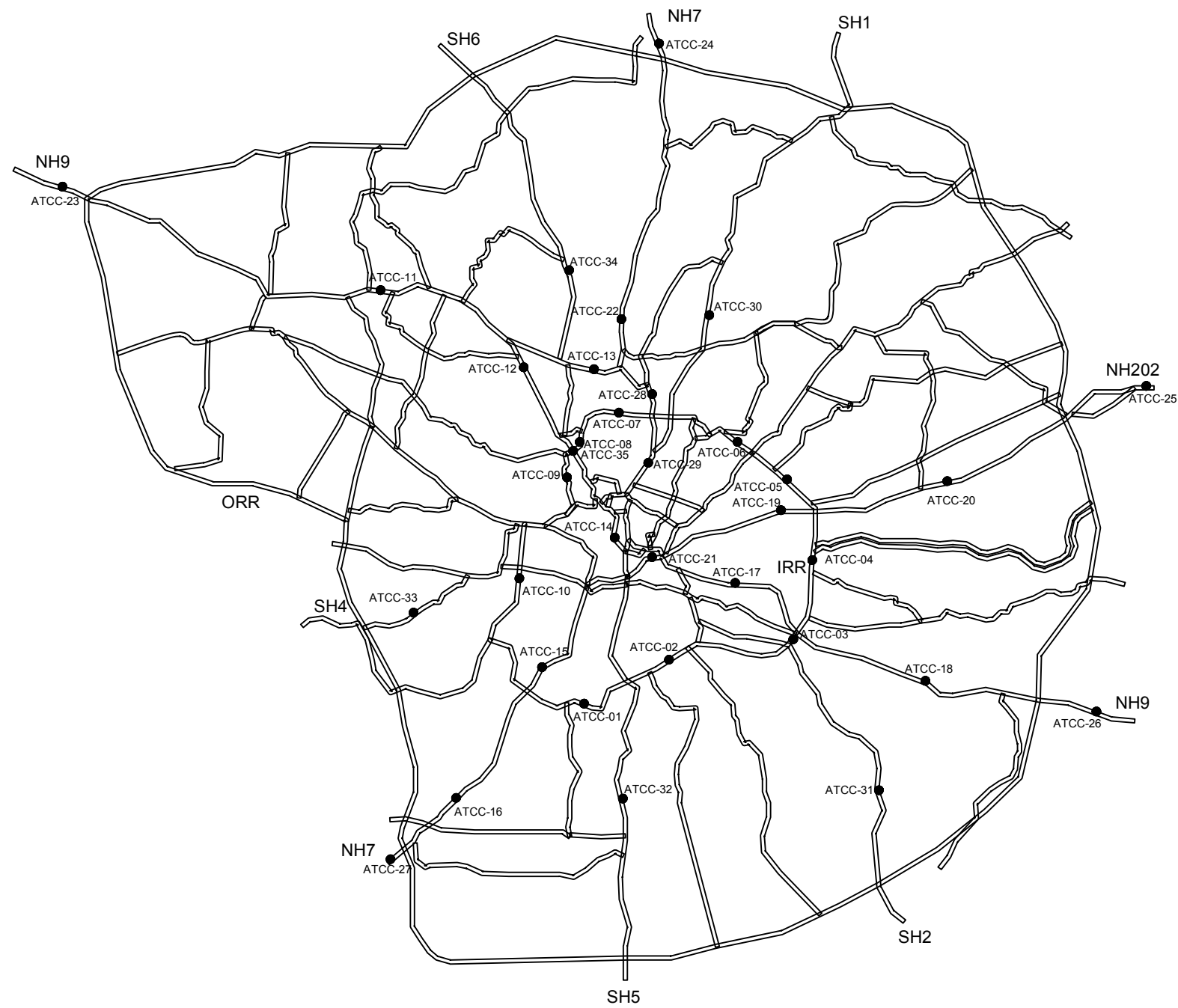
GENERAL NOTES AND ABBREVIATIONS

GENERAL NOTES

- Drawings show only general type, basic design concept and reference dimensions, and are not intended to define the exact details of ITS equipment to be furnished, and indicate the outline of structure and assumed available space in which the ITS equipment is to be installed. Before manufacturing of the ITS equipment and site construction works are commenced, the Contractor shall submit the dimensional drawings and diagrams which show all details of the ITS equipment to be used, and carry out arrangement related to civil and architectural works.
- Proposed ITS consists of various types of roadside equipment. The ITS roadside equipment is proposed to be located with following basic concepts.
 - Automatic Traffic Counters-cum-Classifier (ATCC) with CCTV Camera
 - ATCC roadside equipment will be placed on each section of National Highways, State Highways and IRR which is divided by major junctions.
 - Two (2) sets of image recognition sensor for both bounds are basically put on a supporting steel pole at median except locations where the METRO will be constructed or there is not enough space for installation. In these locations, the sensors will be separately installed at both sides of road shoulder.
 - CCTV camera will be fixed on the top of supporting steel pole to visually monitor the traffic flow.
 - The visible clearance must be kept in the detection area of image recognition sensor. The detection area is assumed to be around 15m width and 30m length across the road.
 - Flood Monitoring (FLD) System with CCTV Camera
 - The flood sensors will be installed at 14 water logging spots which were shortlisted as the most serious locations and required immediate action by the Hyderabad Traffic Police.
 - The electrode contact type detectors will be fixed into steel protective pipe of which diameter is around 100mm.
 - The bottom of protective pipe must meet the same level of road surface to detect accurate flood conditions. The protective pipe would be placed on the road shoulder in order to avoid traffic interruption.
 - The protective pipe would be sustained by the supporting pole.
 - CCTV camera will be fixed on the top of supporting steel pole to visually monitor the flood conditions.
 - Variable Message Sign (VMS) Board
 - The VMS Board will be placed at major junctions and intersections on National Highways, IRR and State Highways to provide traffic status, incidents and weather information to drivers.
 - The VMS board will be fixed on the supporting structure (gantry type or F-shaped cantilever type). The type of supporting structure shall be determined by the contractor considering the necessary visibility to the driver.
 - The VMS board must be installed at the location assuring minimum visibility of the message to the driver at the distance of 200 m.
 - Minimum clearance of 5.5m height and at least 0.3m clearance for asphalt overlay from road surface must be kept under the bottom of VMS board.
- In case that proposed roadside equipment location has wide free space along the road, island at the edge of current carriageway shall be prepared to construct the supporting structure.
- All dimensions are in millimeters unless otherwise specified.

ABBREVIATIONS		
1.	ATCC	AUTOMATIC TRAFFIC COUNTERS-CUM-CLASSIFIER
2.	CCTV	CLOSED CIRCUIT TELEVISION
3.	MET	METEOROLOGICAL MONITORING
4.	FLD	FLOOD MONITORING
5.	VMS	VARIABLE MESSAGE SIGN
6.	ITSC	INTELLIGENT TRANSPORT SYSTEM CENTRE
7.	MSG	MESSAGE
8.	UPS	UN-INTERUPTED POWER SUPPLY
9.	LCD	LIQUID CRYSTAL DISPLAY
10.	OBU	ON-BOARD UNIT
11.	OFC	OPTICAL FIBRE CABLE
12.	GSM	GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS
13.	GPRS	GENERAL PACKET RADIO SERVICE
14.	DMZ	DEMILITARIZED ZONE
15.	VLAN	VIRTUAL LOCAL AREA NETWORK
16.	L3-SW	LAYER 3 SWITCH
17.	MC	MEDIA CONVERTER
18.	IRR	INNER RING ROAD
19.	ORR	OUTER RING ROAD
20.	NH	NATIONAL HIGHWAY
21.	SH	STATE HIGHWAY
22.	APSRTC	ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION
23.	VT & PIS	VEHICLE TRACKING & PASSENGER INFORMATION SYSTEM
24.	HTMS	HIGHWAY TRAFFIC MANAGEMENT SYSTEM
25.	HTRIMS	HYDERABAD TRAFFIC INTEGRATED MANAGEMENT SYSTEM
26.	APSDPS	ANDHRA PRADESH STATE DEVELOPMENT PLANNING SOCIETY


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REVISION NO.	DATE	DESCRIPTION				NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)	
01	-	FIRST SUBMISSION		JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	TITLE :	
						GENERAL NOTES AND ABBREVIATIONS	
						SCALE: NOT TO SCALE	DWG. NO. G -02



ATCC No.	Nearest Landmark
ATCC-01	Near Palle Cheruvu Road, Chandrayanagutta
ATCC-02	DRDL, Kanchanbagh
ATCC-03	LB Nagar Ring Road
ATCC-04	Nagole Junction
ATCC-05	Genpact, Habsiguda
ATCC-06	Railway Golf Course, Mettuguda
ATCC-07	ACP Office, Begumpet
ATCC-08	Green Lands, CM Office
ATCC-09	Taj Banjara, Banjara Hills
ATCC-10	Spencers Stores, Attapur
ATCC-11	Prajay City, Miyapur
ATCC-12	Hyderabad Industries Ltd, Moosapet
ATCC-13	Air Force Station, Bowenpally Junction
ATCC-14	Gandhi Bhavan, Nampally
ATCC-15	National Police Academy, Shivarampally
ATCC-16	NH7, Near Shamshabad Airport Road
ATCC-17	Dilsukhnagar, Near Chandrabrothers Show Room
ATCC-18	All India Radio Station, Hayathnagar
ATCC-19	Hyderabad Public School, Ramanthapur
ATCC-20	Central Power Research Institute (CPRI), Boduppal
ATCC-21	Esama Bazar Road, Near MGBS
ATCC-22	Near Dairy farm Road, Towards Suchitra
ATCC-23	Murhangli village, NH9
ATCC-24	Near CMR Engineering College, Mecchal
ATCC-25	HP Petroleum Tanks, Ghatkesar
ATCC-26	Inamguda (Ramoji Film City)
ATCC-27	Tondapally village, NH 7
ATCC-28	Tarbond (JBS)
ATCC-29	Makhdoom Mohiuddin Statue, Tankbund
ATCC-30	Military College, Siddipet Road, Alwal
ATCC-31	Nagarjuna Sagar Road, Turkayamjal
ATCC-32	Srisailem Highway, Pahadisharif, Near RCI
ATCC-33	Chevella Road, Near Shadan College
ATCC-34	Medak Road, Near HMT
ATCC-35	Near Fountain, Under Punjagutta Flyover

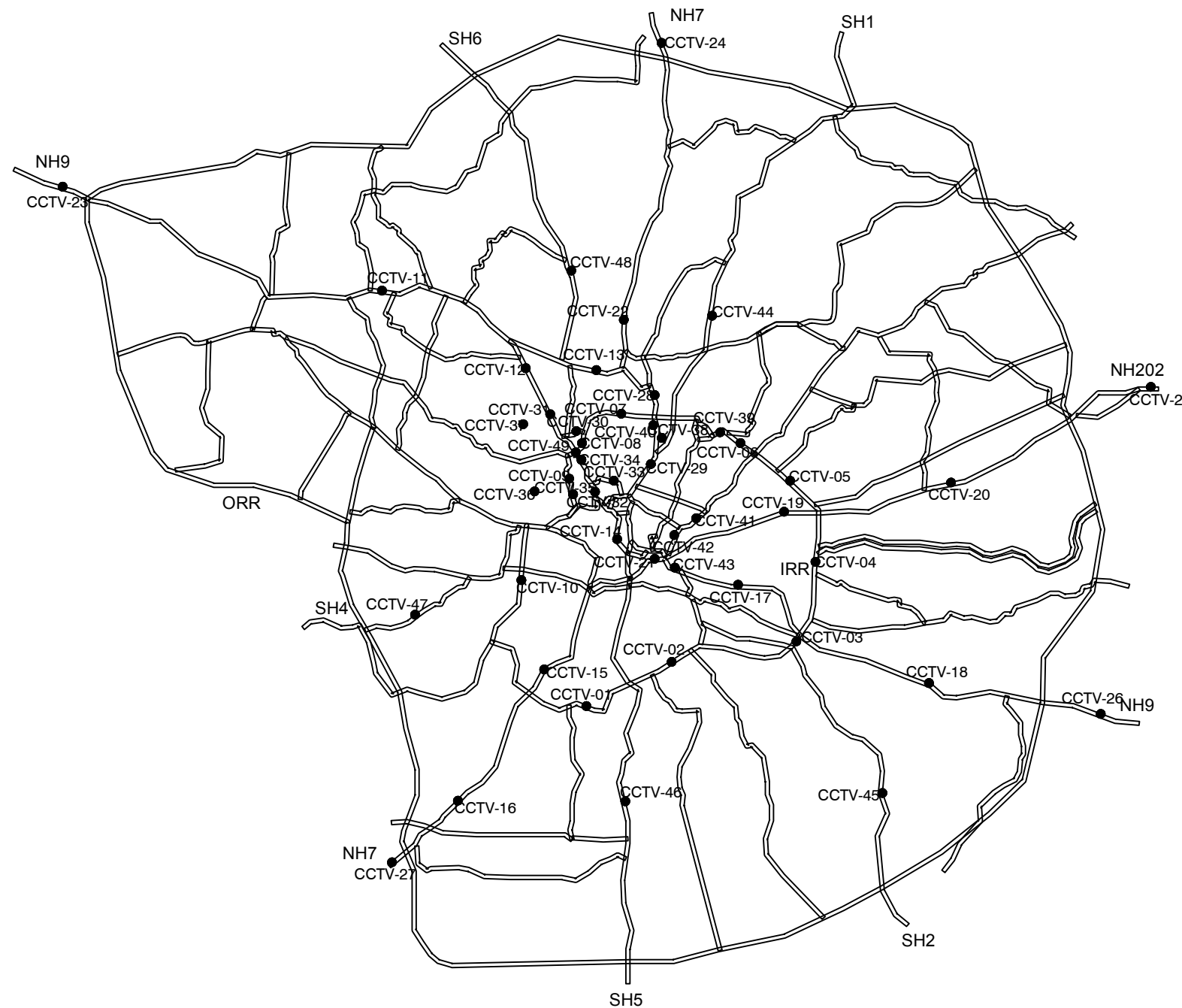
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REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	


JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)
 TITLE :
LOCATION PLAN OF ATCC ROADSIDE EQUIPMENT
 SCALE: NOT TO SCALE DWG. NO. G -03


CCTV No.	Nearest Landmark
CCTV-01	Near Palle Cheruvu Road, Chandrayanagutta
CCTV-02	DRDL, Kanchanbagh
CCTV-03	LB Nagar Ring Road
CCTV-04	Nagole Junction
CCTV-05	Genpact, Habsiguda
CCTV-06	Railway Golf Course, Mettuguda
CCTV-07	ACP Office, Begumpet
CCTV-08	Green Lands, CM Office
CCTV-09	Taj Banjara, Banjara Hills
CCTV-10	Spencers Stores, Attapur
CCTV-11	Prerjay City, Miyapur
CCTV-12	Hyderabad Industries Ltd, Moosapet
CCTV-13	Air Force Station, Bowenpally Junction
CCTV-14	Gandhi Bhavan, Nampally
CCTV-15	National Police Academy, Shivarampally
CCTV-16	NH7, Near Shamshabad Airport Road
CCTV-17	Dilsukhnagar, Near Chandnabrothers Show Room
CCTV-18	All India Radio Station, Hayathnagar
CCTV-19	Hyderabad Public School, Ramanthapur
CCTV-20	Central Power Research Institute (CPRI), Boduppal
CCTV-21	Esama Bazar Road, Near MGBS
CCTV-22	Near Dairy farm Road, Towards Suchitra
CCTV-23	Muthangi village, NH9
CCTV-24	Near CMR Engineering College, Medchal
CCTV-25	HPP Petroleum Tanks, Ghatkesar
CCTV-26	Inamguda (Ramoji Film City)
CCTV-27	T hondapally village, NH 7
CCTV-28	Tarbond (JBS)
CCTV-29	Makhdoom Mohiuddin Statue, Tankbund
CCTV-30	Lal Bunglow, Greenland to Ameerpet Road



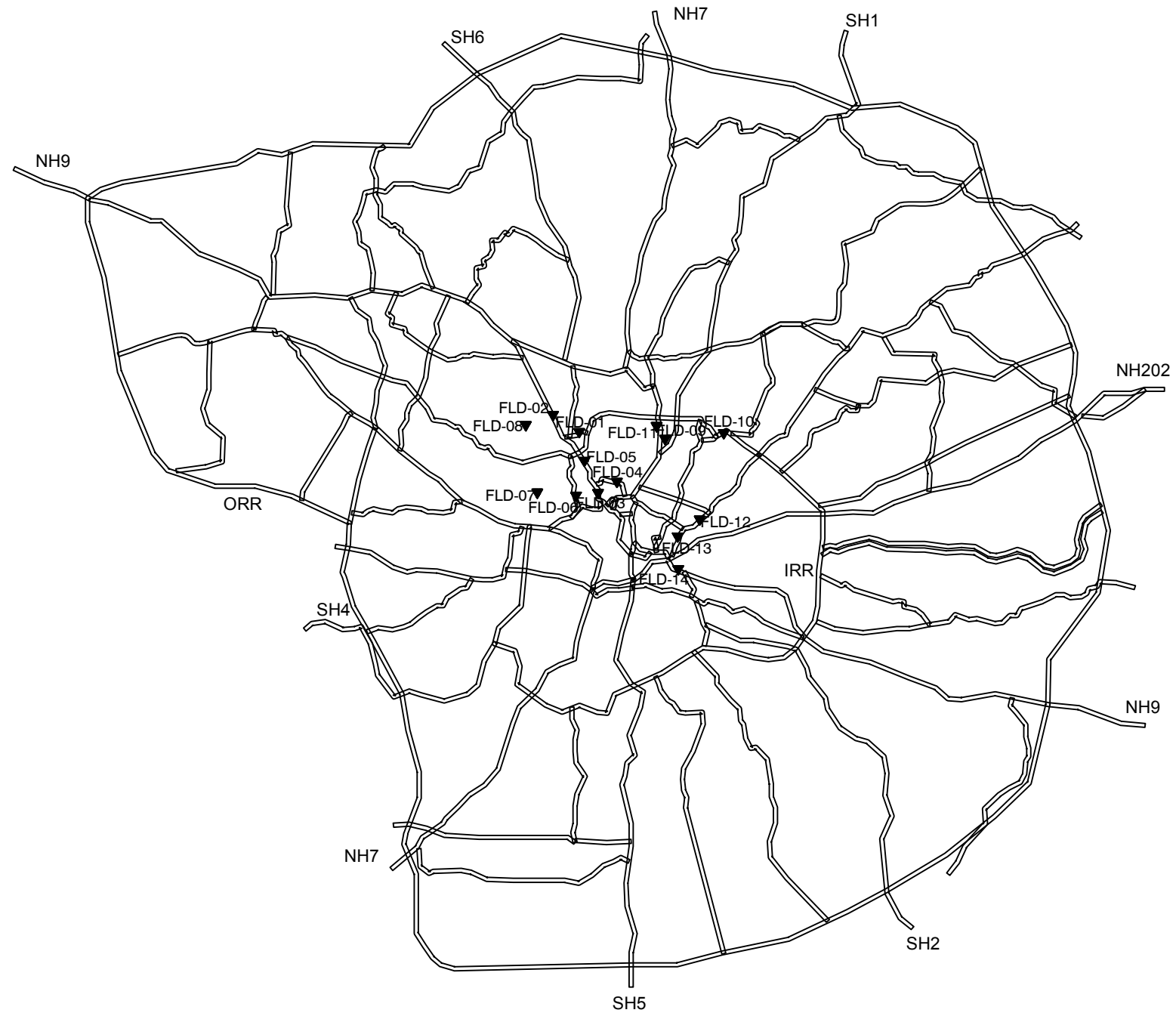
CCTV No.	Nearest Landmark
CCTV-31	Ameerpet Junction, Maitrivanam
CCTV-32	T Junction from Pankagutta Road to Hotel Taj Krishna
CCTV-33	TSR Towers, Somajiguda
CCTV-34	Model House, Panjagutta
CCTV-35	Road No 1, Banjara Hills, Near Masab Tank Flyover Road
CCTV-36	Road No 12, Banjara Hills, Banjara Hills Traffic Police
CCTV-37	Near Kotla Vijay Bhaskar Reddy indoor Stadium, Yousufguda
CCTV-38	Ministers Road Junction, Near James Street Railway Station, Ranigunj
CCTV-39	Road Under Rail Bridge Near SCR Railnilayam, Secunderabad
CCTV-40	NH9, Ranigunj to Paradise, Near Park Lane Y Road
CCTV-41	Road Under Rail Bridge Near Fever Hospital, Nallakunta
CCTV-42	Near EPF Office, Barkatpura Circle Road
CCTV-43	Road Under Rail Bridge, Malakpet, NH9
CCTV-44	Military College, Siddipet Road, Alwal
CCTV-45	Nagarjuna Sagar Road, Turkayamjal
CCTV-46	Srisailem Highway, Pahadisharif, Near RCI
CCTV-47	Chevella Road, Near Shadan College
CCTV-48	Medak Road, Near HMT
CCTV-49	Near Fountain, Under Punjagutta Flyover

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 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)
 TITLE :
LOCATION PLAN OF CCTV ROADSIDE EQUIPMENT
 SCALE: NOT TO SCALE DWG. NO. G -04



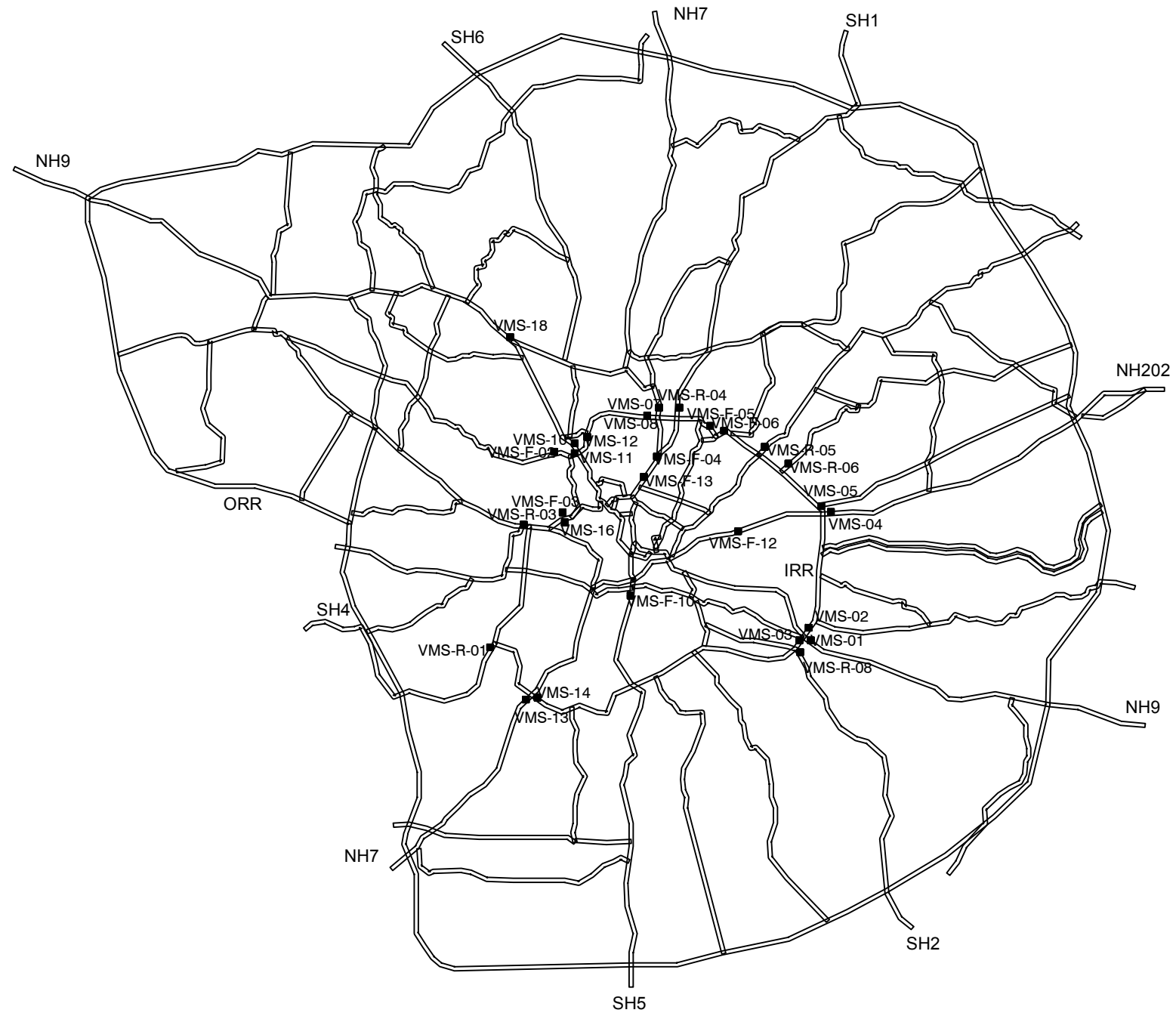
FM No.	Nearest Landmark
FM-01	Lal Bunglow, Greenland to Ameerpet Road
FM-02	Ameerpet Junction, Maitrivanam
FM-03	T Junction from Punkagutta Road to Hotel Taj Krishna
FM-04	TSR Towers, Somajiguda
FM-05	Model House, Panjagutta
FM-06	Road No 1, Banjara Hills, Near Masab Tank Flyover Road
FM-07	Road No 12, Banjara Hills, Banjara Hills Traffic Police
FM-08	Near Kotla Vijay Bhaskar Reddy indoor Stadium, Yousufguda
FM-09	Ministers Road Junction, Near James Street Railway Station, Ranigunj
FM-10	Road Under Rail Bridge Near SCR Railnilayam, Secunderabad
FM-11	NH9, Ranigunj to Paradise, Near Park Lane Y Road
FM-12	Road Under Rail Bridge Near Fever Hospital, Nallakunta
FM-13	Near EPF Office, Barkatpura Circle Road
FM-14	Road Under Rail Bridge, Malakpet, NH9

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 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)
 TITLE :
LOCATION PLAN OF FLD ROADSIDE EQUIPMENT
 SCALE: NOT TO SCALE DWG. NO. G -05



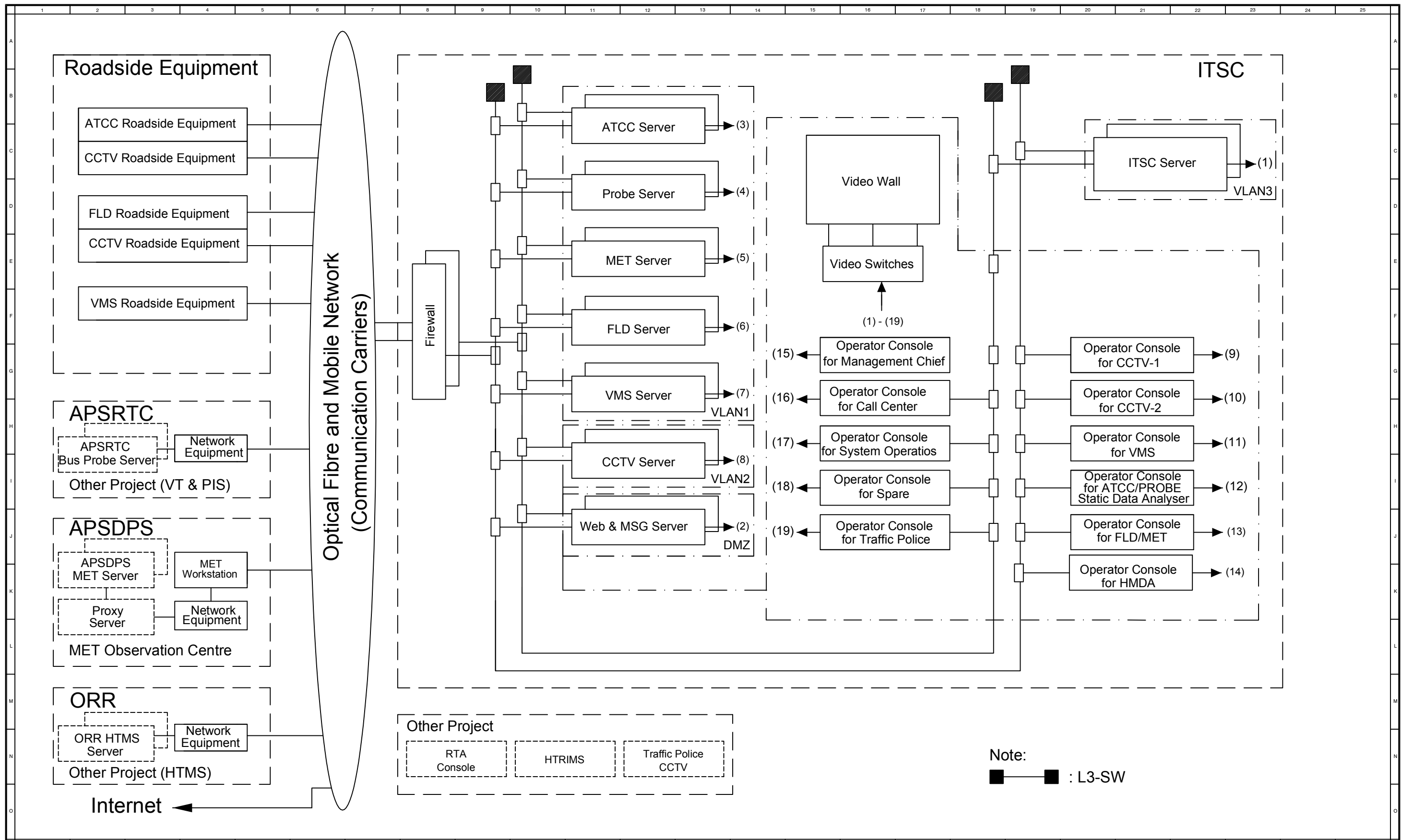
VMS No.	Nearest Landmark
VMS-01	LB Nagar Ring Road
VMS-02	LB Nagar Ring Road
VMS-03	LB Nagar Ring Road
VMS-04	Uppal Ring Road
VMS-05	Uppal Ring Road
VMS-07	MG Road Flyover Junction, Secunderabad
VMS-08	Near Anand Theatre, MG Road, Secunderabad
VMS-10	Near Panjagutta Flyover, Towards Khairatabad
VMS-11	Nagarjuna Circle Road, Near Brisah, Flyover Towards CM
VMS-12	ITC Kakatiya Sheraton, Greenlands
VMS-13	Near Entryto PVR Expressway, Rajendra Nagar
VMS-14	Junction Near Sivarampalli, Towards Mehdiapatnam
VMS-16	Mehdiapatnam Road, Near Sarojinidevi Eye Hospital & Entryto PVR Expressway
VMS-18	IDA Kukatpally, Near Metro Mall
VMS-F-02	Banjara Hills, Road No 2, Sultan-UI-Uloom College
VMS-F-03	Mehdiapatnam Road, Near Sarojinidevi Eye Hospital & Entryto PVR Expressway
VMS-F-04	Tank Bund, Secunderabad Sailing Club, Marriott Hotel
VMS-F-05	Railinlayam, Secunderabad
VMS-F-06	Secunderabad-Tarnaka Main Road, Alugadda Bavi
VMS-F-10	Madhina Circle, Chaminar Road
VMS-F-12	Amberpet Main Road, Towards Moosrambagh Junction
VMS-F-13	Tank Bund, Near Yemana Statue
VMS-R-1	Himayat Sagar Road, Sri Venkateswara Veterinary College
VMS-R-3	Mumbai Road, Langar House Road Junction, Mehdiapatnam
VMS-R-4	Secunderabad Club Road, Towards SP Road, Gymkhana Grounds, Secunderabad
VMS-R-5	Tarnaka Main Road, Near Lalapet Flyover, Towards Osmania University Main Road
VMS-R-6	Nacharam Mallapur Road, Near ICT Colony, Towards Habsiguda Main Road
VMS-R-8	Towards Bairamalguda Bypass Road, Nagarjuna Sagar Road, Near Mallikarjuna Nagar Colony

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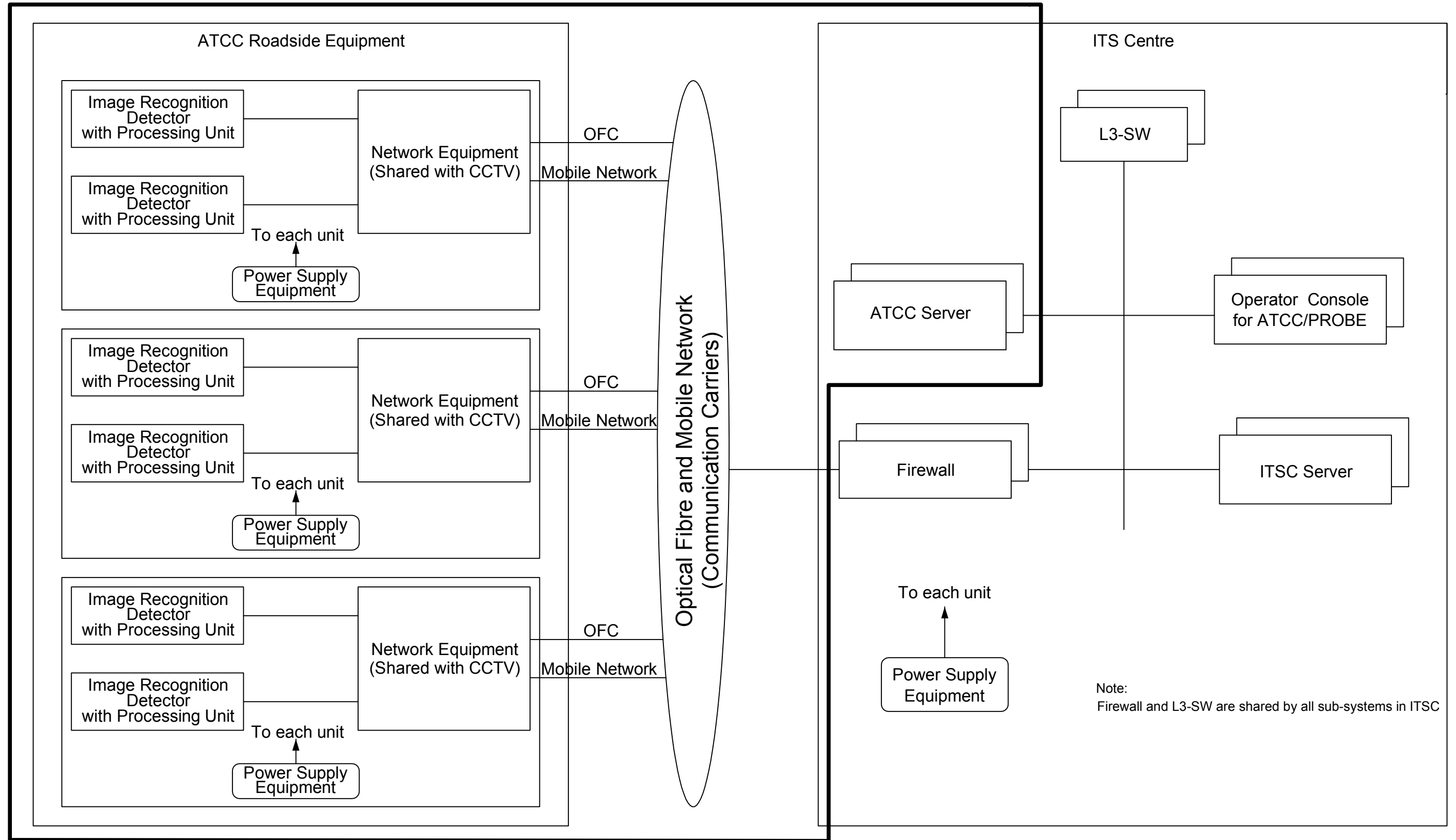
PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)
 TITLE :
LOCATION PLAN OF VMS ROADSIDE EQUIPMENT
 SCALE: NOT TO SCALE DWG. NO. G -06



Note:
 — : L3-SW

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REVISION NO.	DATE	DESCRIPTION				TITLE : ALL COMPONENTS OF HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM	
01	-	FIRST SUBMISSION		SCALE: NOT TO SCALE DWG. NO. S -01			

SCOPE OF ATCC SYSTEM



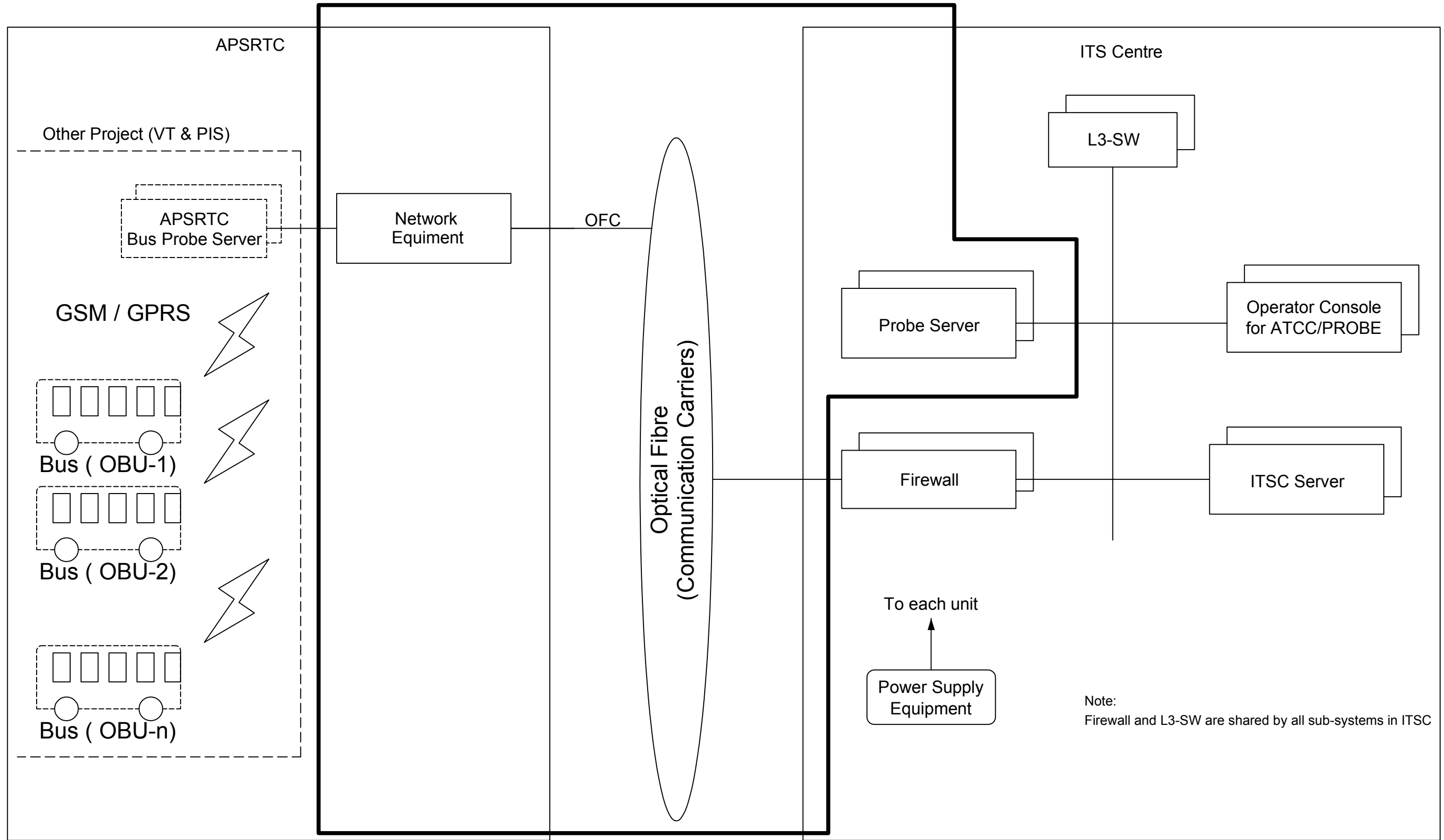
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HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**
 TITLE : **AUTOMATIC TRAFFIC COUNTERS-CUM-CLASSIFIER SYSTEM**
 SCALE: NOT TO SCALE DWG. NO. S -02

SCOPE OF PROBE CAR SYSTEM



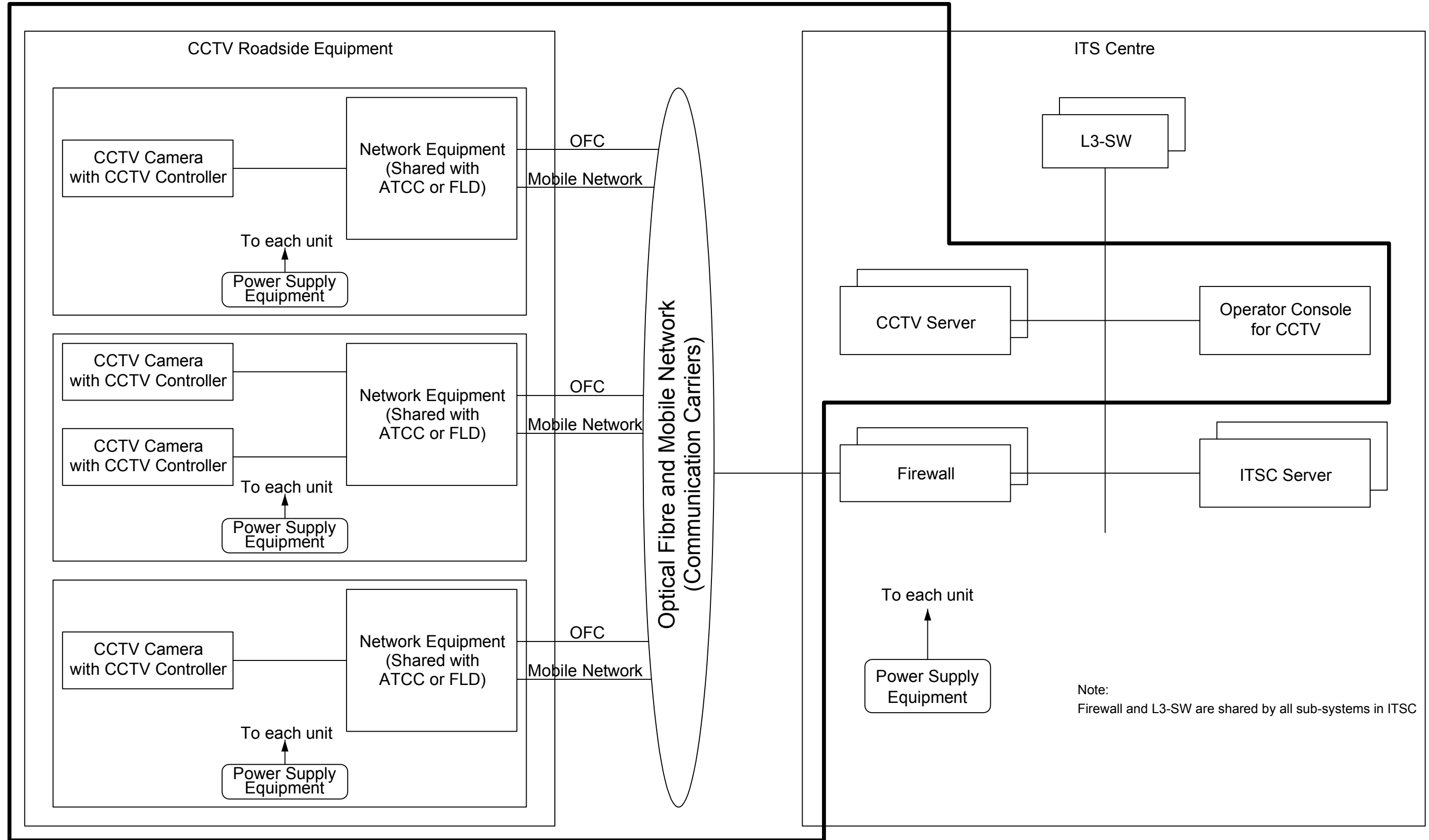
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HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**
 TITLE : **PROBE CAR SYSTEM**
 SCALE: NOT TO SCALE DWG. NO. S -03

SCOPE OF CCTV SYSTEM



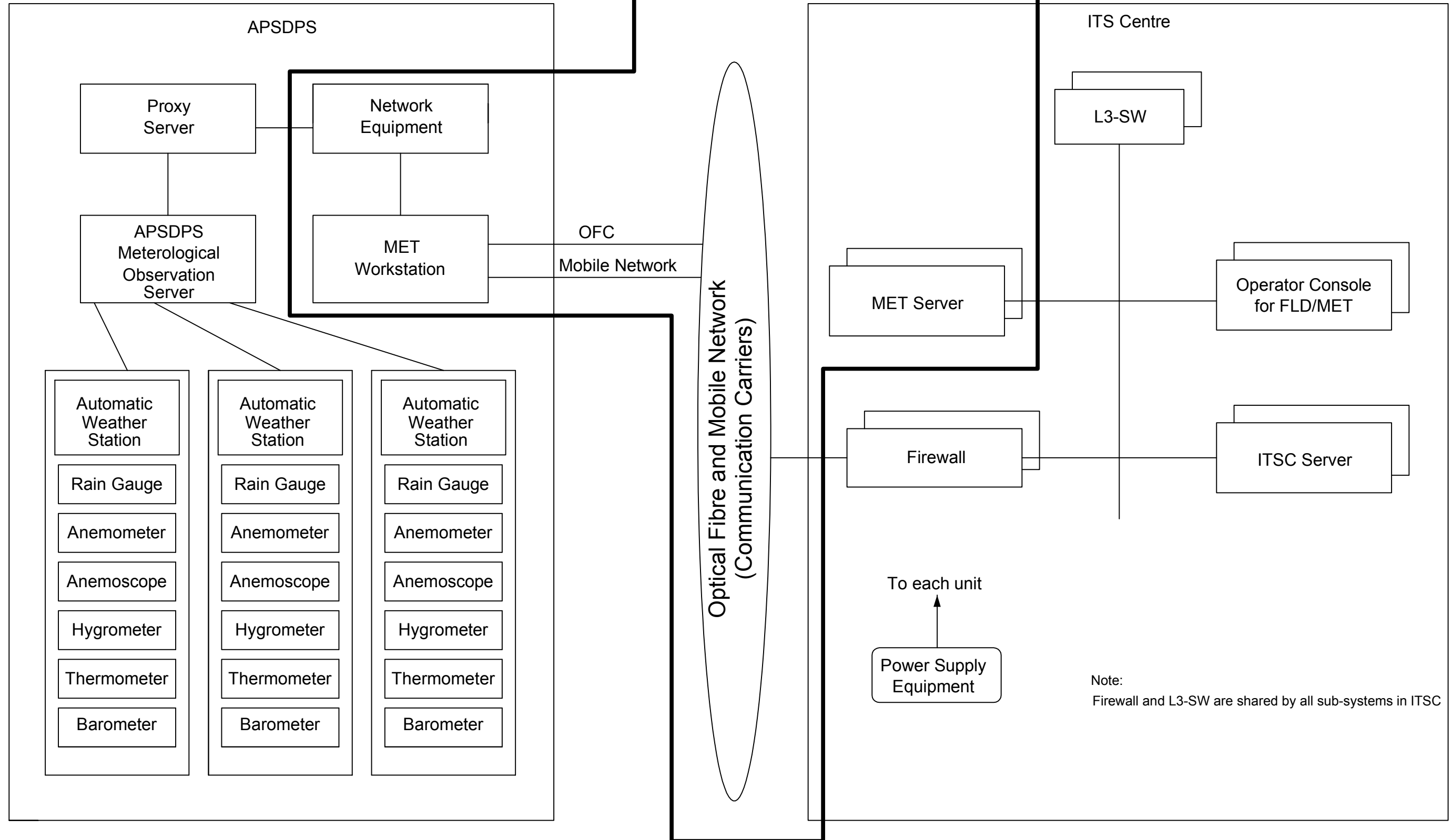
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 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)
 TITLE :
CLOSED CIRCUIT TELEVISION CAMERA SYSTEM
 SCALE: NOT TO SCALE DWG. NO. S -04

SCOPE OF MET SYSTEM



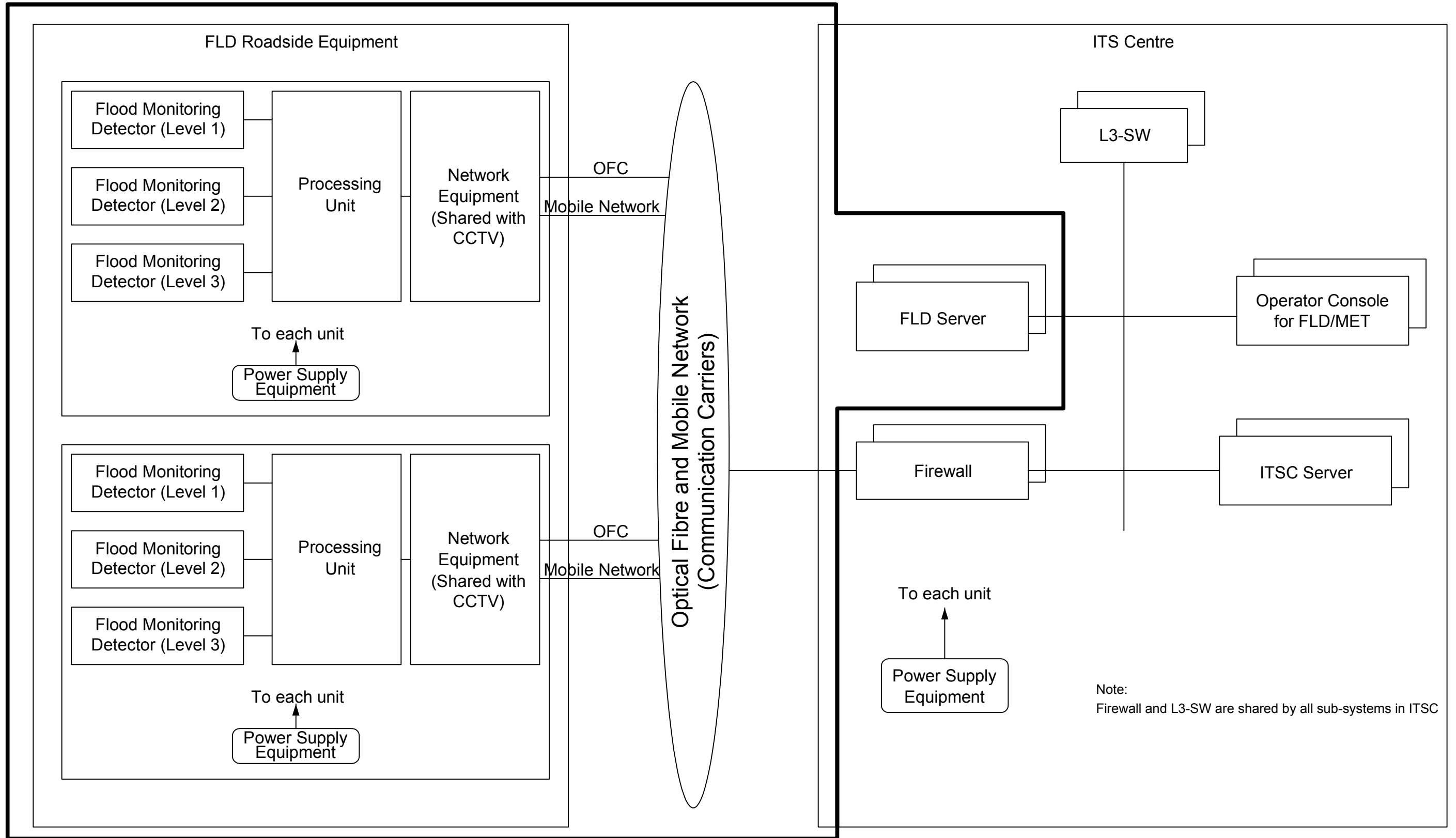
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	


JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)
 TITLE :
METEOROLOGICAL MONITORING SYSTEM
 SCALE: NOT TO SCALE DWG. NO. S -05

SCOPE OF FLD SYSTEM



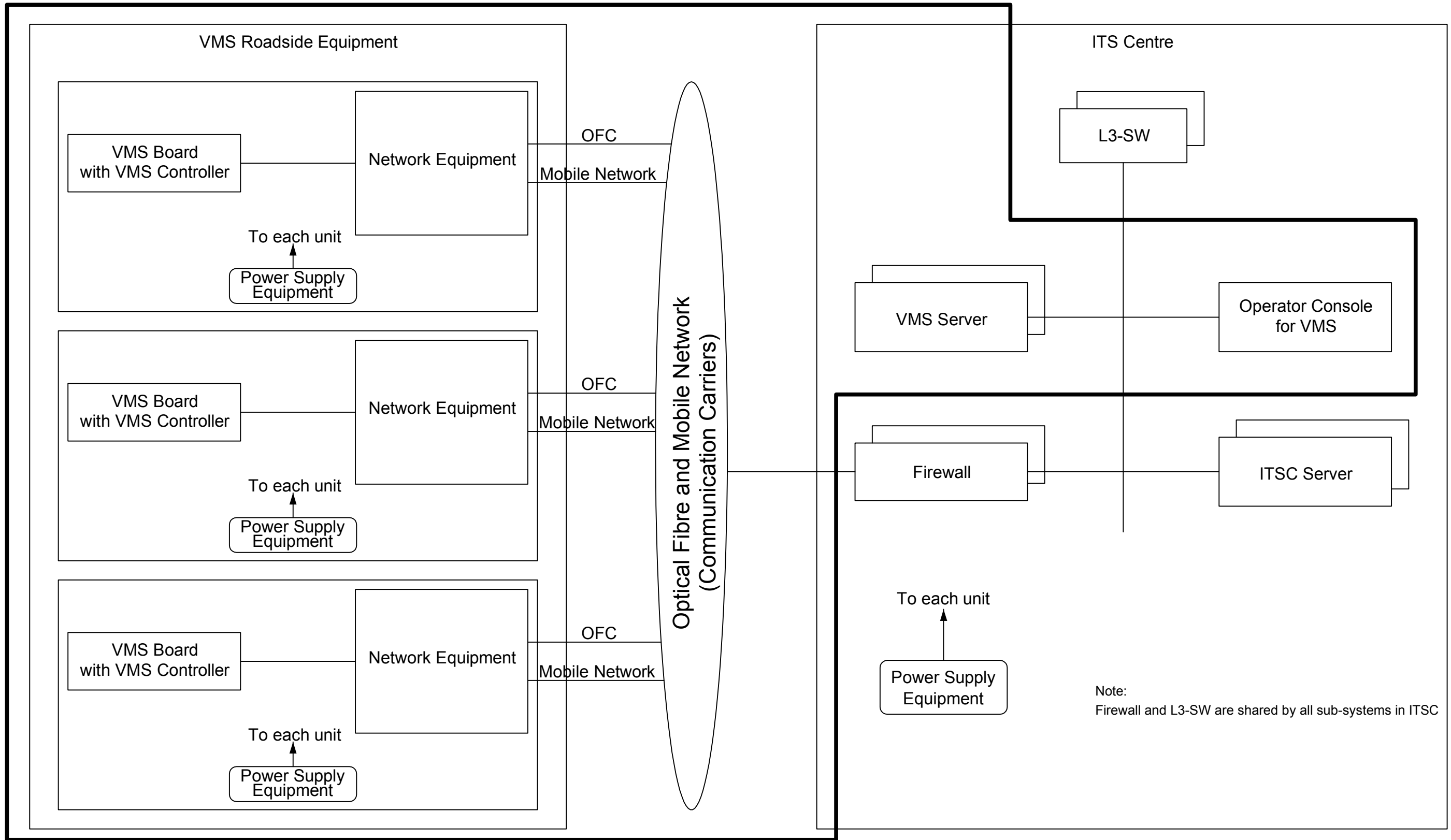
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	


JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)
 TITLE :
FLOOD MONITORING SYSTEM
 SCALE: NOT TO SCALE DWG. NO. S -06

SCOPE OF VMS SYSTEM



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REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

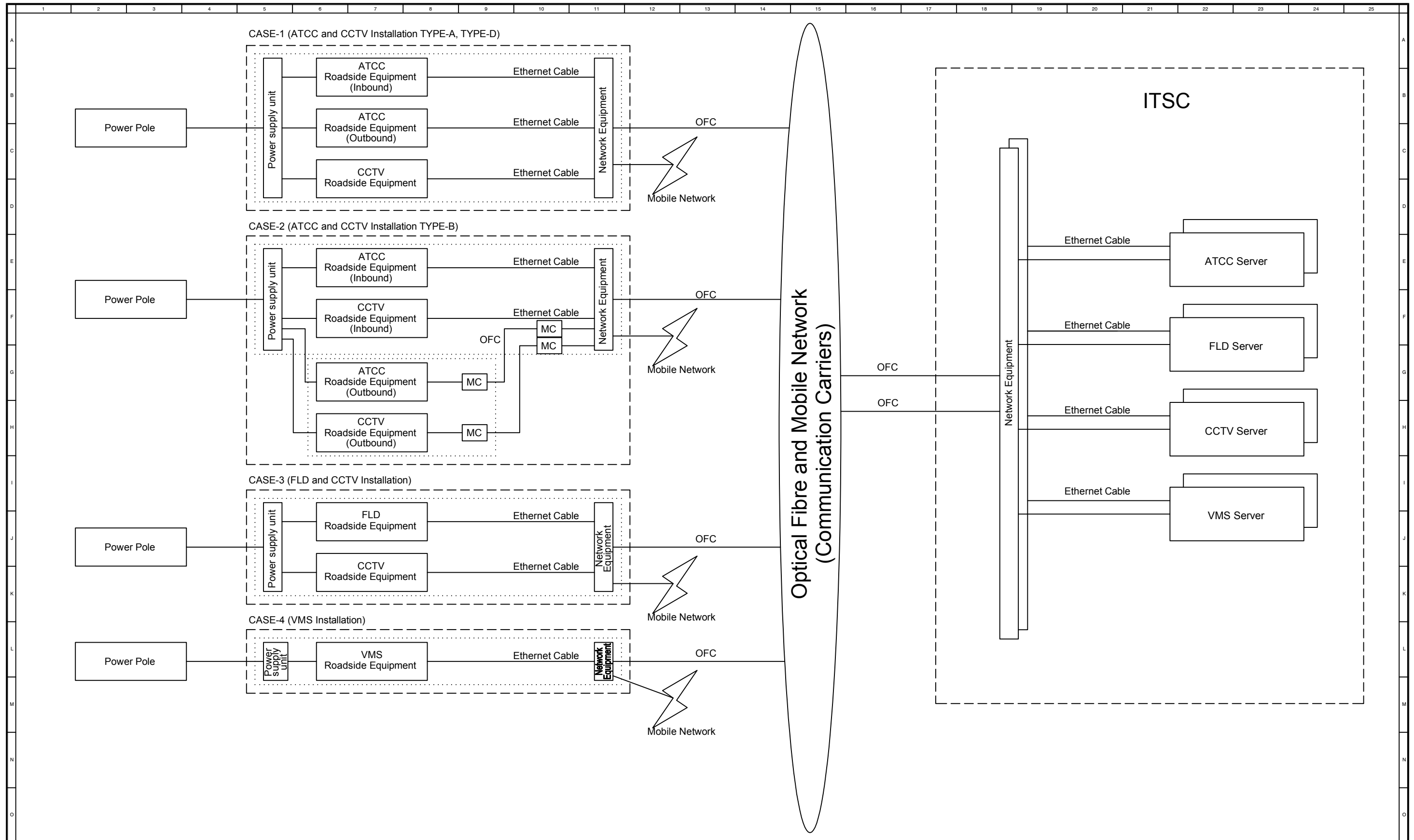
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

TITLE :
VARIABLE MESSAGE SIGN SYSTEM

SCALE: NOT TO SCALE DWG. NO. S -07



DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

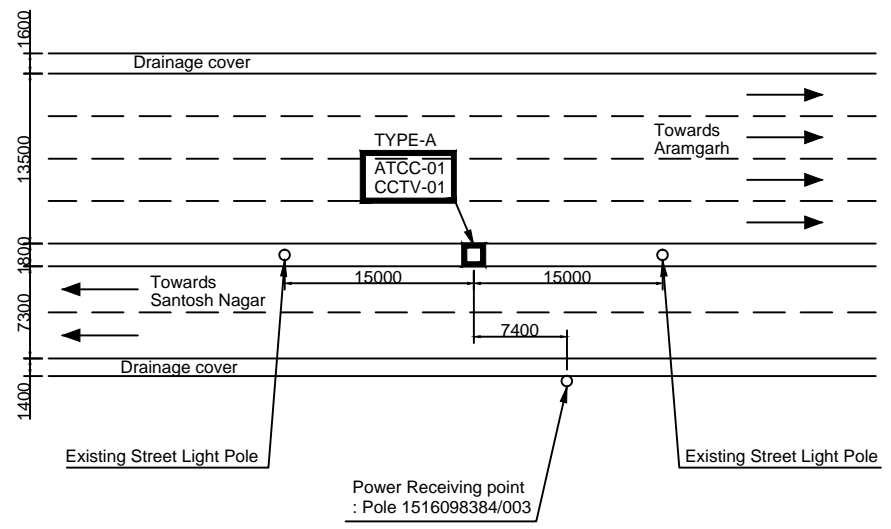
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

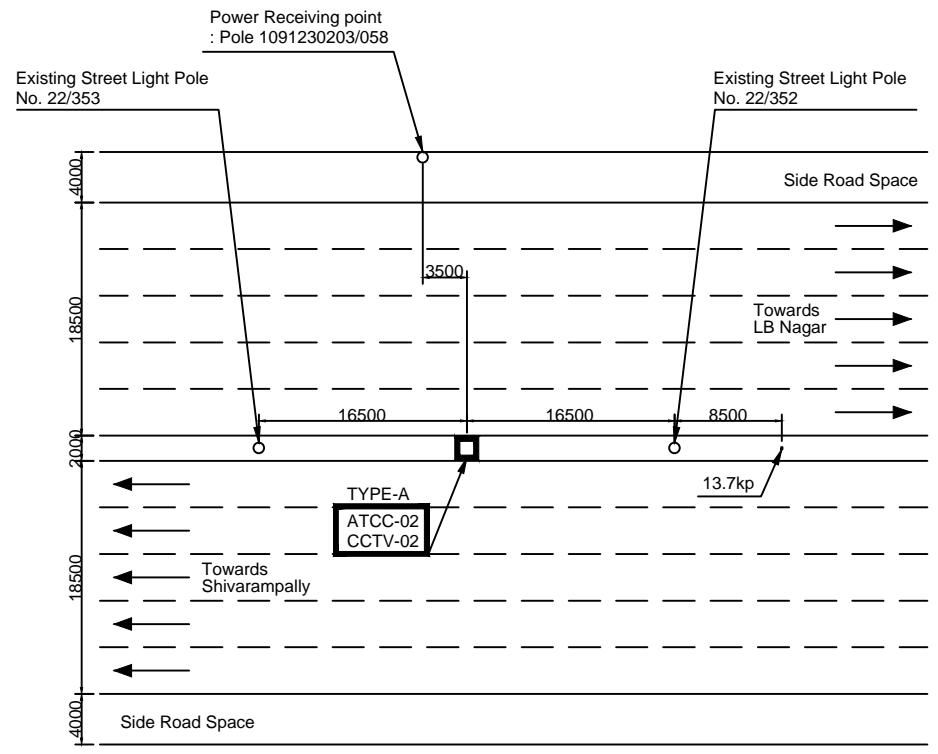
PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

TITLE :
CABLE DISTRIBUTION DIAGRAM

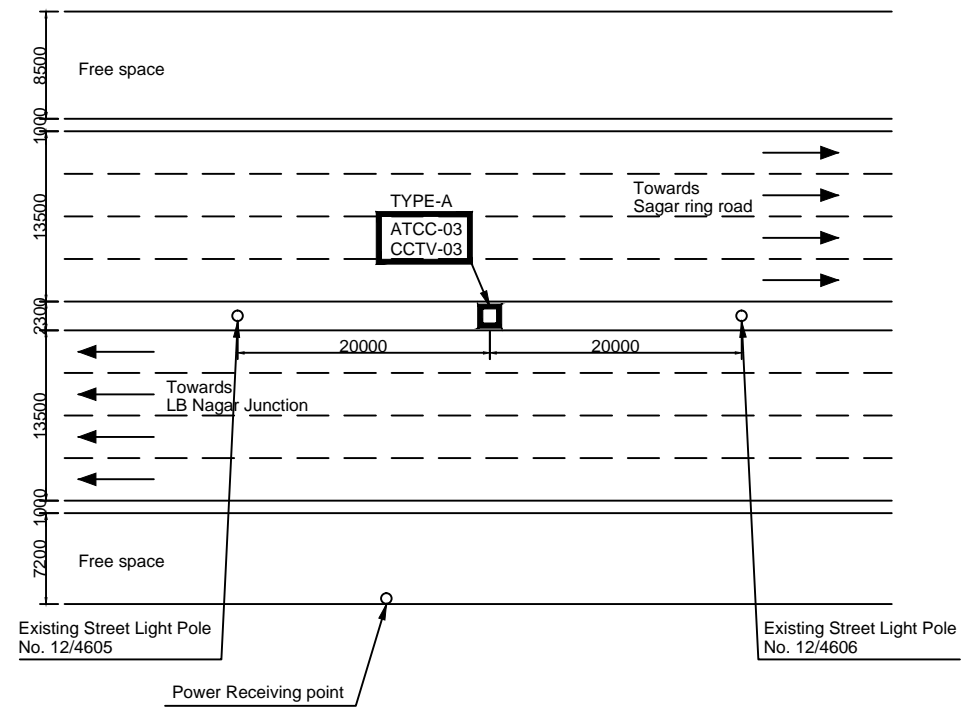
SCALE: NOT TO SCALE DWG. NO. S -08



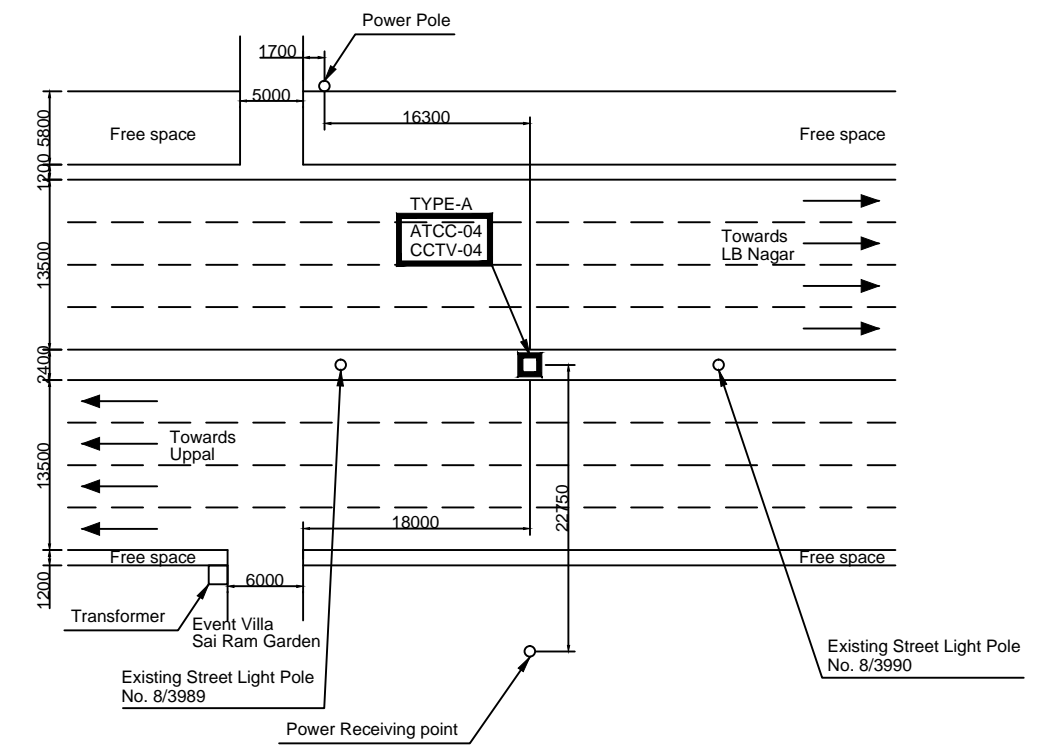
ATCC-01, CCTV-01



ATCC-02, CCTV-02



ATCC-03, CCTV-03



ATCC-04, CCTV-04

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

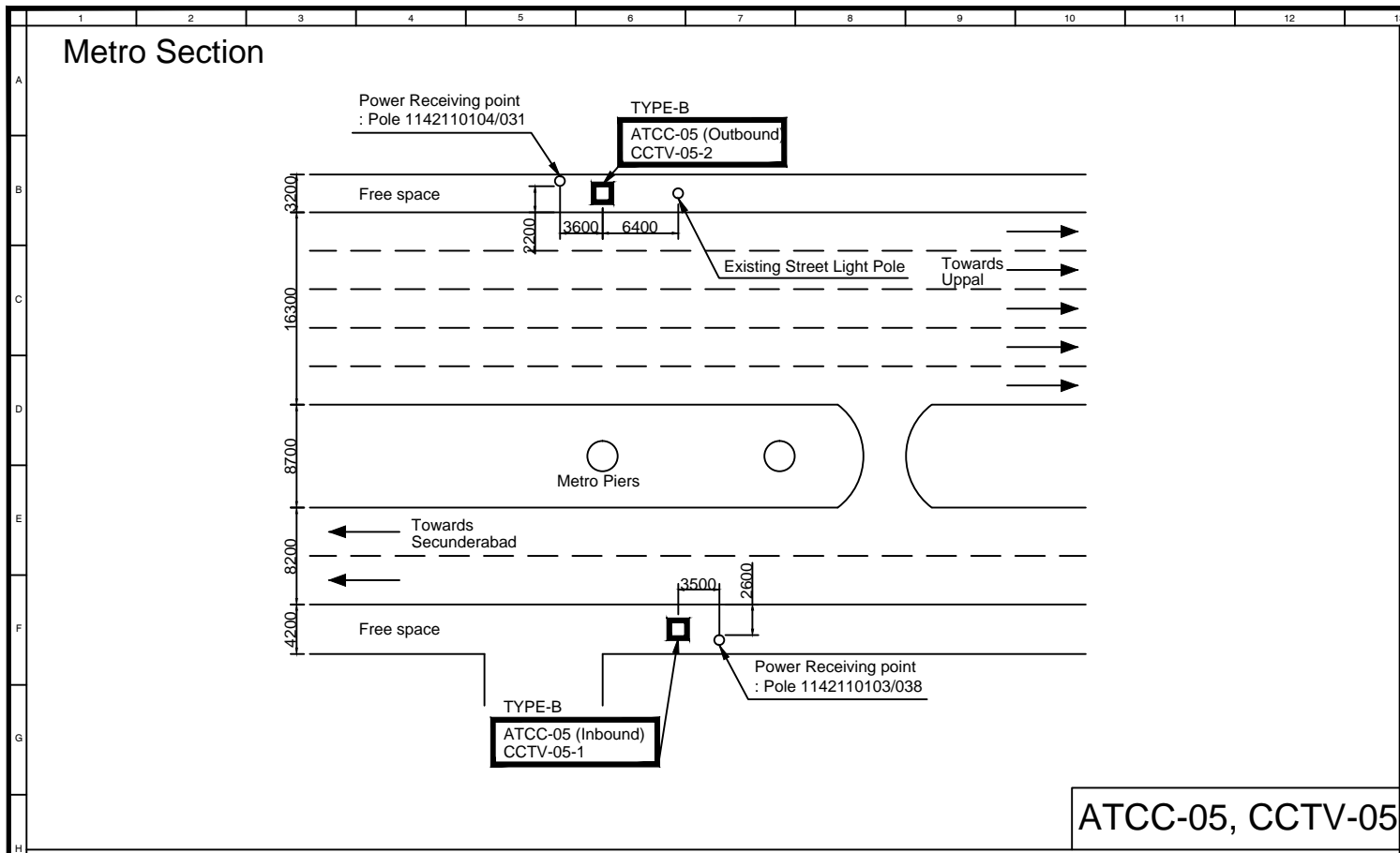
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

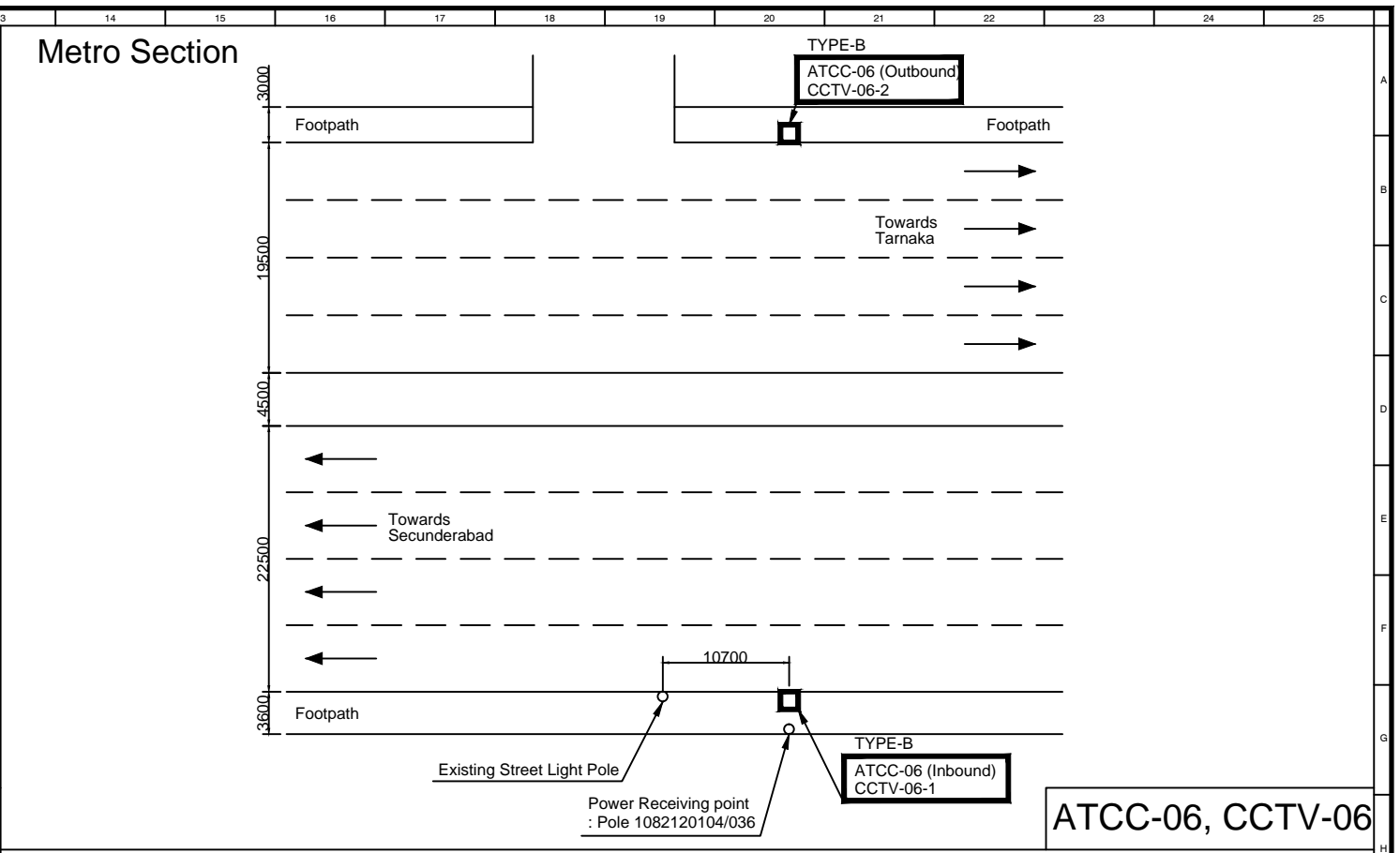
PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE : **LAYOUT PLAN OF ATCC AND CCTV (1)**

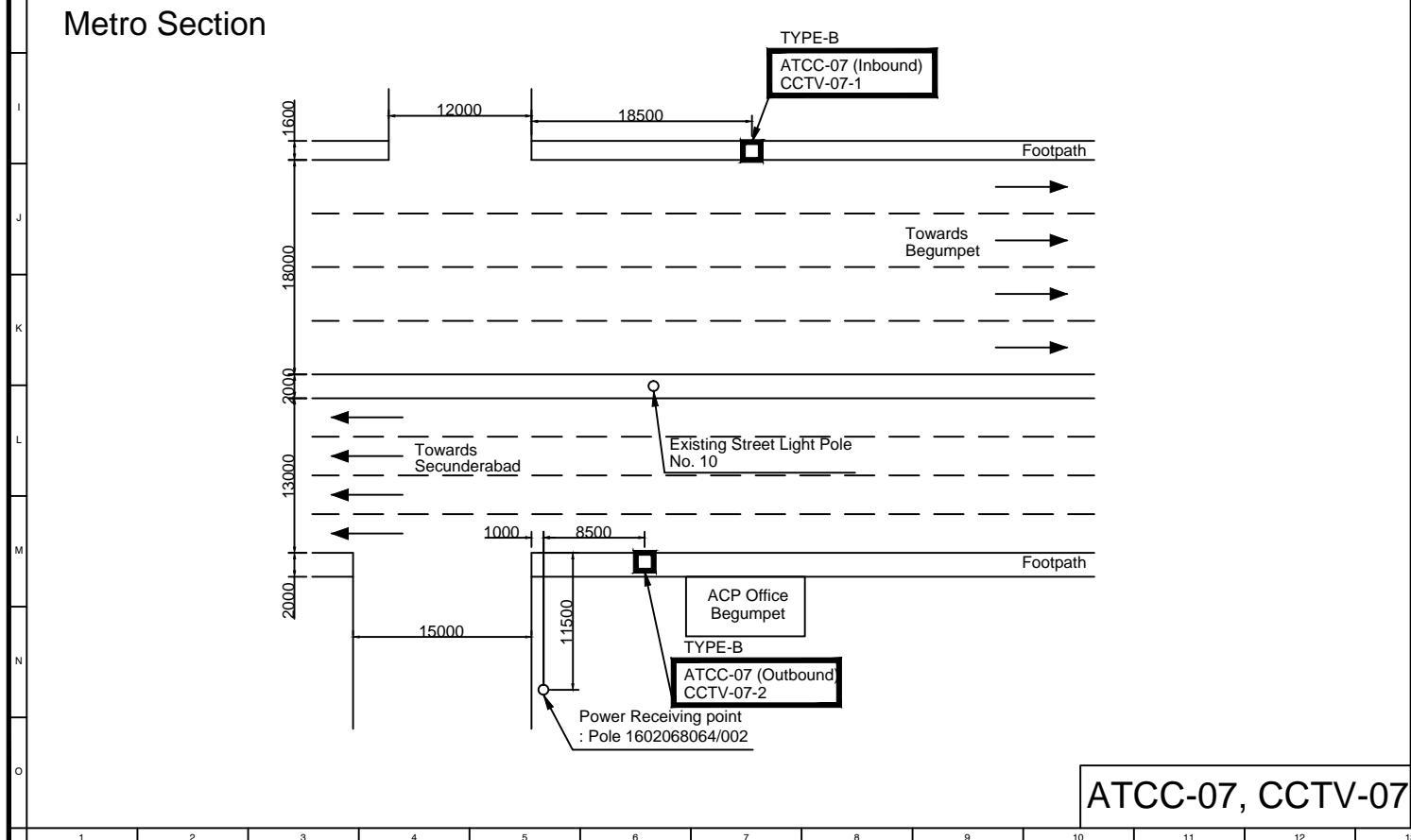
SCALE: 1:600 DWG. NO. L -01



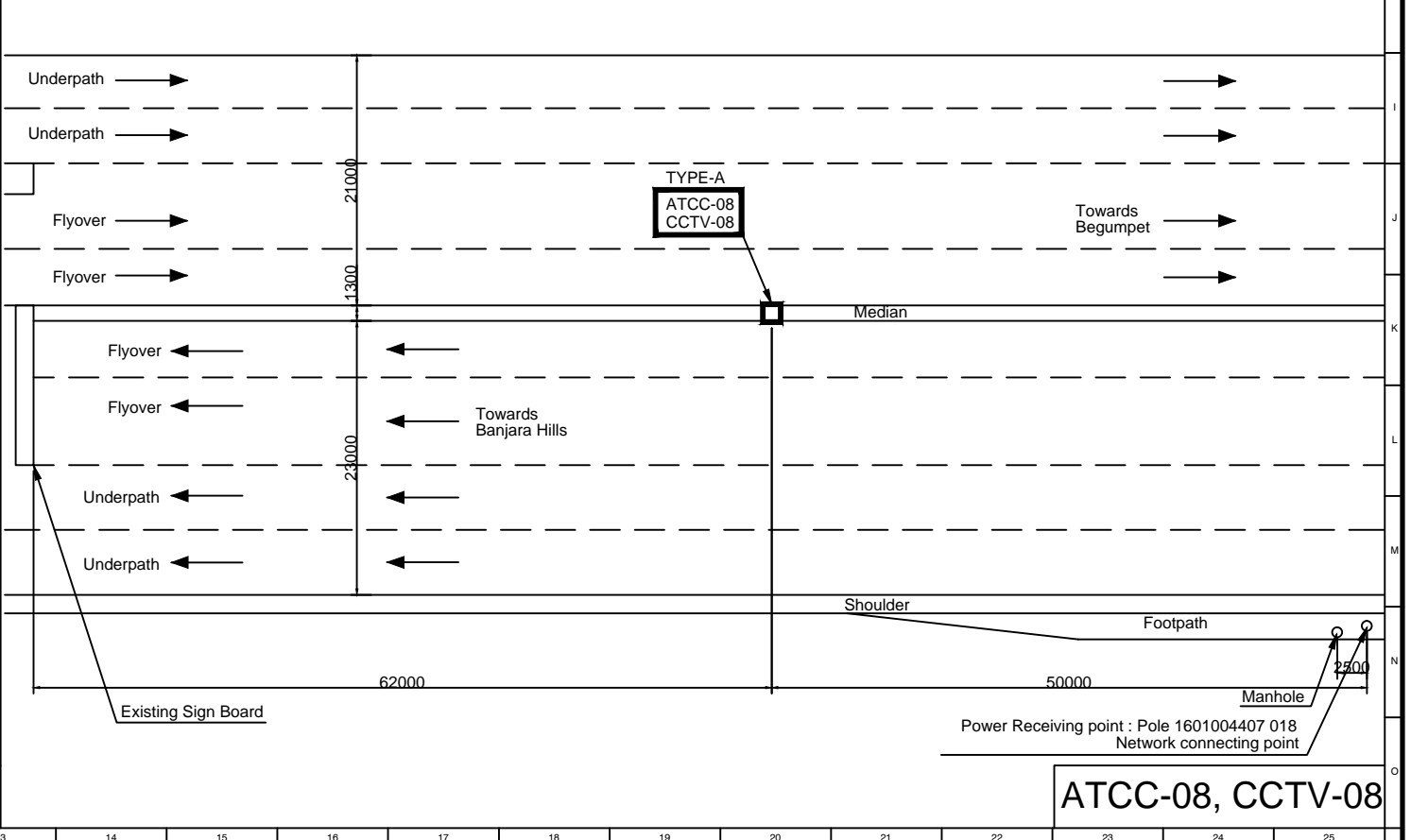
ATCC-05, CCTV-05



ATCC-06, CCTV-06



ATCC-07, CCTV-07



ATCC-08, CCTV-08

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JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

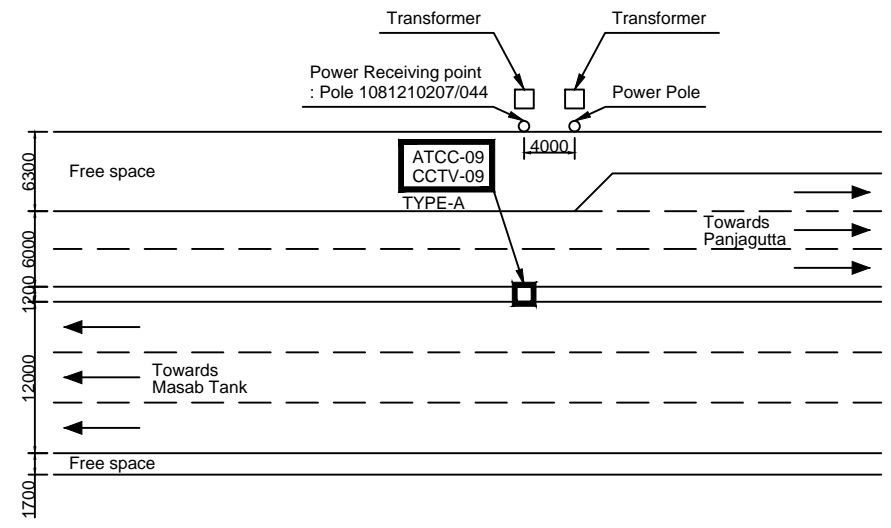
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

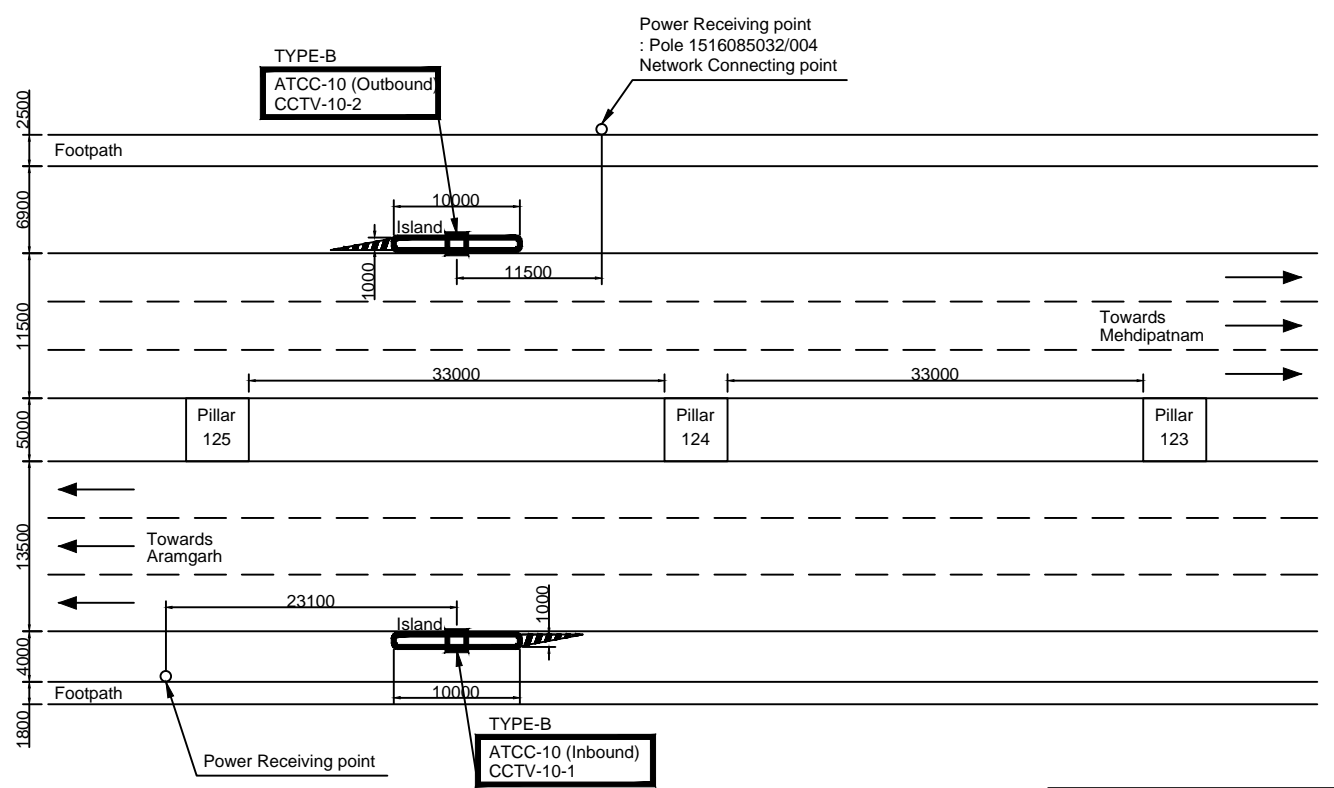
PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE : **LAYOUT PLAN OF ATCC AND CCTV (2)**

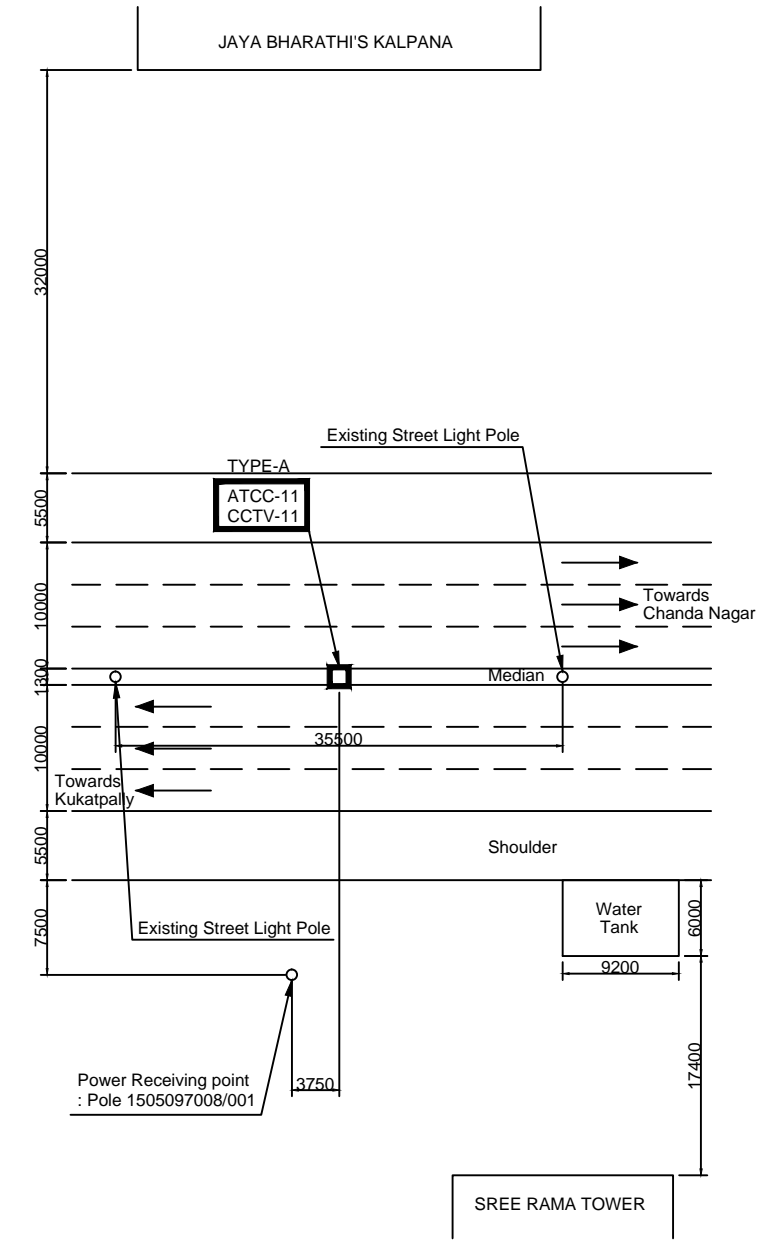
SCALE: 1:600 DWG. NO. L -02



ATCC-09, CCTV-09



ATCC-10, CCTV-10



ATCC-11, CCTV-11

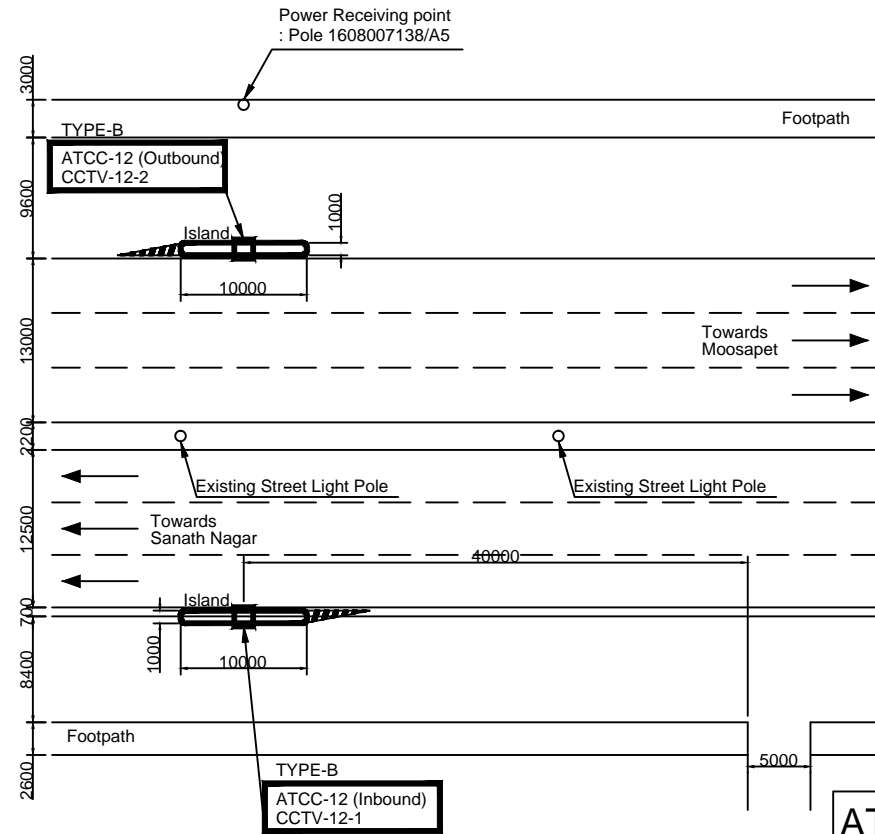
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

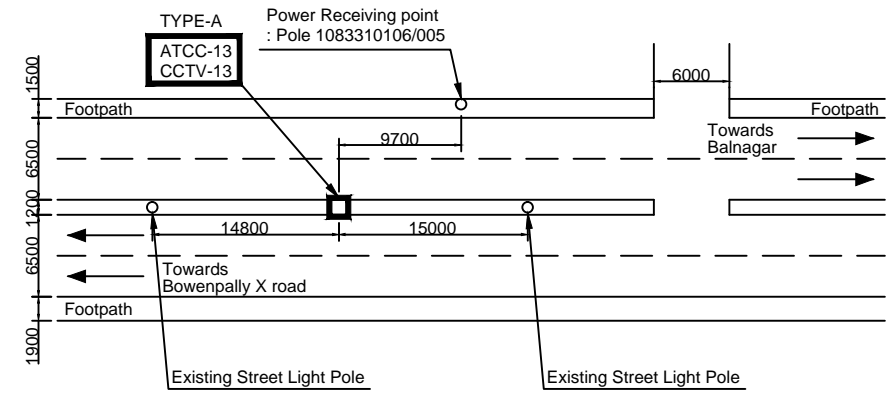
HYDERABAD GROWTH CORRIDOR LIMITED
 HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT : NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)
 TITLE : LAYOUT PLAN OF ATCC AND CCTV (3)
 SCALE: 1:600 DWG. NO. L -03

Metro Section

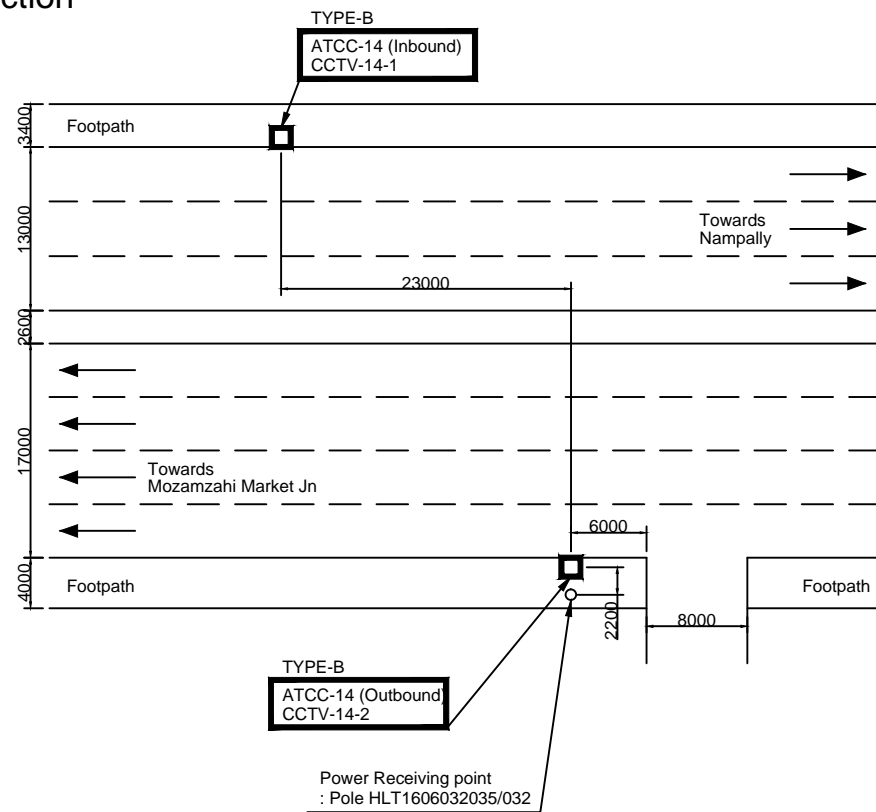


ATCC-12, CCTV-12

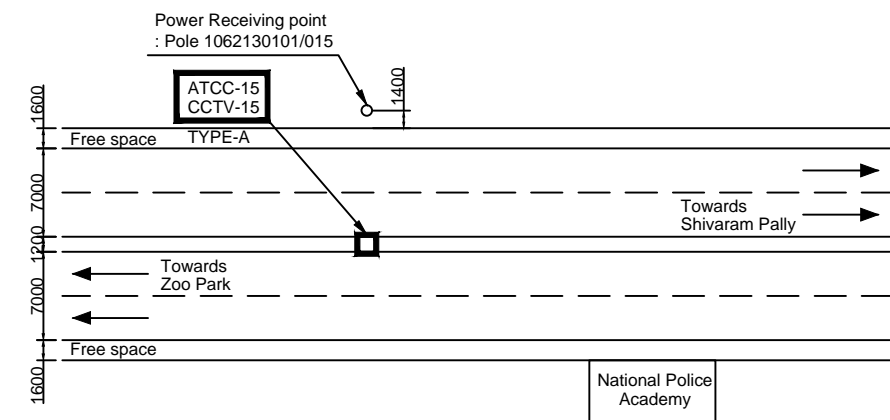


ATCC-13, CCTV-13

Metro Section



ATCC-14, CCTV-14



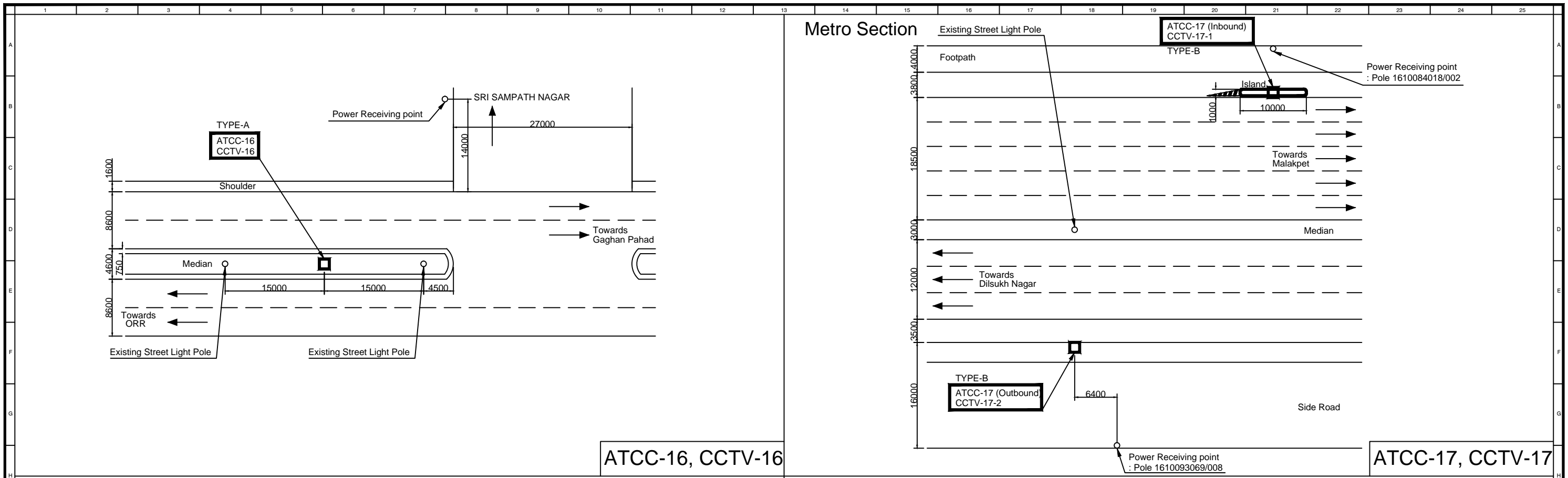
ATCC-15, CCTV-15

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REVISION NO.	DATE	DESCRIPTION	
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JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

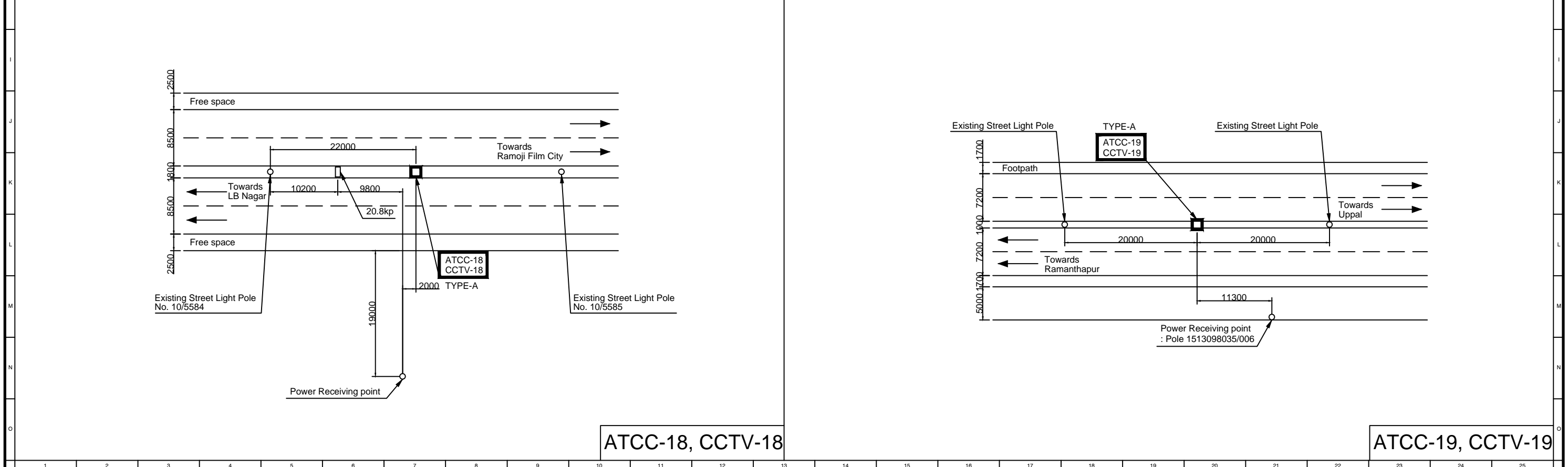
HYDERABAD GROWTH CORRIDOR LIMITED
 HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**
 TITLE : **LAYOUT PLAN OF ATCC AND CCTV (4)**
 SCALE: 1:600 DWG. NO. L -04



ATCC-16, CCTV-16

ATCC-17, CCTV-17



ATCC-18, CCTV-18

ATCC-19, CCTV-19

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REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

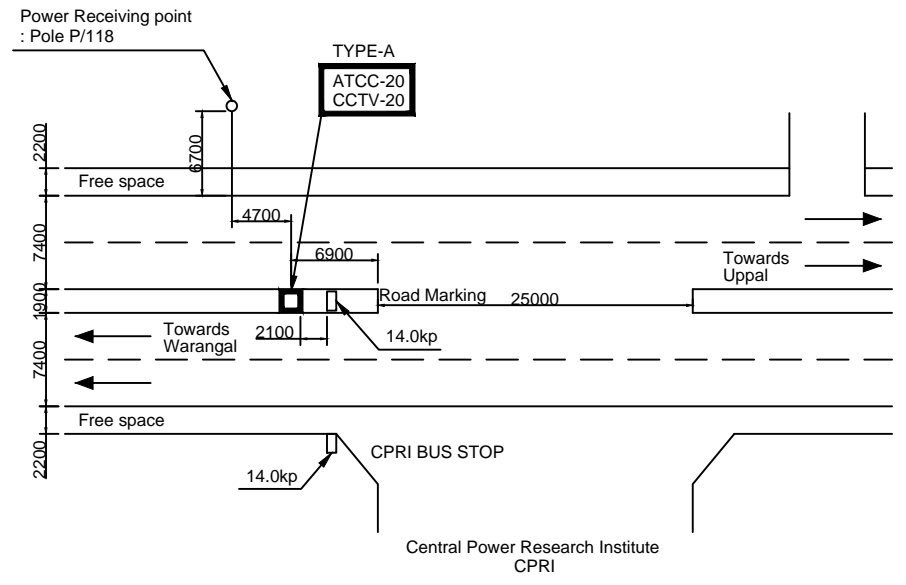
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

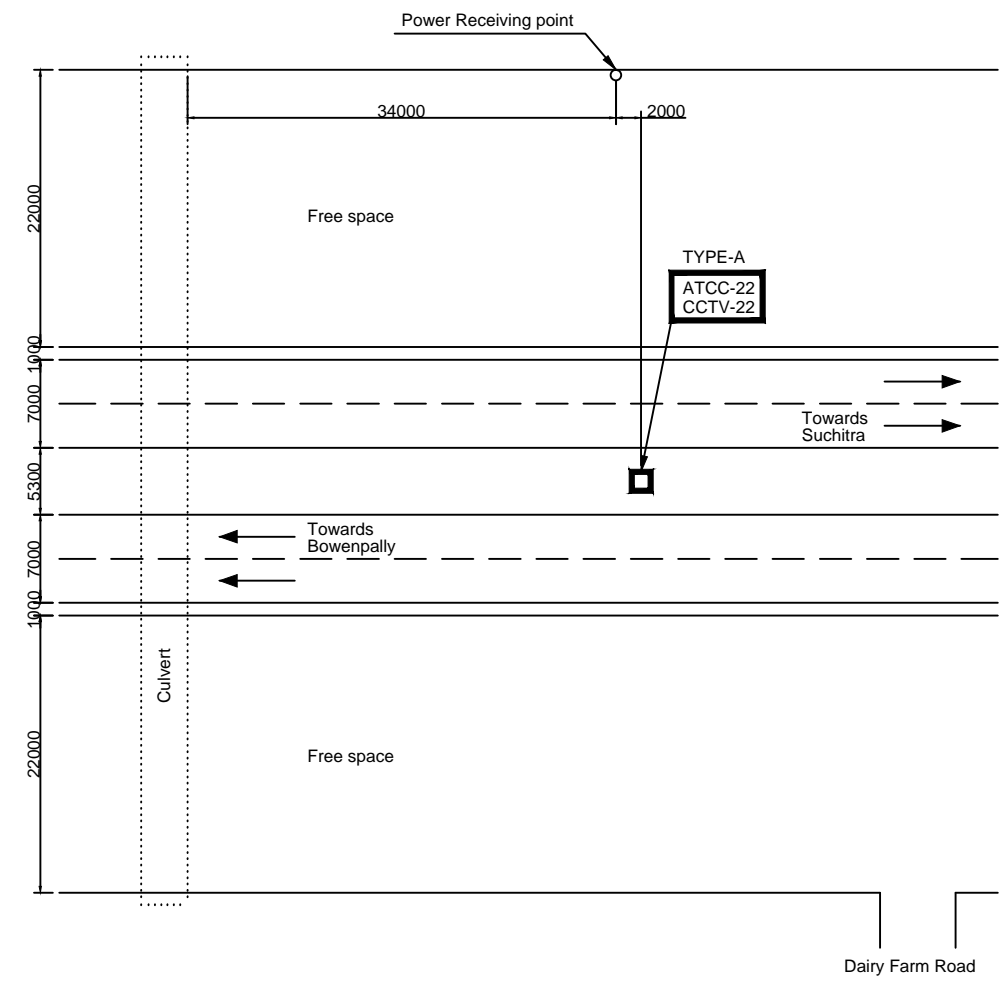
PROJECT : NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

TITLE : LAYOUT PLAN OF ATCC AND CCTV (5)

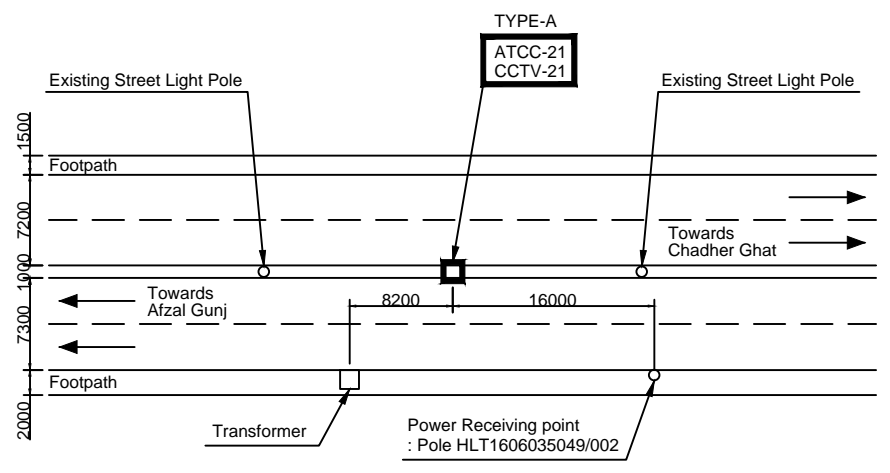
SCALE: 1:600 DWG. NO. L -05



ATCC-20, CCTV-20



ATCC-22, CCTV-22



ATCC-21, CCTV-21

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

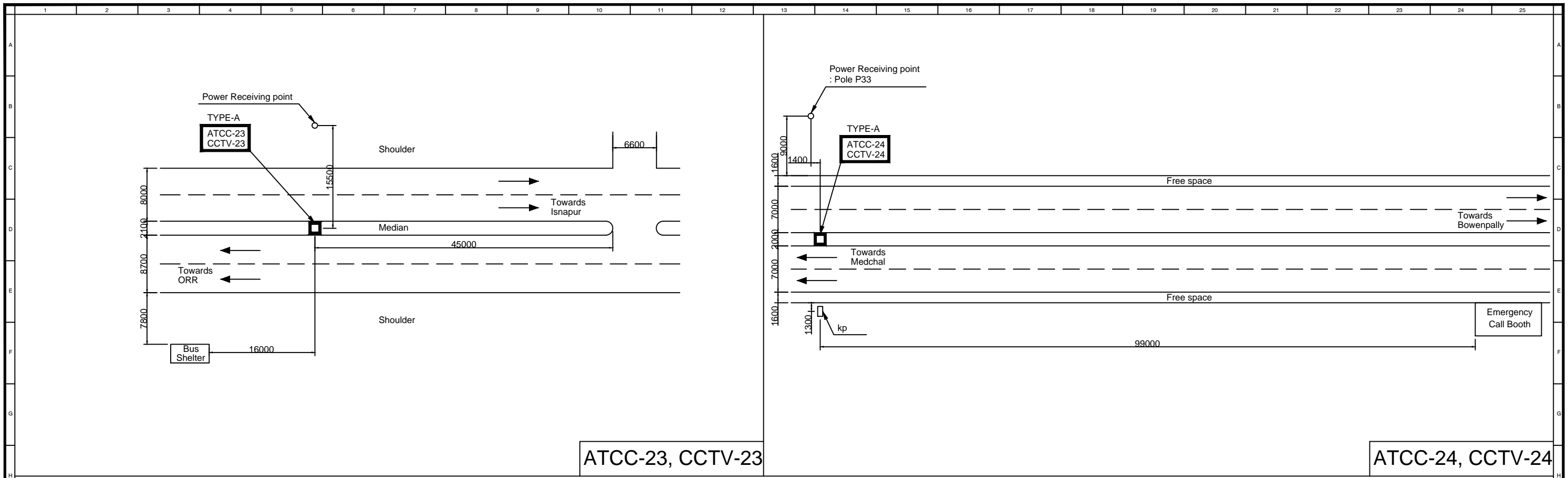
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

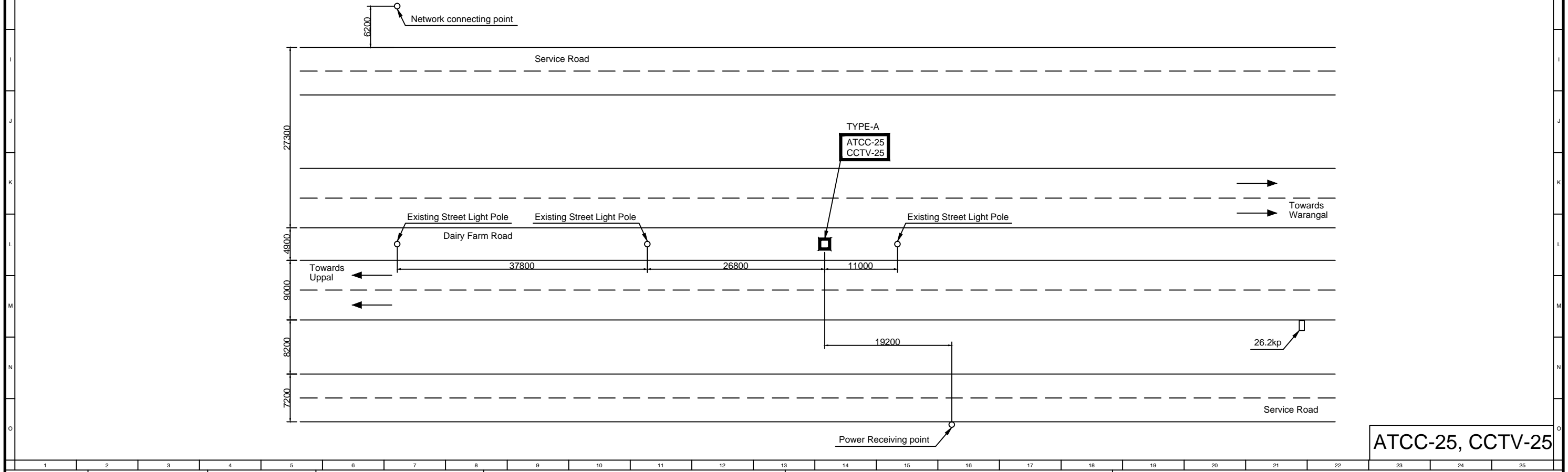
TITLE : **LAYOUT PLAN OF ATCC AND CCTV (6)**

SCALE: 1:600 DWG. NO. L -06



ATCC-23, CCTV-23

ATCC-24, CCTV-24



ATCC-25, CCTV-25

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REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

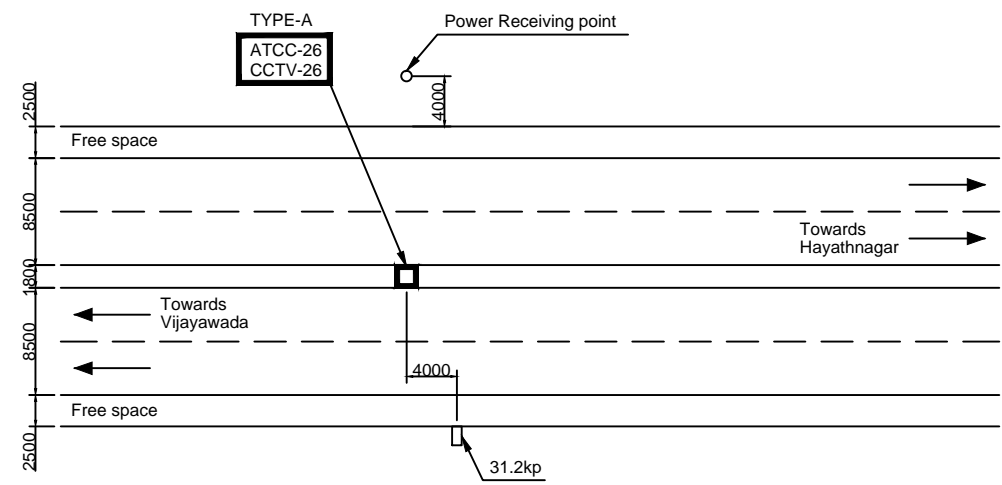
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

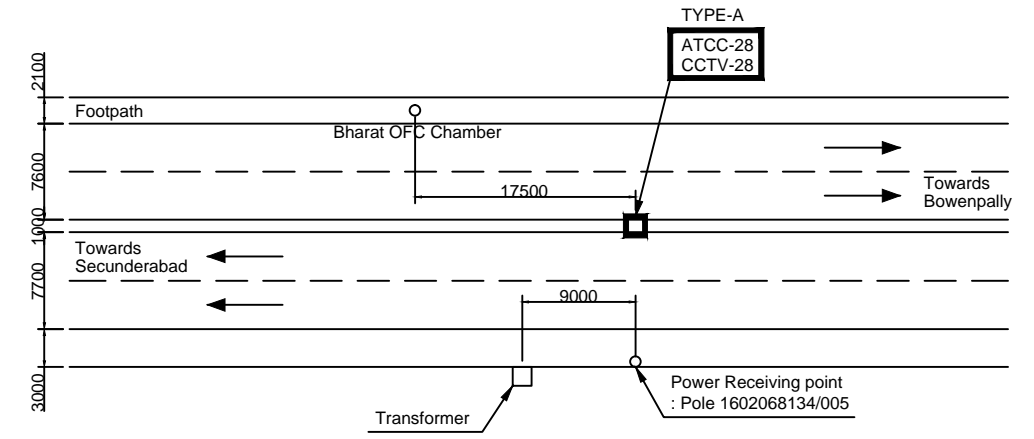
PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE : **LAYOUT PLAN OF ATCC AND CCTV (7)**

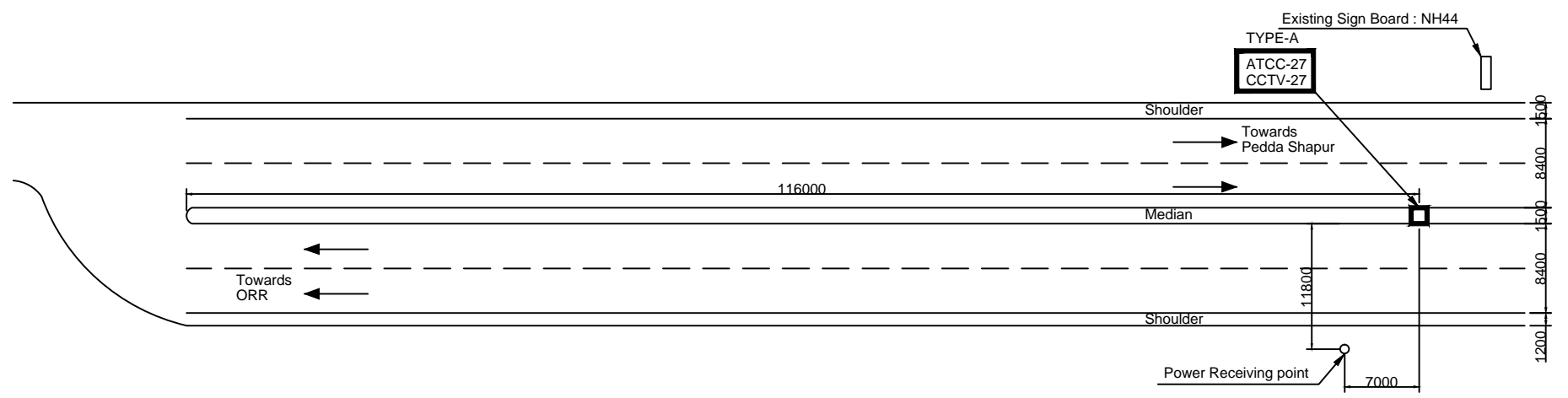
SCALE: 1:600 DWG. NO. L -07



ATCC-26, CCTV-26



ATCC-28, CCTV-28



ATCC-27, CCTV-27

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REVISION NO.	DATE	DESCRIPTION	
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JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

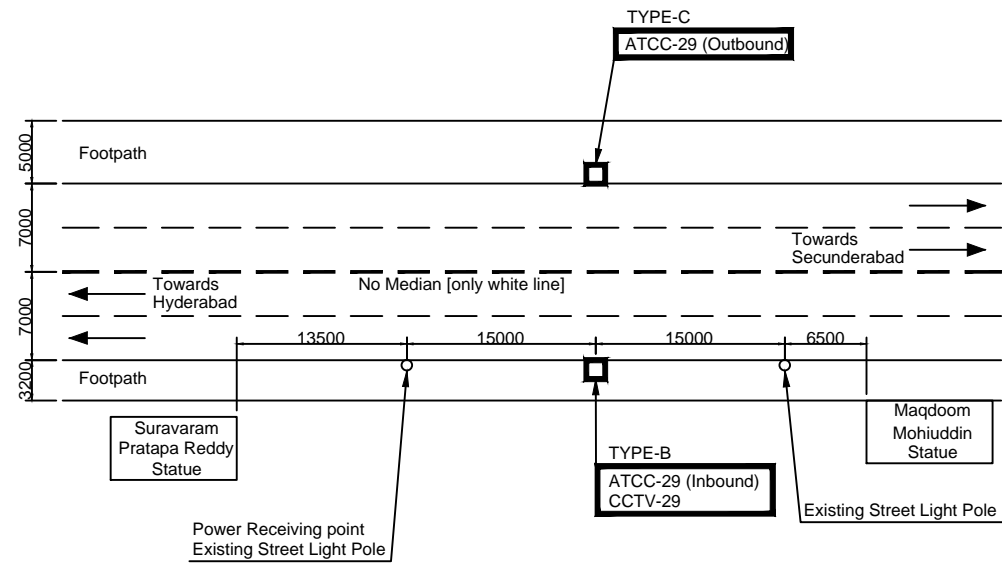
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

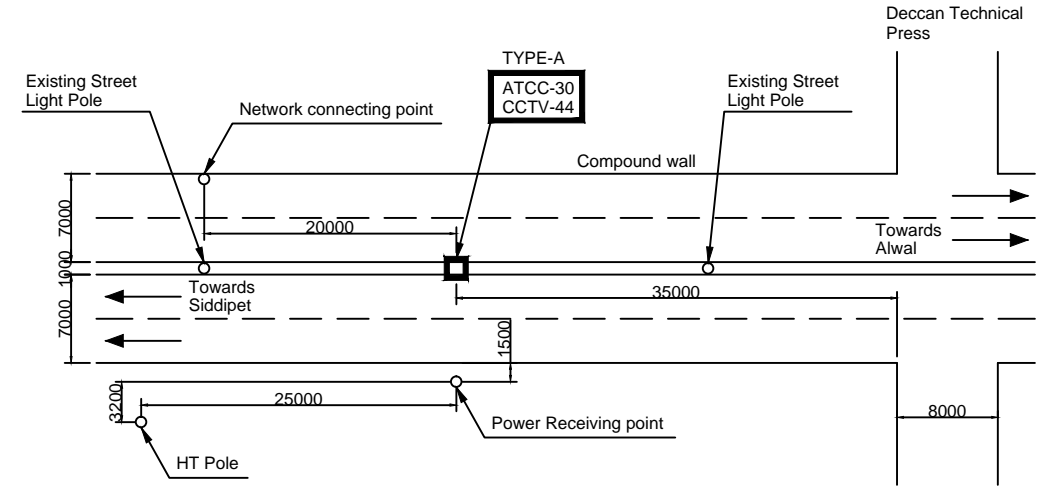
PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE : **LAYOUT PLAN OF ATCC AND CCTV (8)**

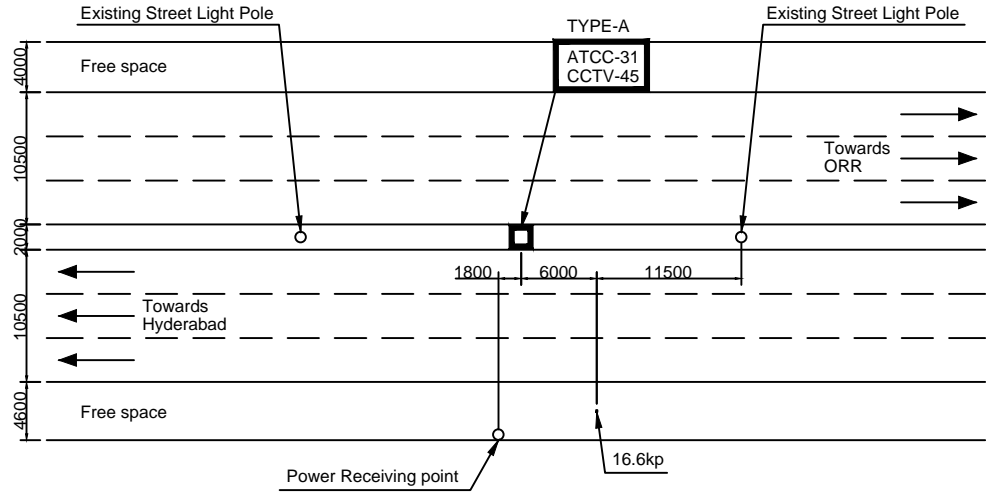
SCALE: 1:600 DWG. NO. L -08



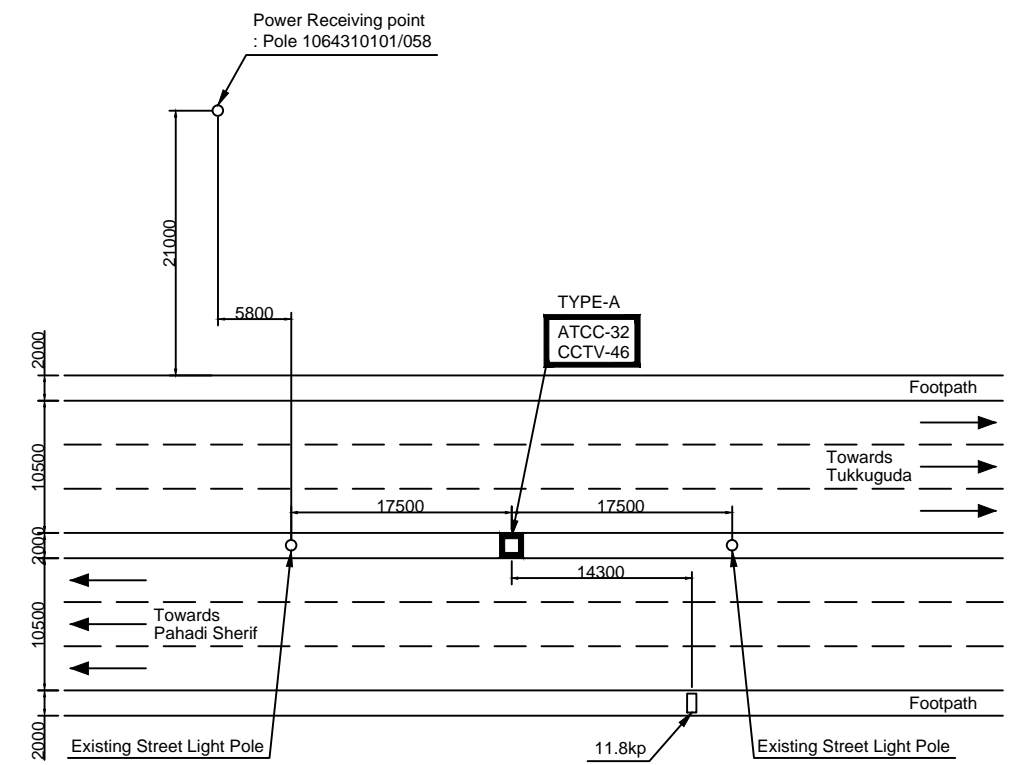
ATCC-29, CCTV-29



ATCC-30, CCTV-44



ATCC-31, CCTV-45



ATCC-32, CCTV-46

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REVISION NO.	DATE	DESCRIPTION	
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JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

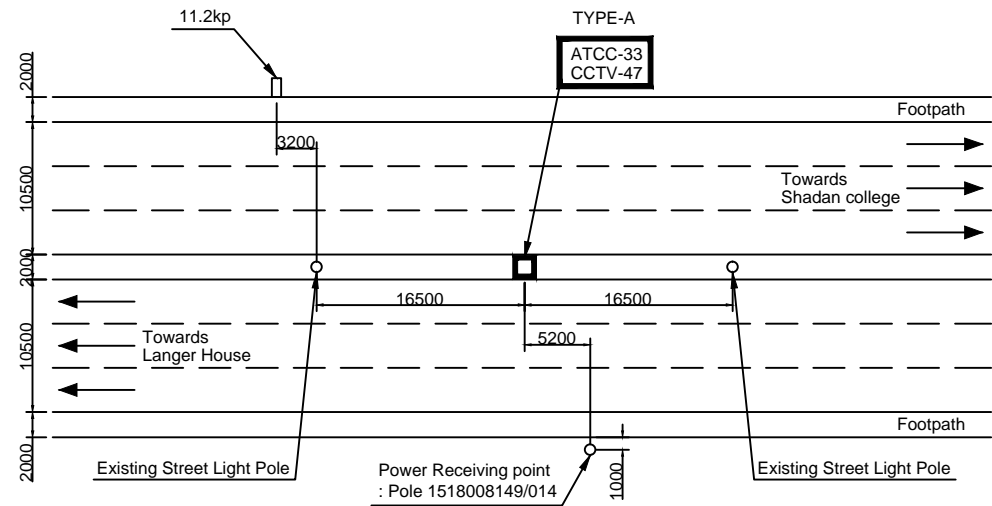
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

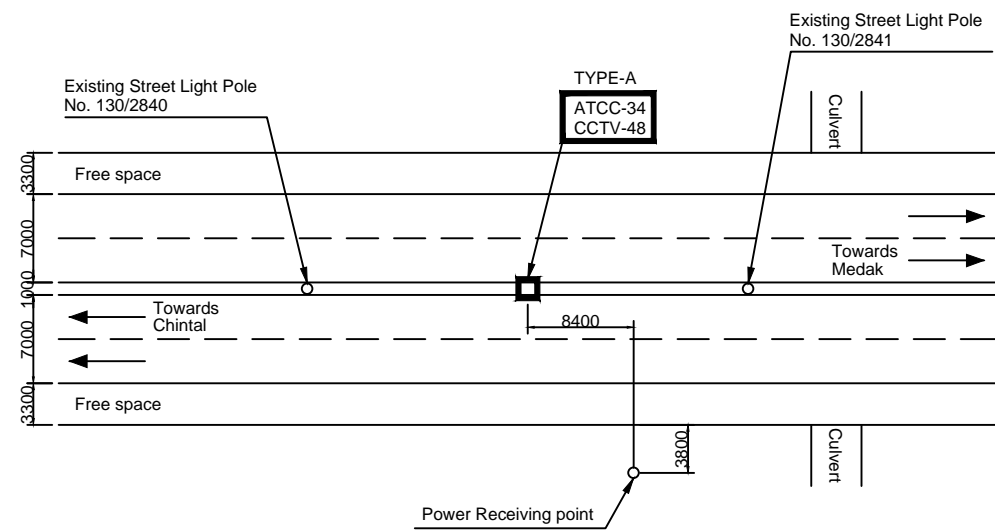
PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE : **LAYOUT PLAN OF ATCC AND CCTV (9)**

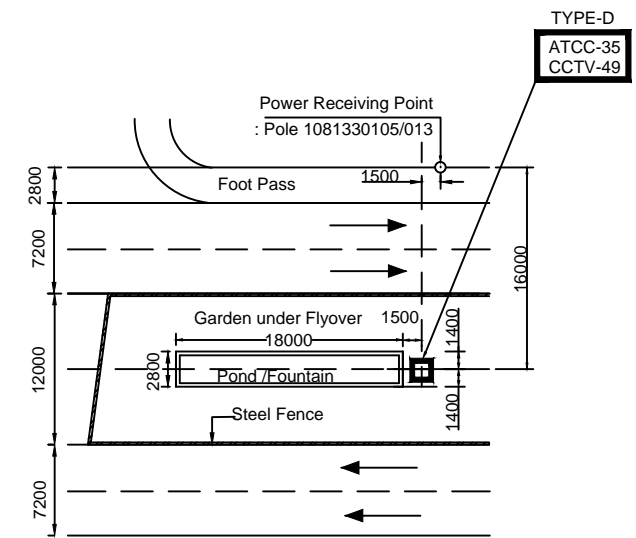
SCALE: 1:600 DWG. NO. L -09



ATCC-33, CCTV-47



ATCC-34, CCTV-48



ATCC-35, CCTV-49

Punjagutta Crossing

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JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

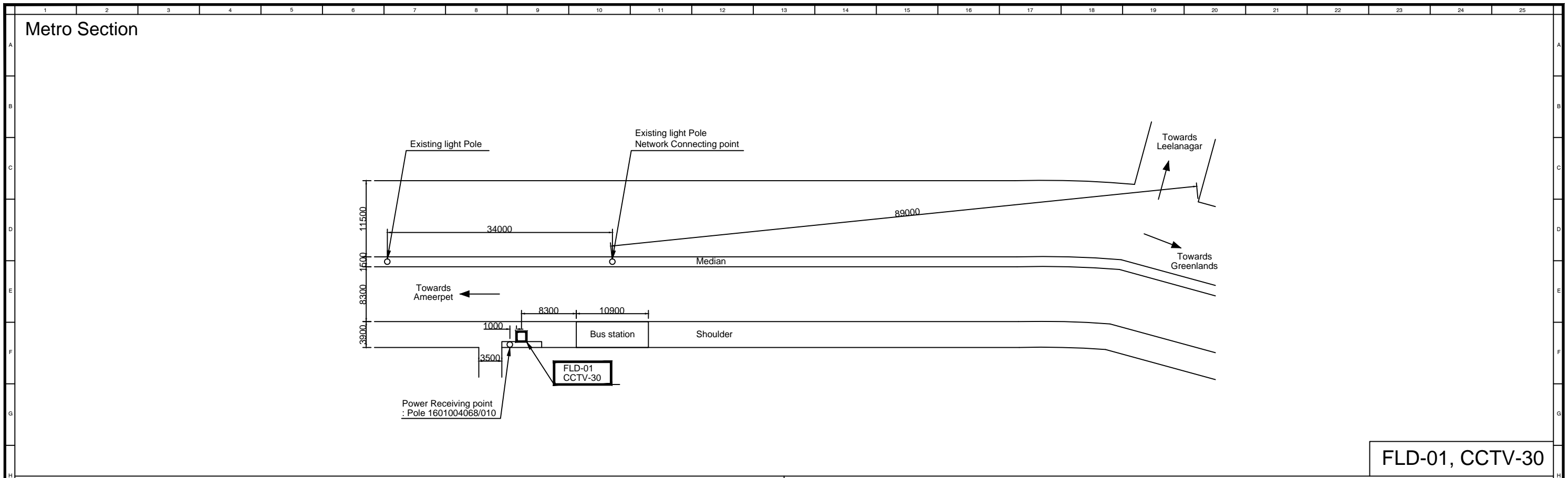
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

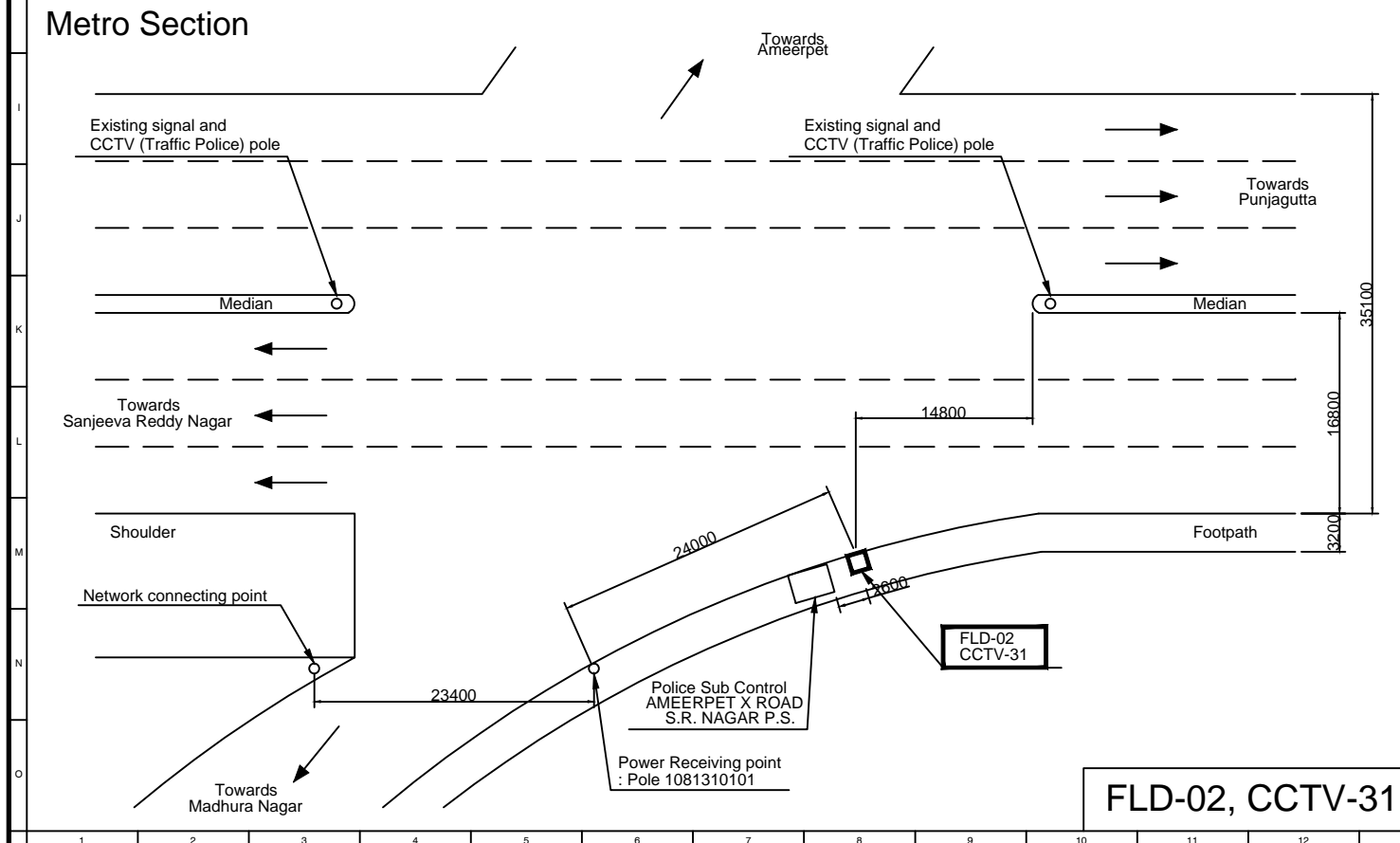
PROJECT : NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

TITLE : LAYOUT PLAN OF ATCC AND CCTV (10)

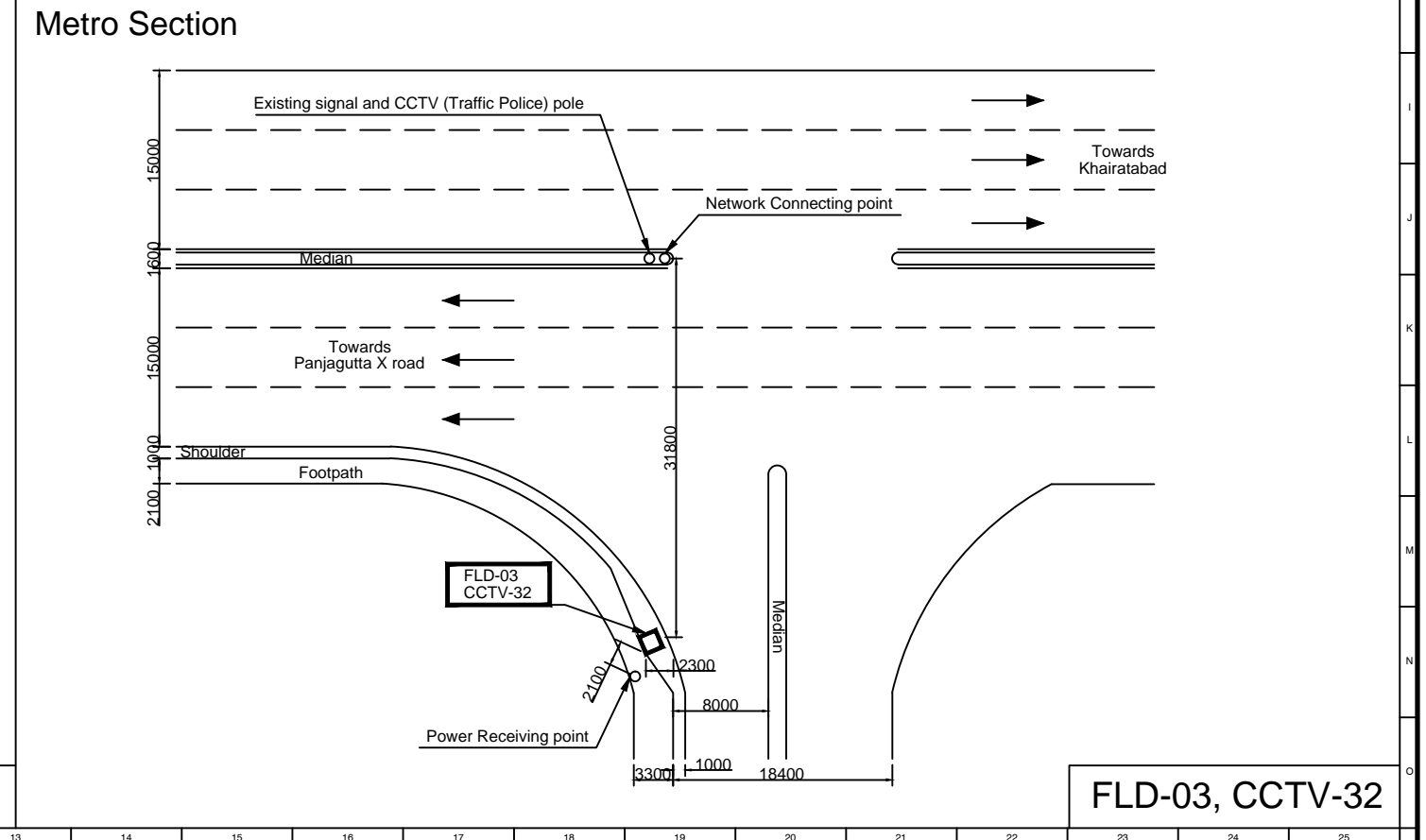
SCALE: 1:600 DWG. NO. L -10



FLD-01, CCTV-30



FLD-02, CCTV-31



FLD-03, CCTV-32

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REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

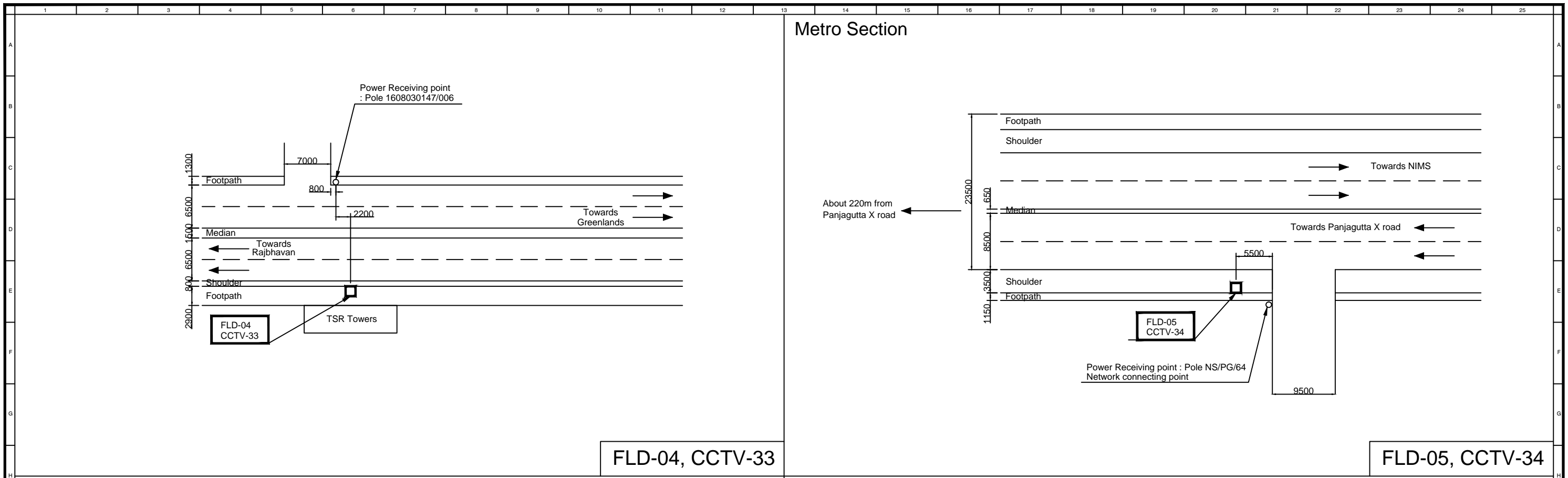
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT : NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

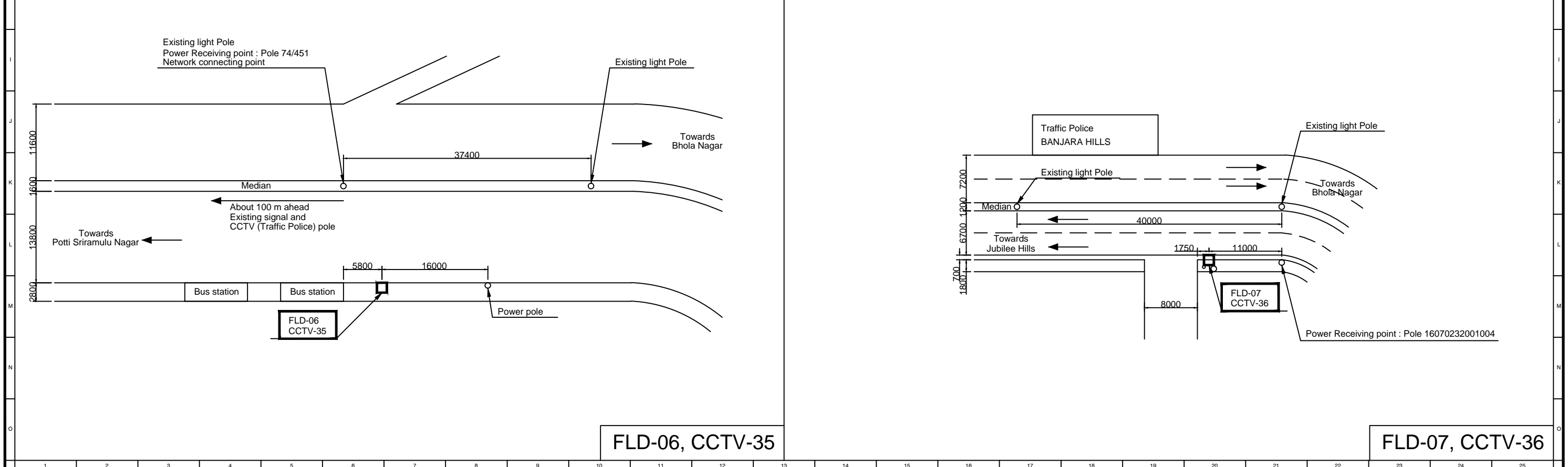
TITLE : LAYOUT PLAN OF FLD AND CCTV (1)

SCALE: 1:600 DWG. NO. L -11



FLD-04, CCTV-33

FLD-05, CCTV-34



FLD-06, CCTV-35

FLD-07, CCTV-36

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JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

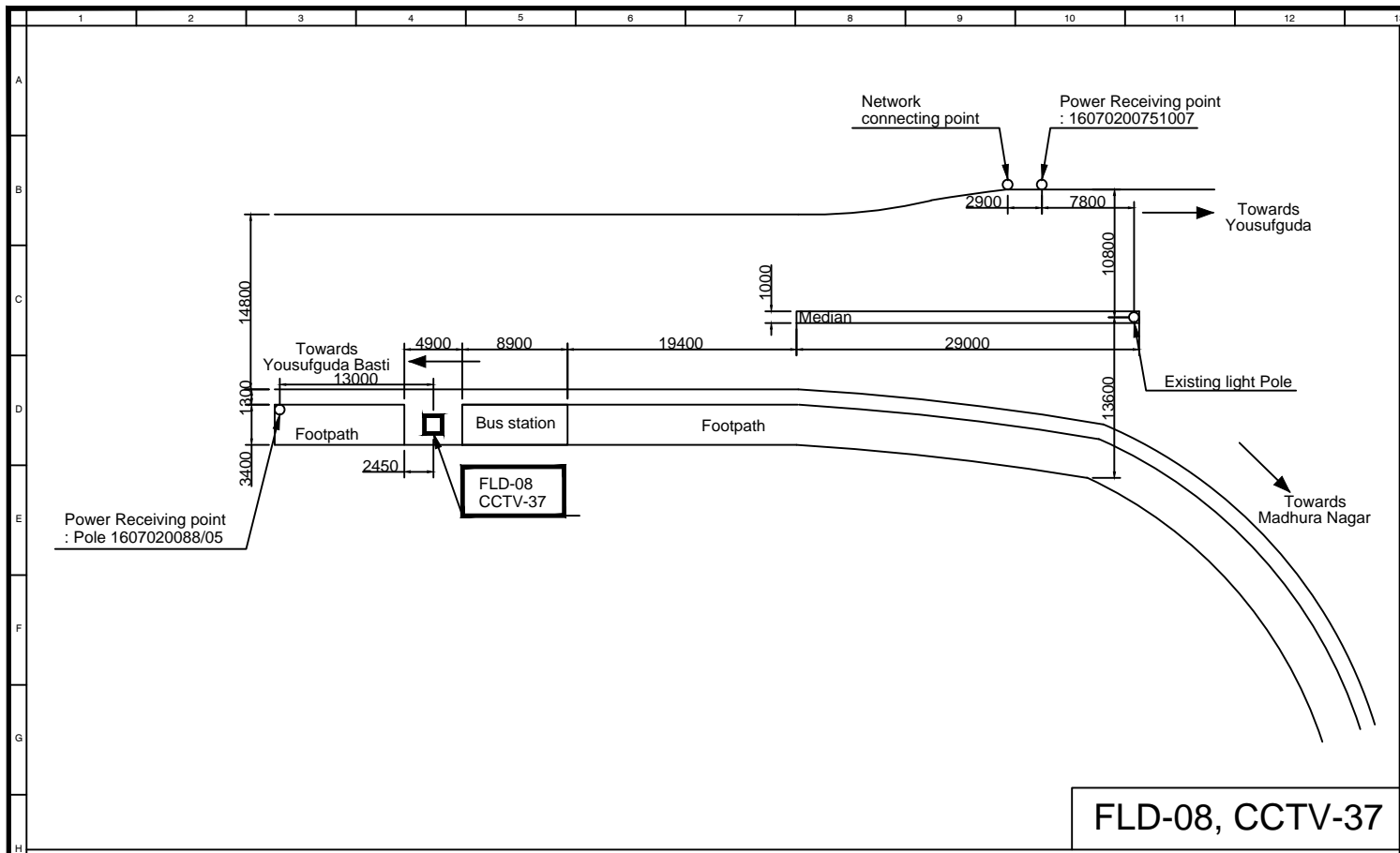
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

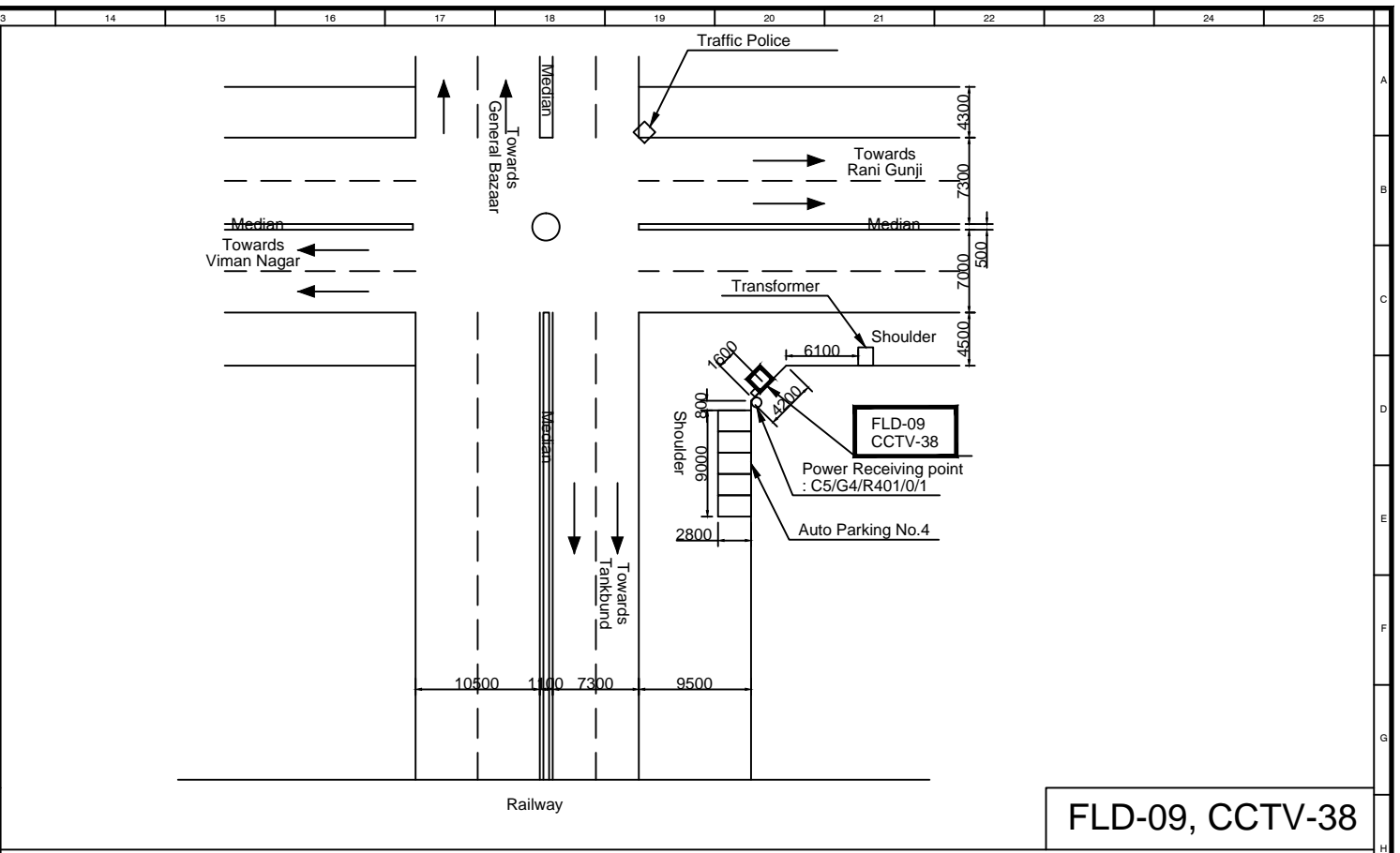
PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

TITLE :
LAYOUT PLAN OF FLD AND CCTV (2)

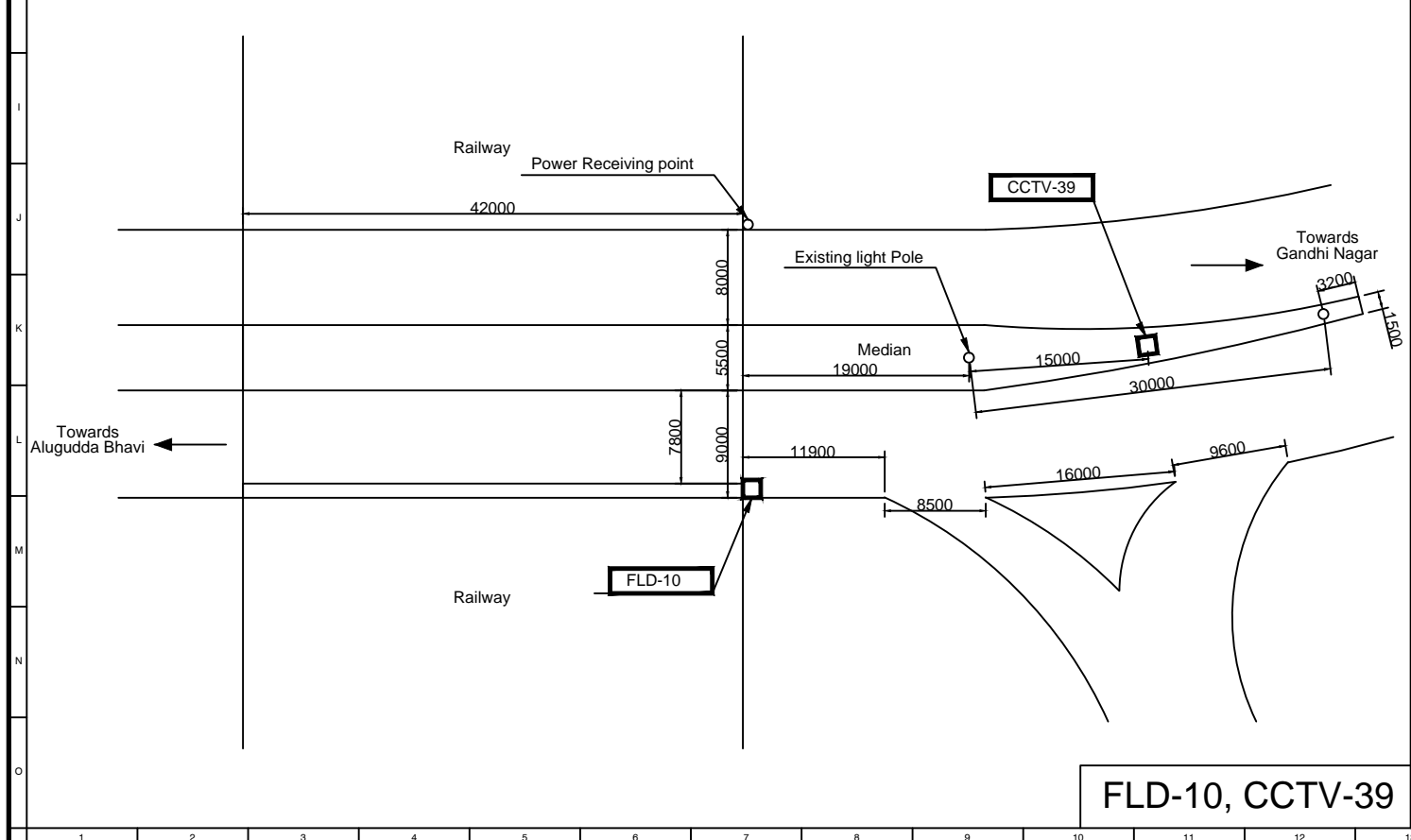
SCALE: 1:600 DWG. NO. L -12



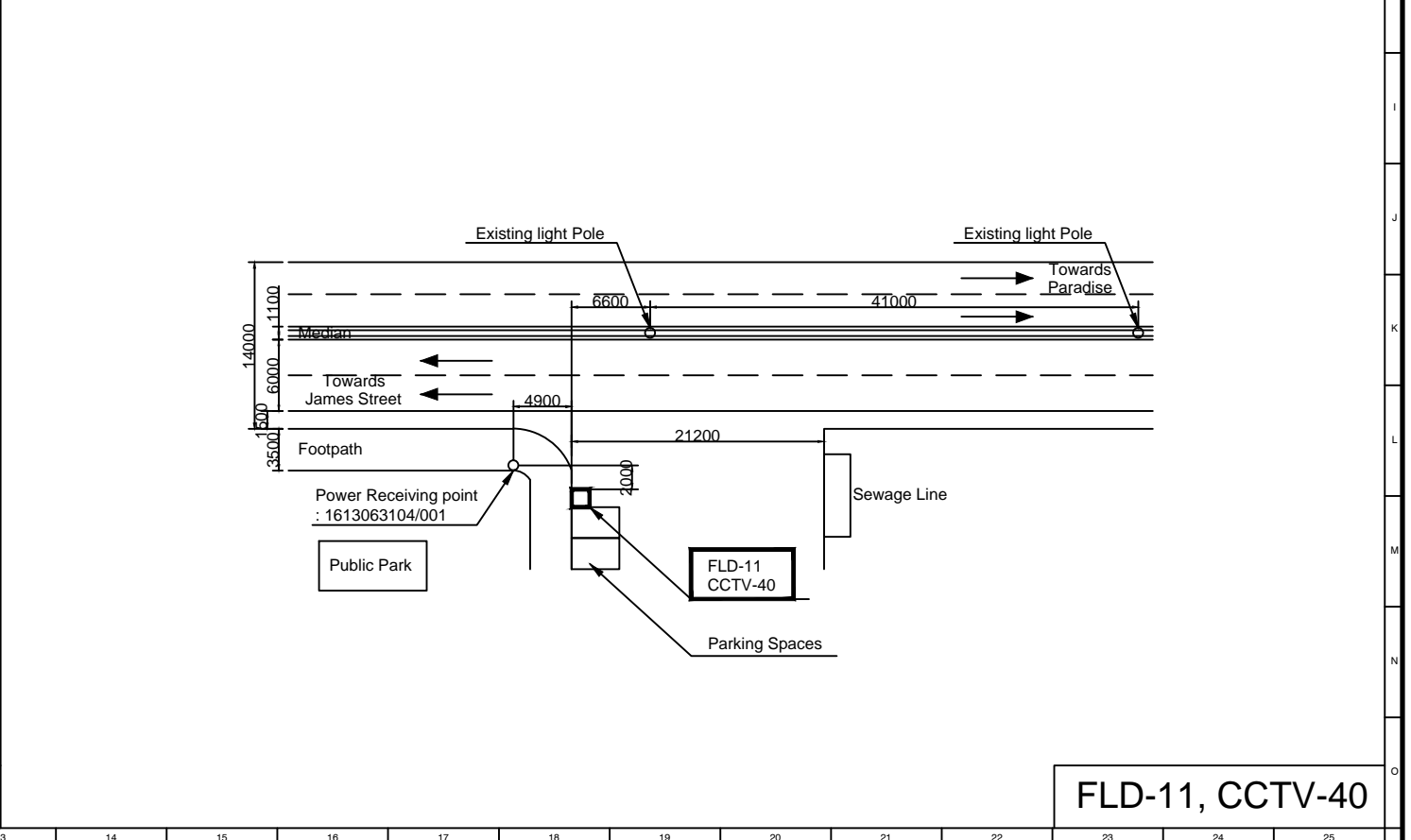
FLD-08, CCTV-37



FLD-09, CCTV-38



FLD-10, CCTV-39



FLD-11, CCTV-40

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

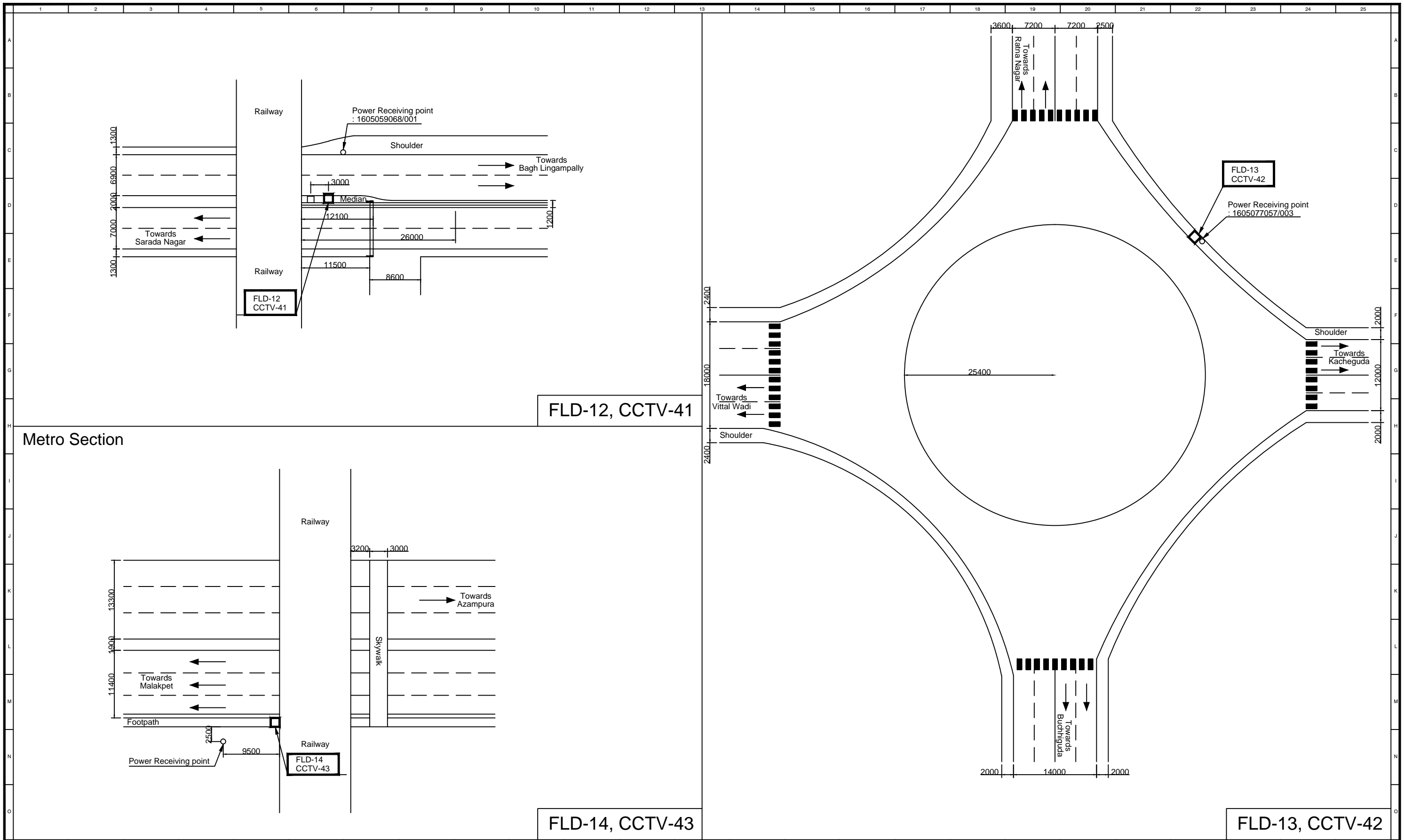
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**


TITLE : **LAYOUT PLAN OF FLD AND CCTV (3)**

SCALE: 1:600 DWG. NO. L -13



DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

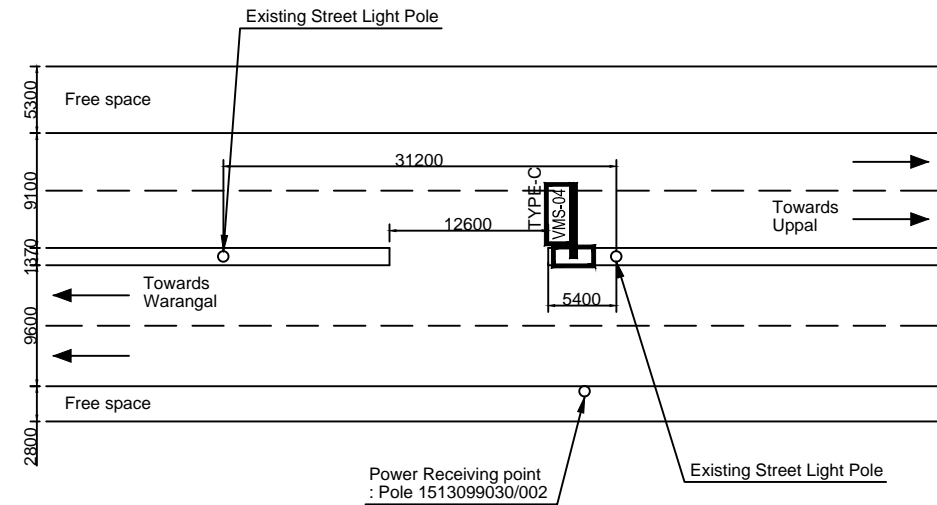
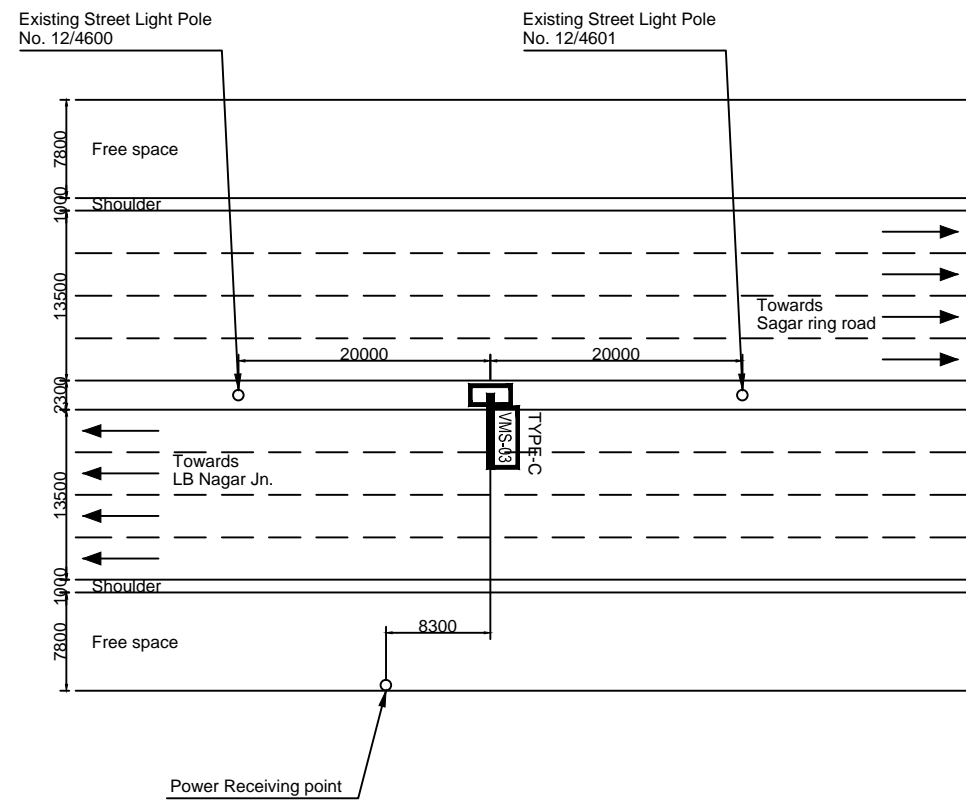
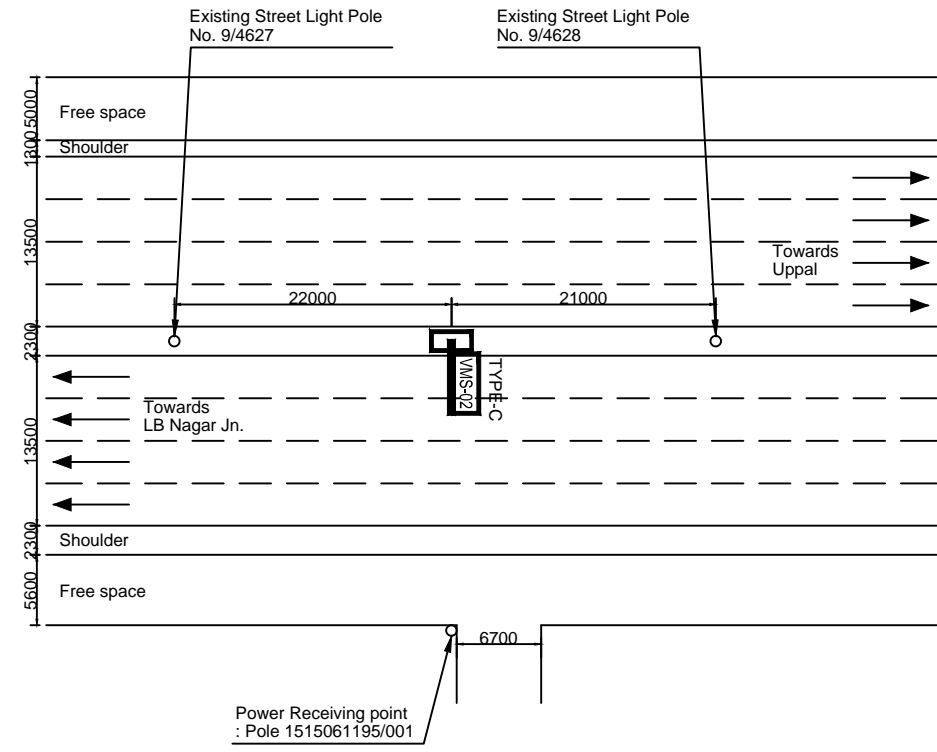
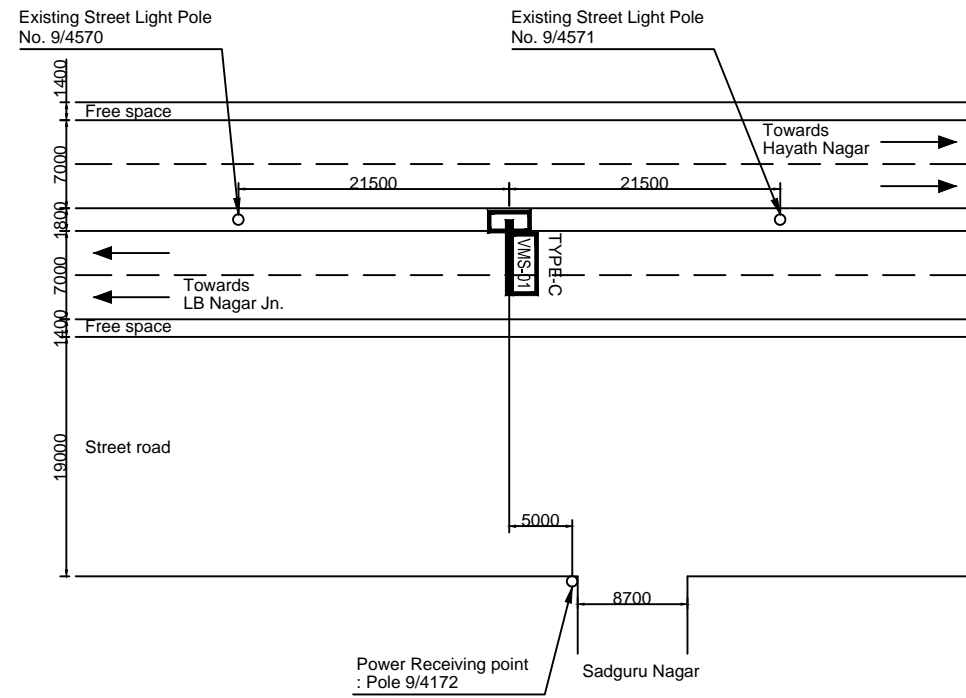

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007


HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

TITLE :
LAYOUT PLAN OF FLD AND CCTV (4)

SCALE: 1:600 DWG. NO. L -14



DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

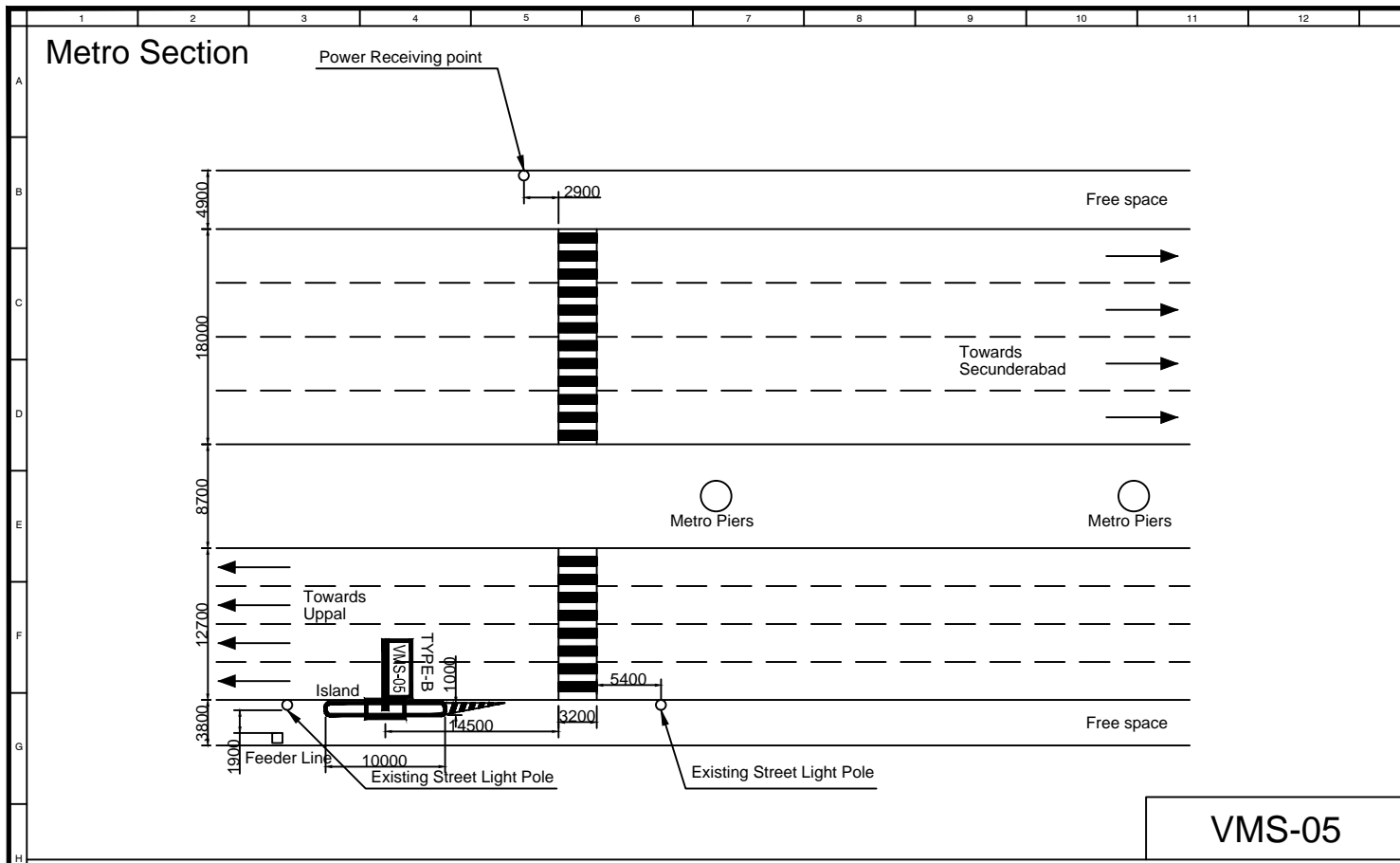
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

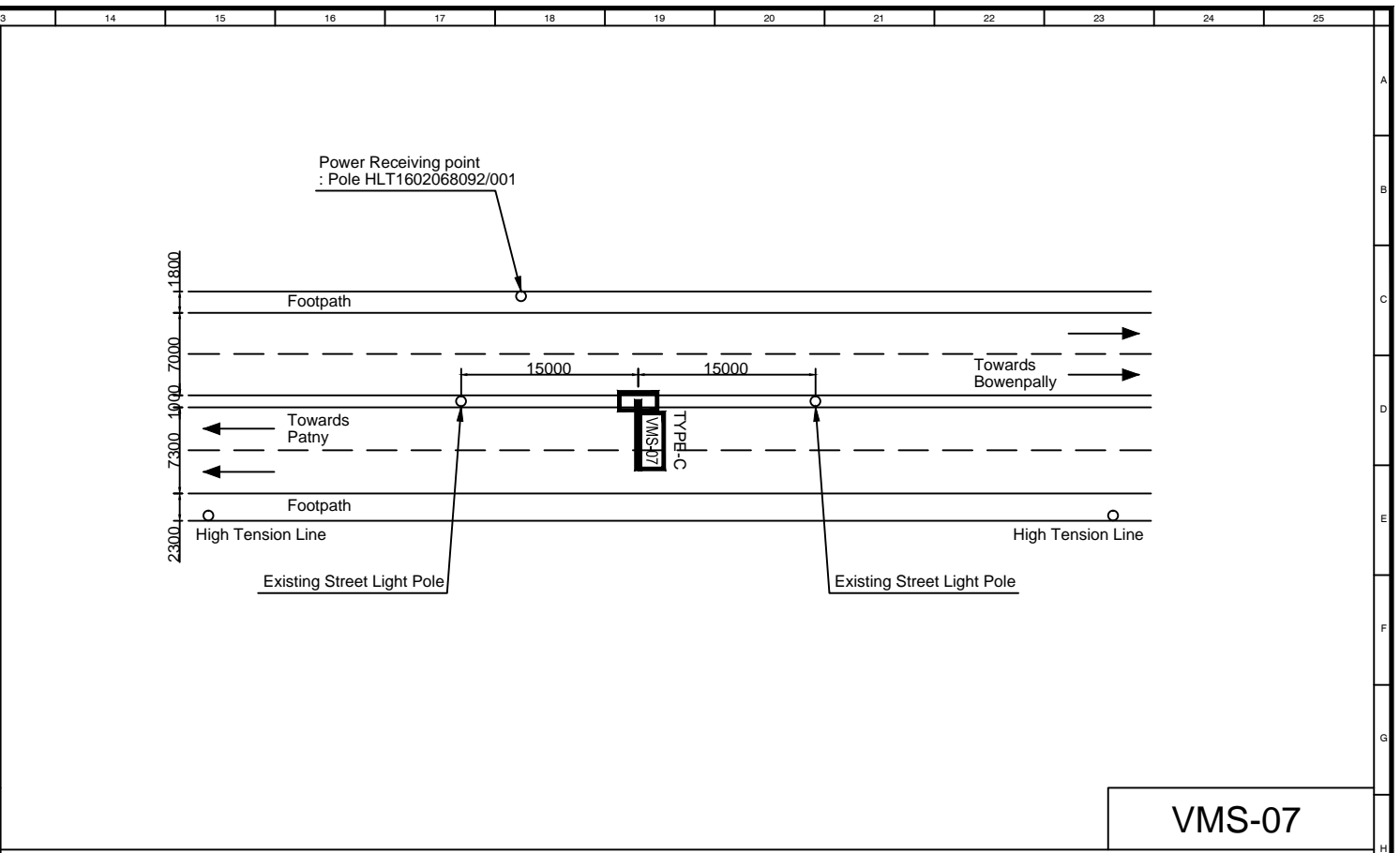
PROJECT : NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

TITLE : LAYOUT PLAN OF VMS (1)

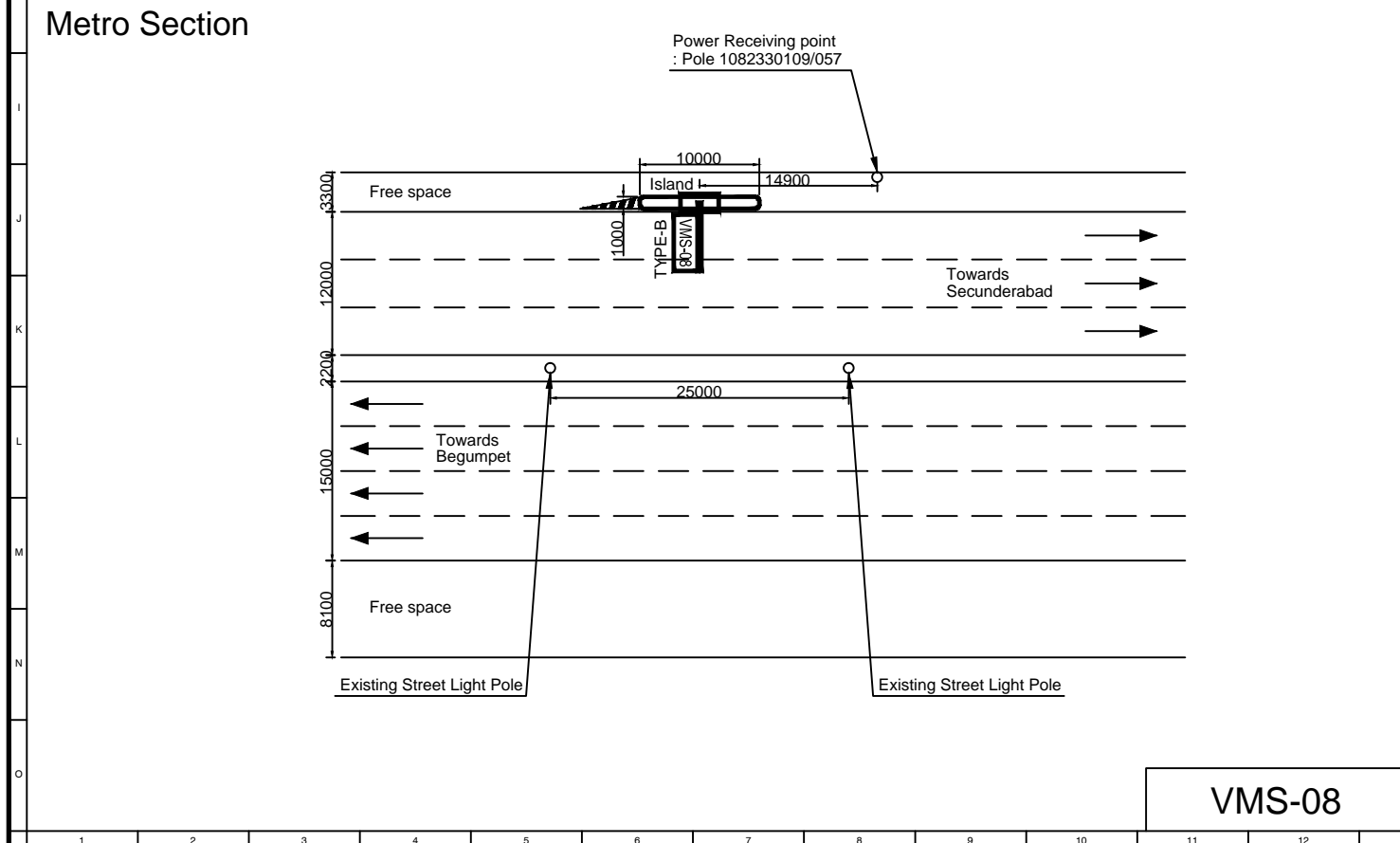
SCALE: 1:600 DWG. NO. L -15



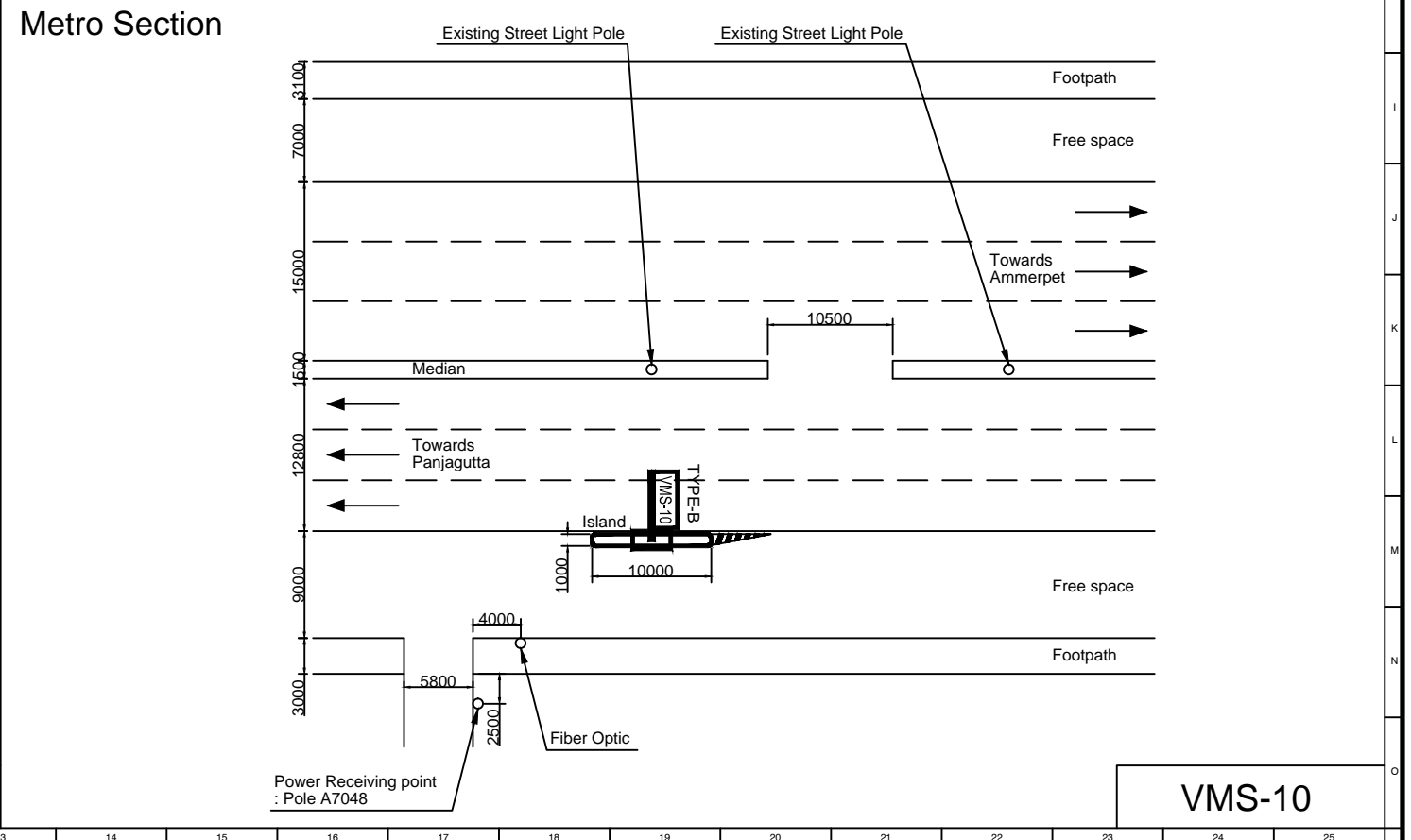
VMS-05



VMS-07



VMS-08



VMS-10

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

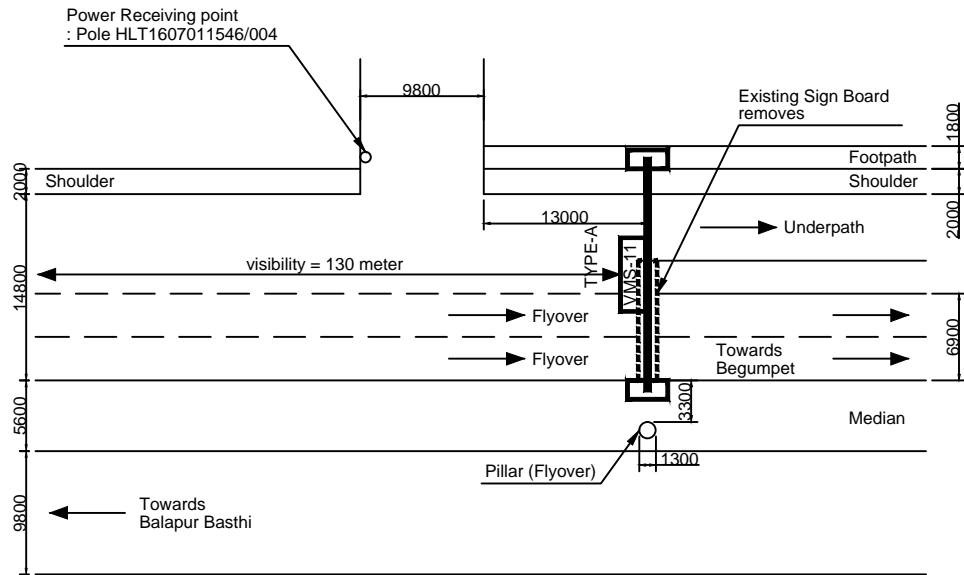
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

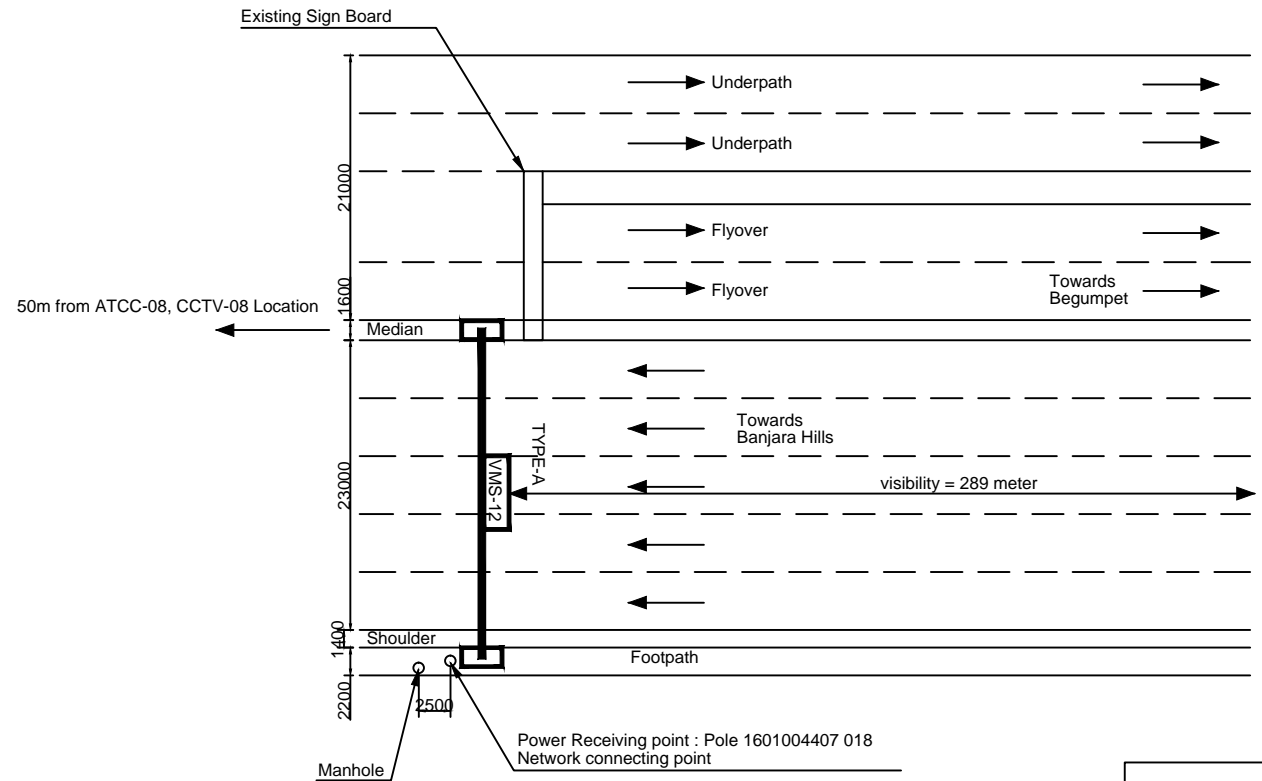
PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE : **LAYOUT PLAN OF VMS (2)**

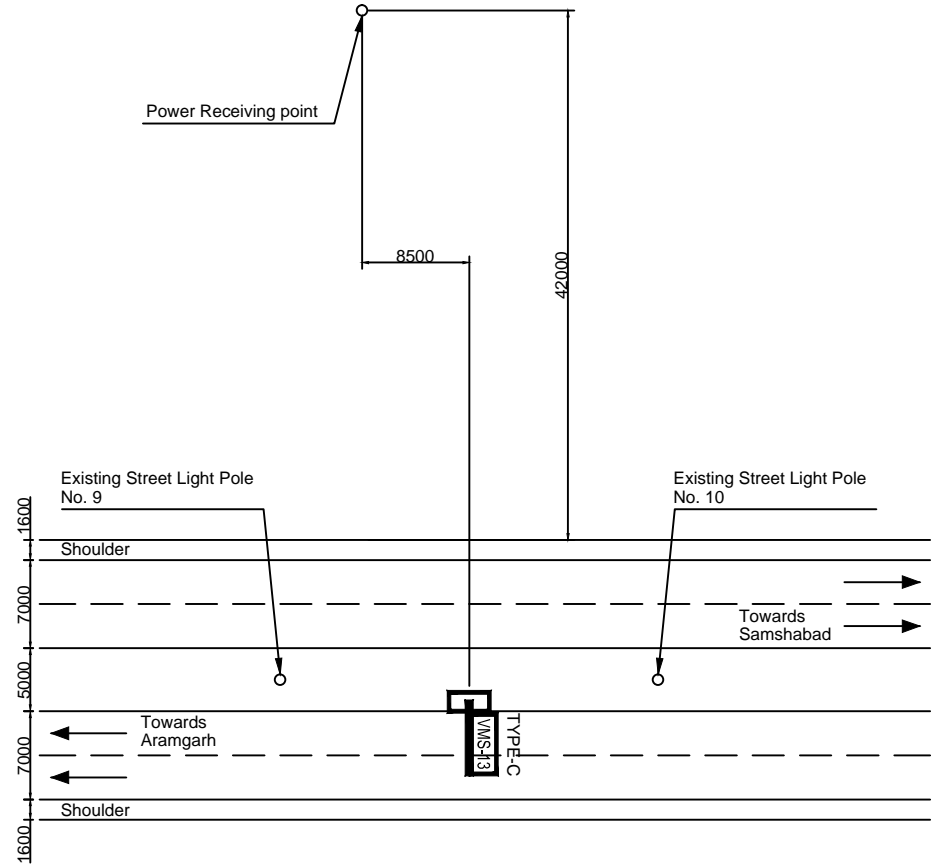
SCALE: 1:600 DWG. NO. L -16



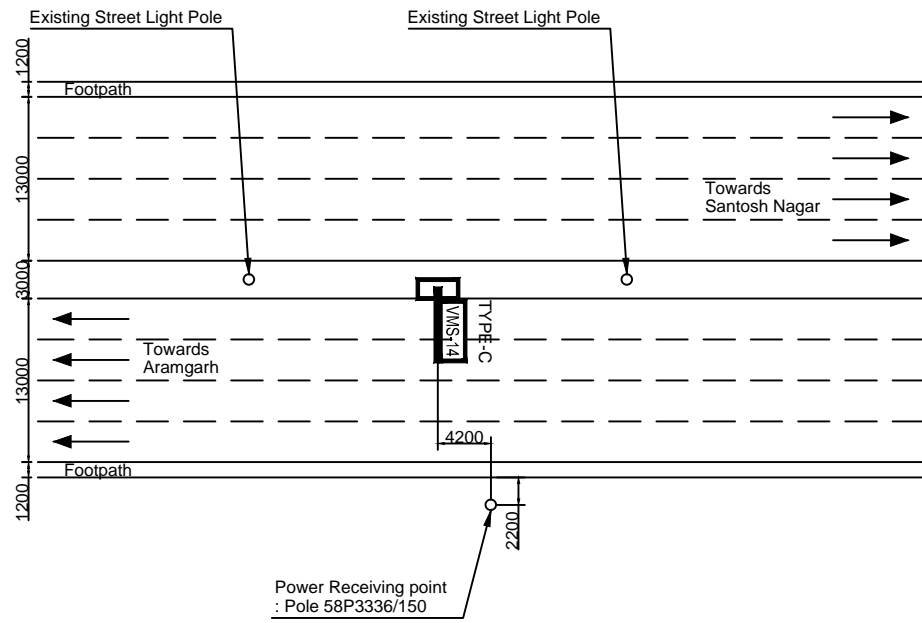
VMS-11



VMS-12



VMS-13



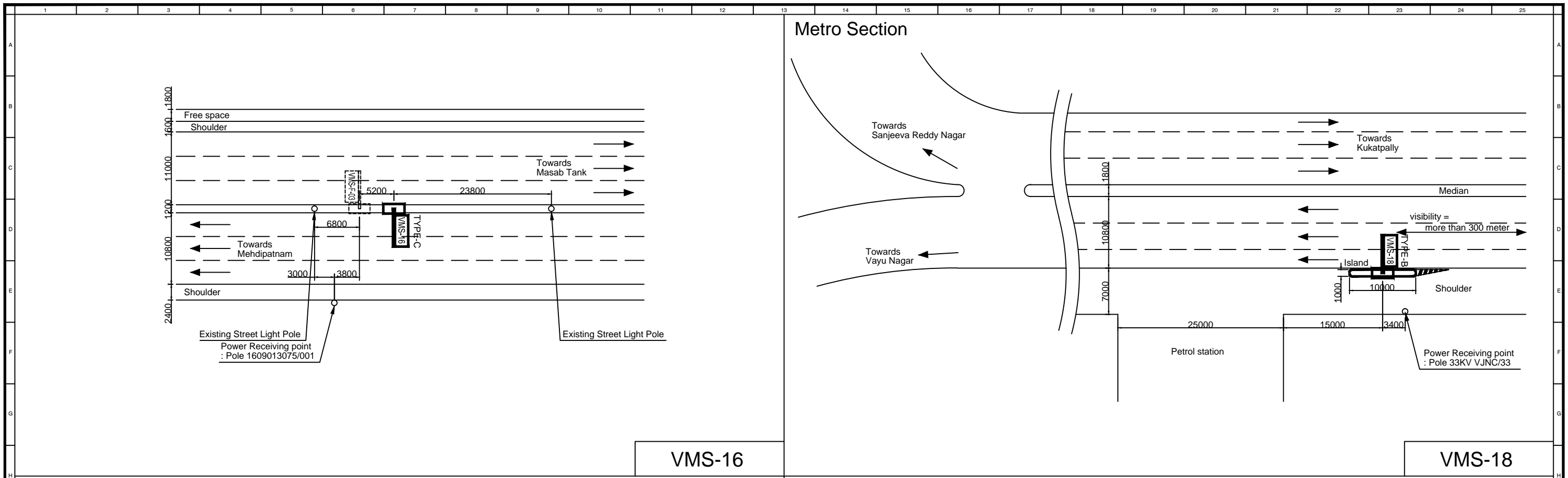
VMS-14

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED
 HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**
 TITLE : **LAYOUT PLAN OF VMS (3)**
 SCALE: 1:600 DWG. NO. L -17



VMS-16

VMS-18

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

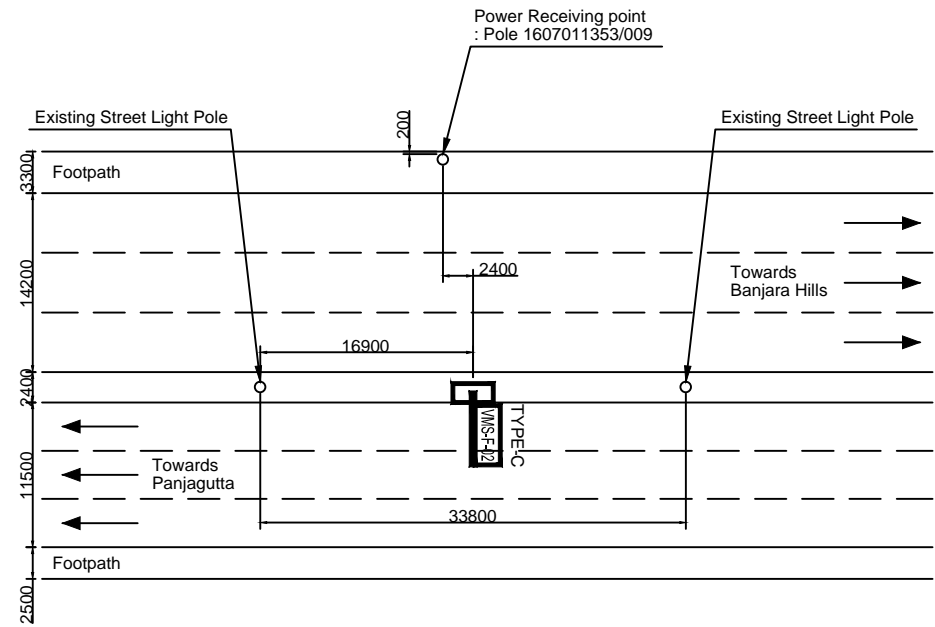
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

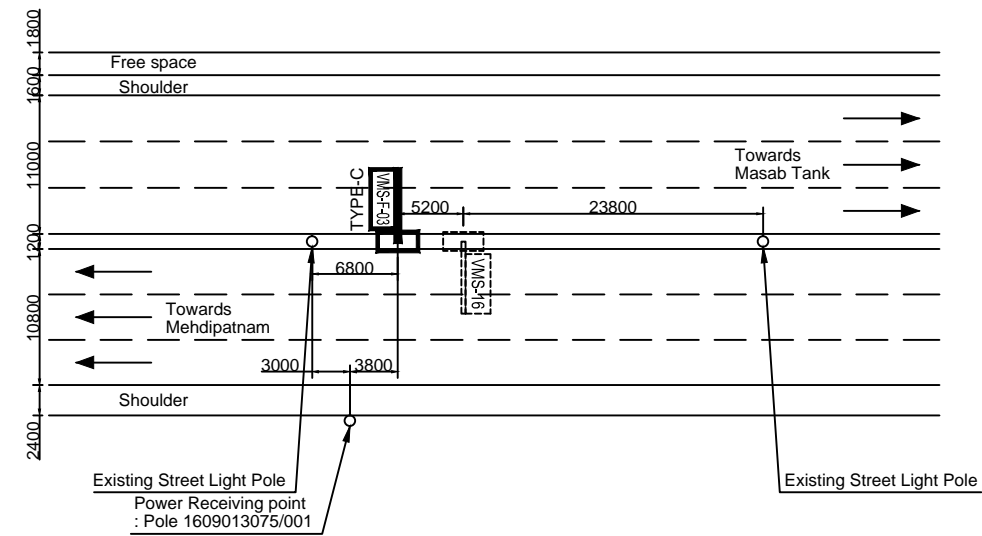
PROJECT :
**NEHRU OUTER RING ROAD PROJECT
(HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE :
LAYOUT PLAN OF VMS (4)

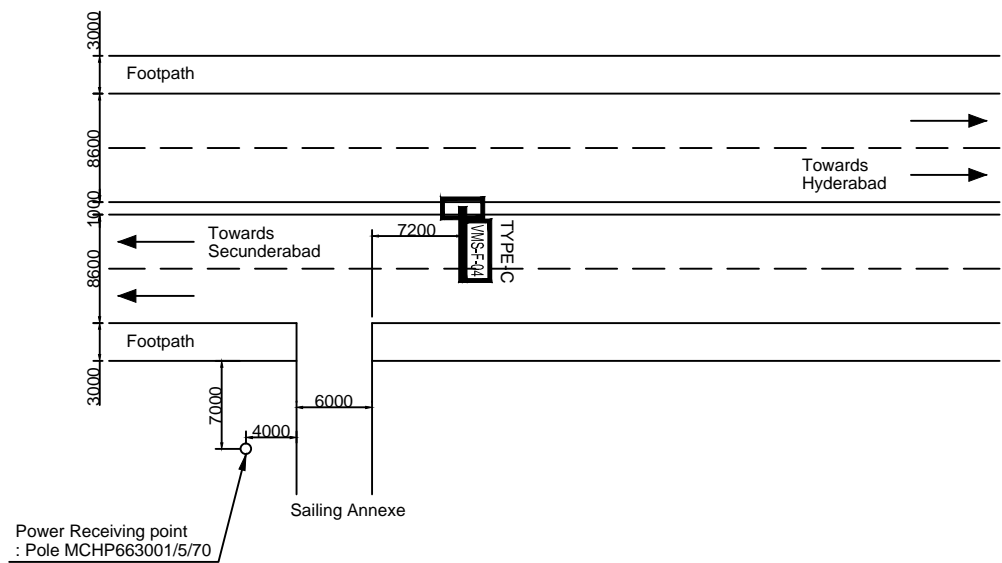
SCALE: 1:600 DWG. NO. L -18



VMS-F-02



VMS-F-03



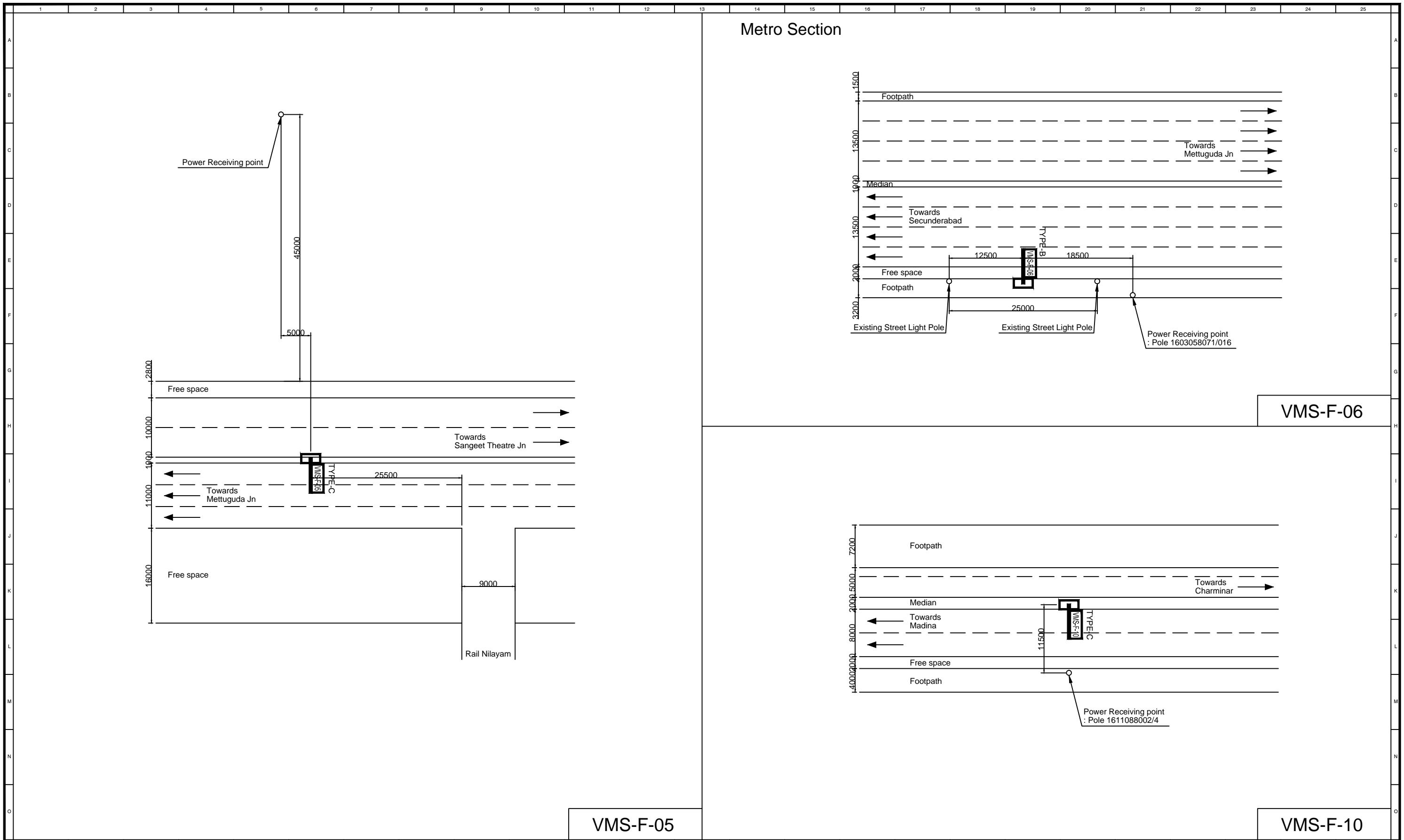
VMS-F-04

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED
 HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**
 TITLE : **LAYOUT PLAN OF VMS (5)**
 SCALE: 1:600 DWG. NO. L -19



VMS-F-05

VMS-F-06

VMS-F-10

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

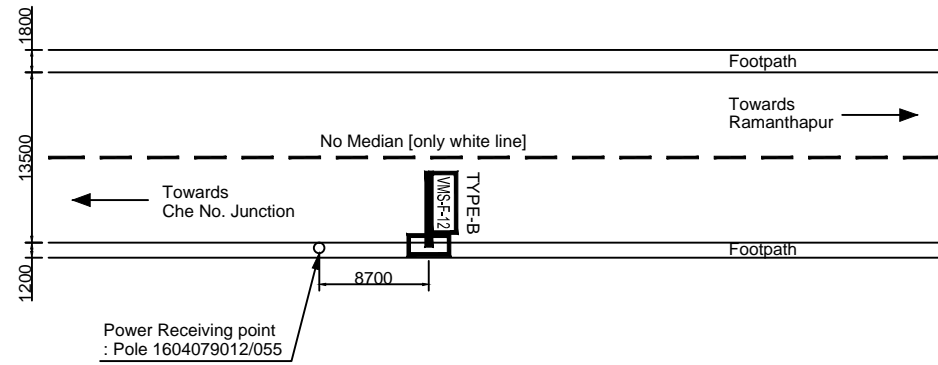
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

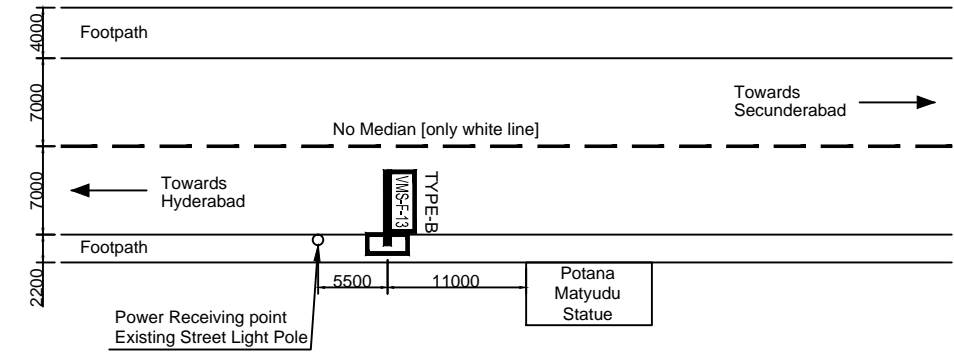
PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE : **LAYOUT PLAN OF VMS (6)**

SCALE: 1:600 DWG. NO. L -20



VMS-F-12



VMS-F-13

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

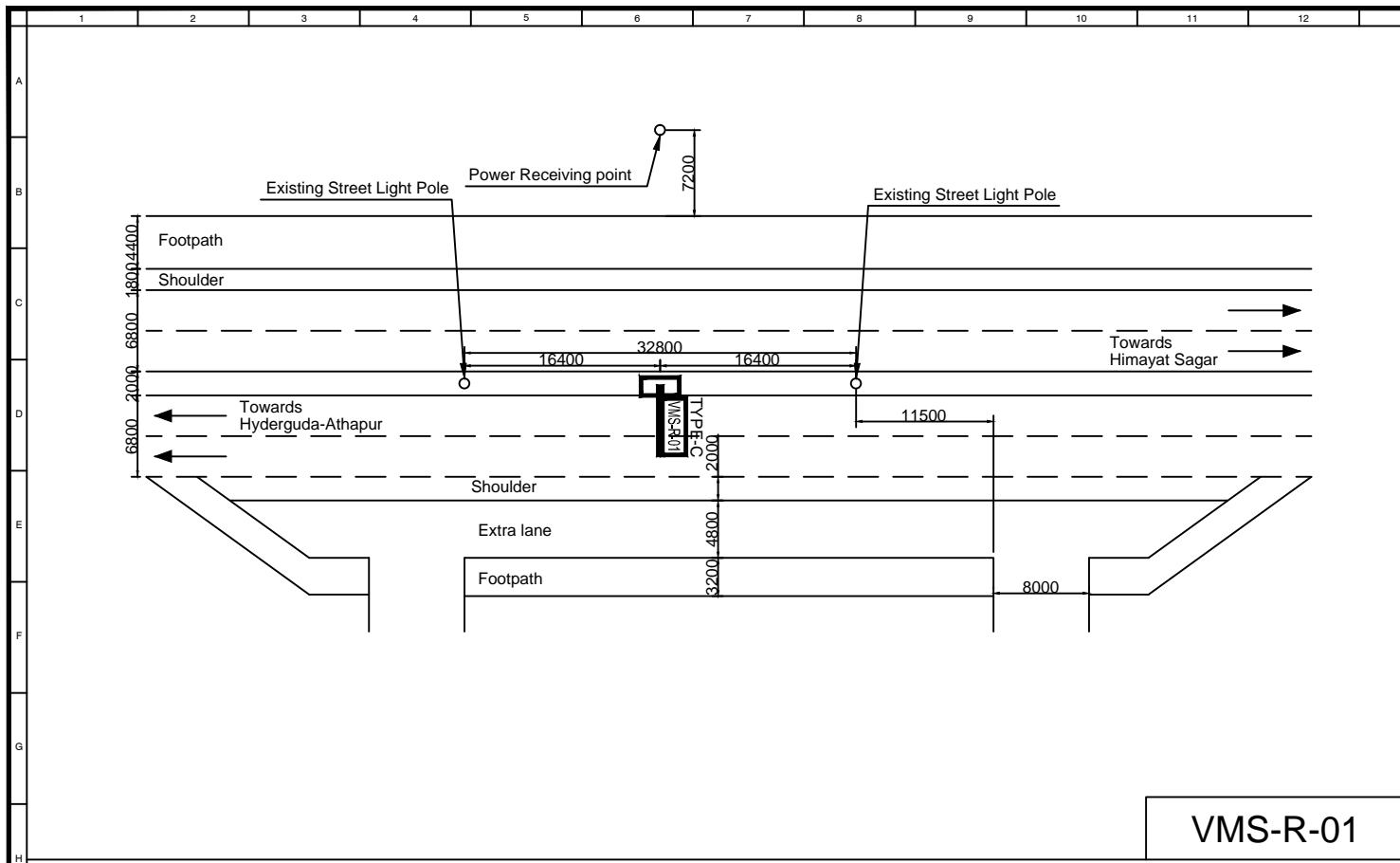
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

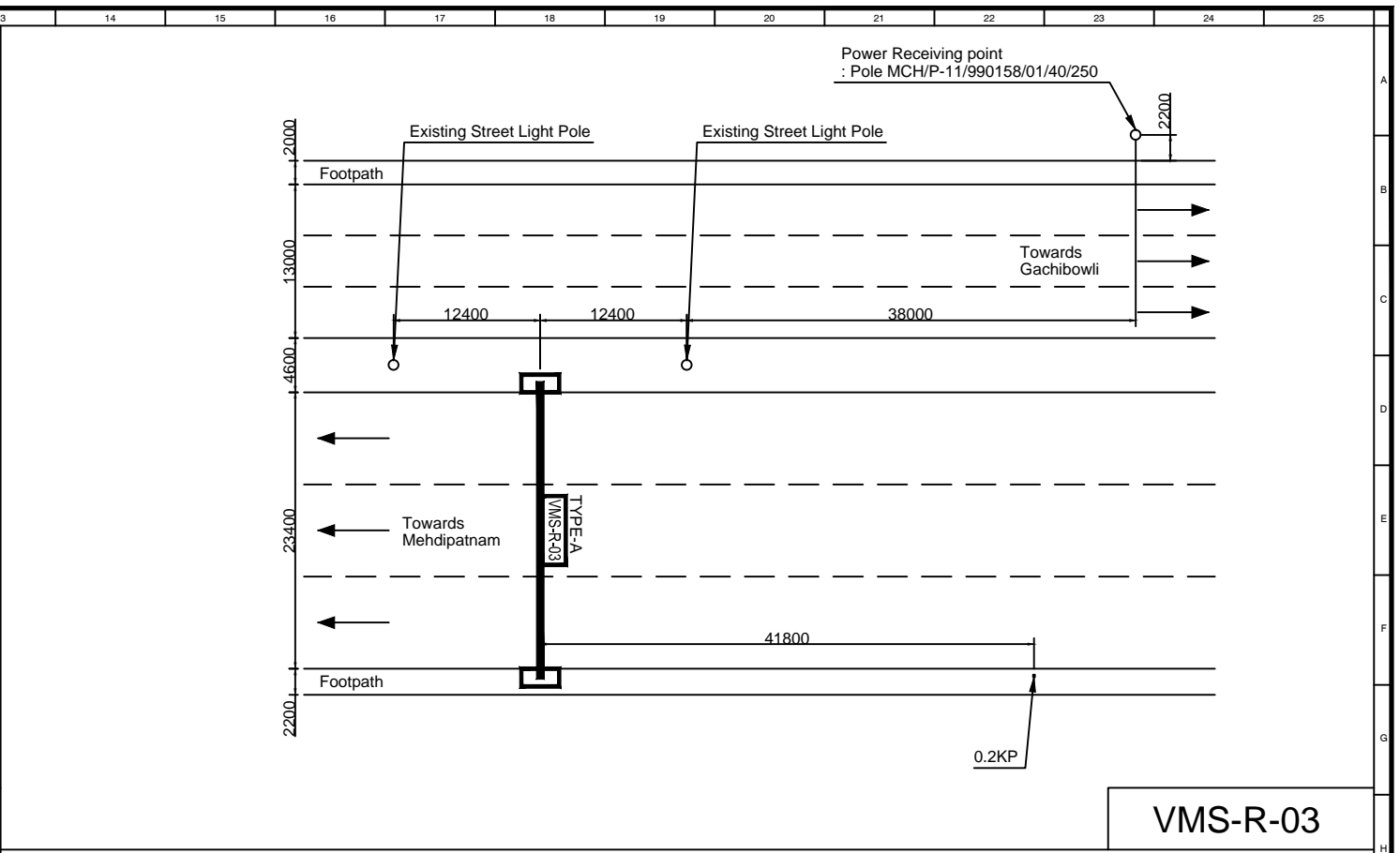
PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE : **LAYOUT PLAN OF VMS (7)**

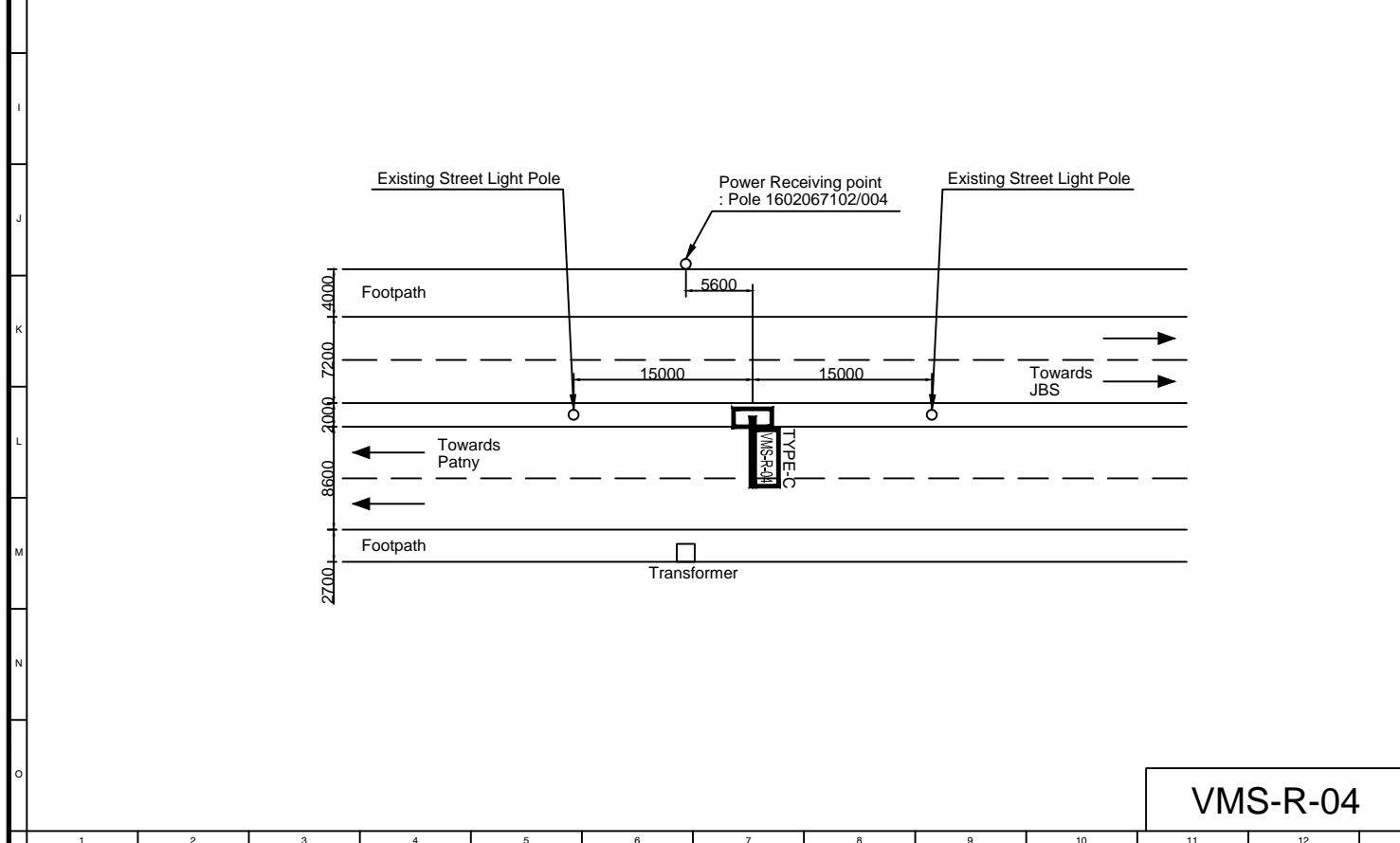
SCALE: 1:600 DWG. NO. L -21



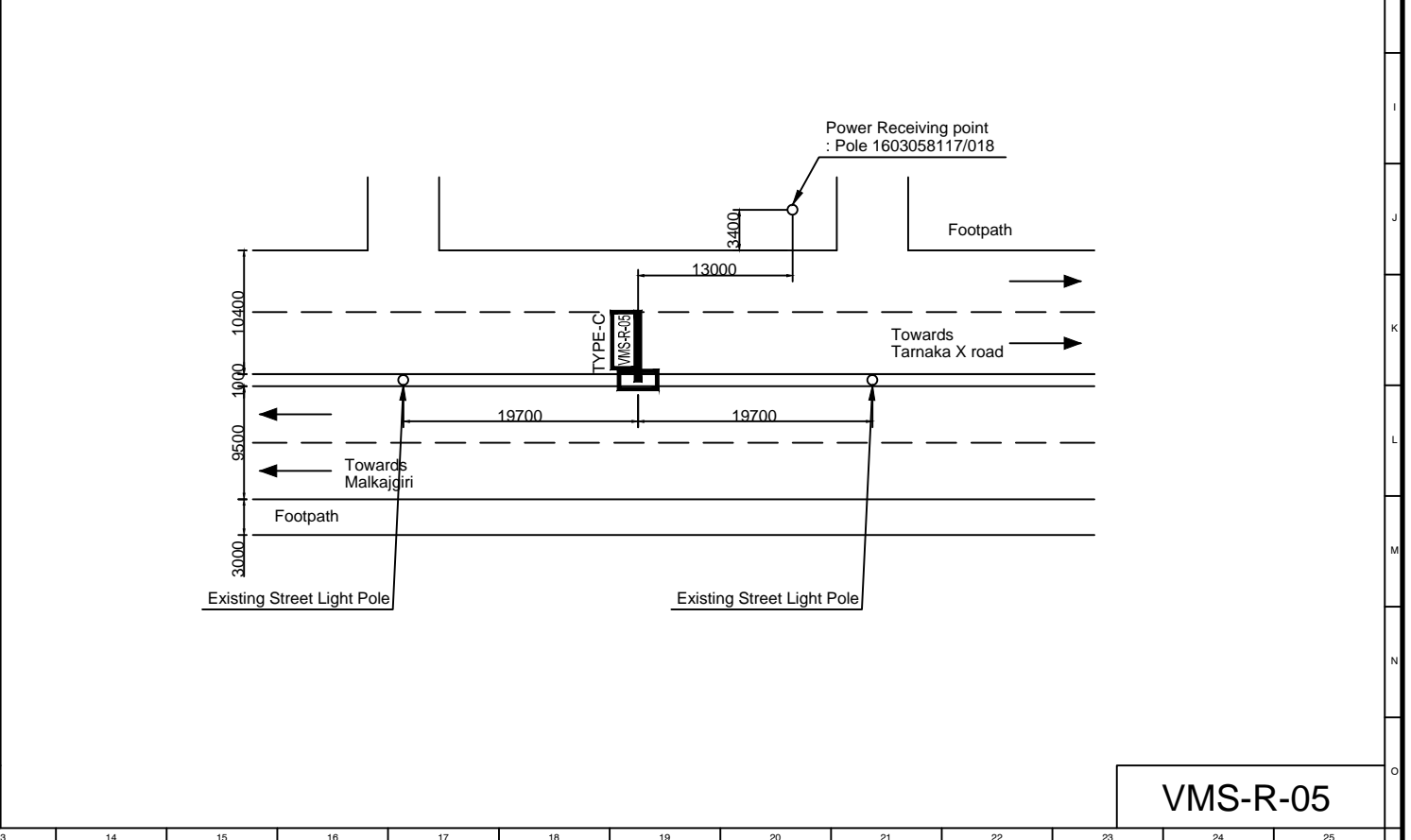
VMS-R-01



VMS-R-03



VMS-R-04



VMS-R-05

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

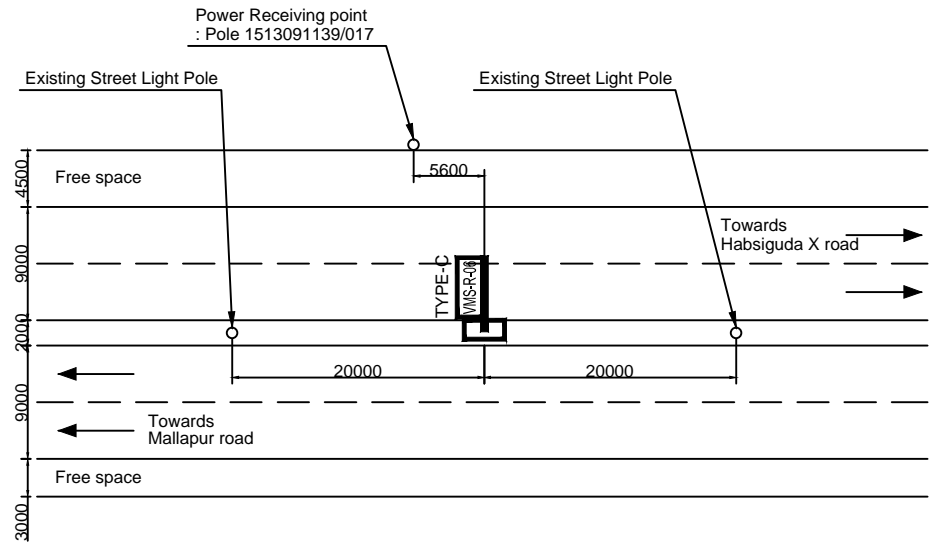
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

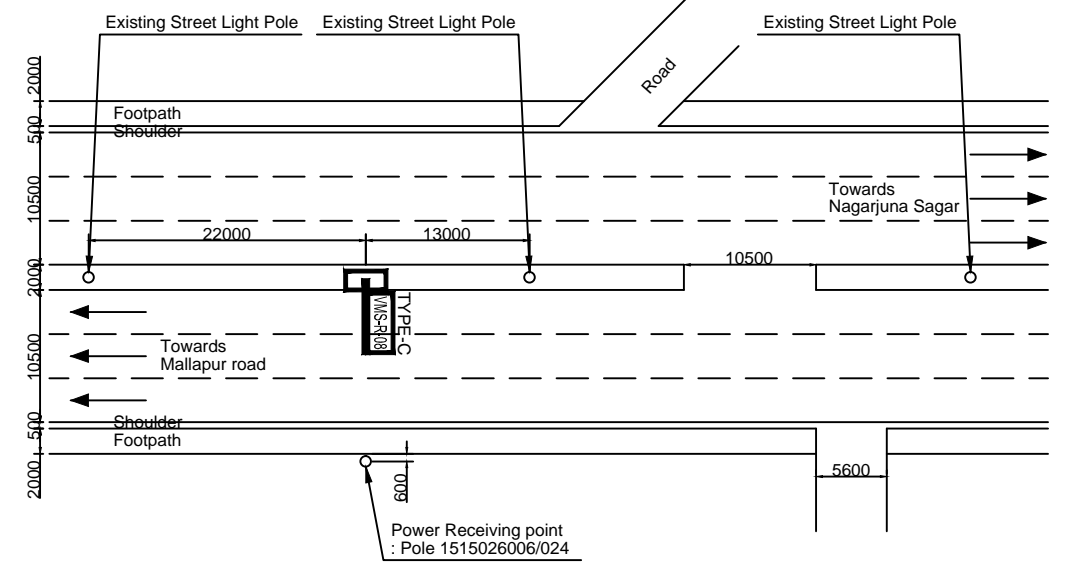
PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**

TITLE : **LAYOUT PLAN OF VMS (8)**

SCALE: 1:600 DWG. NO. L -22



VMS-R-06



VMS-R-08

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

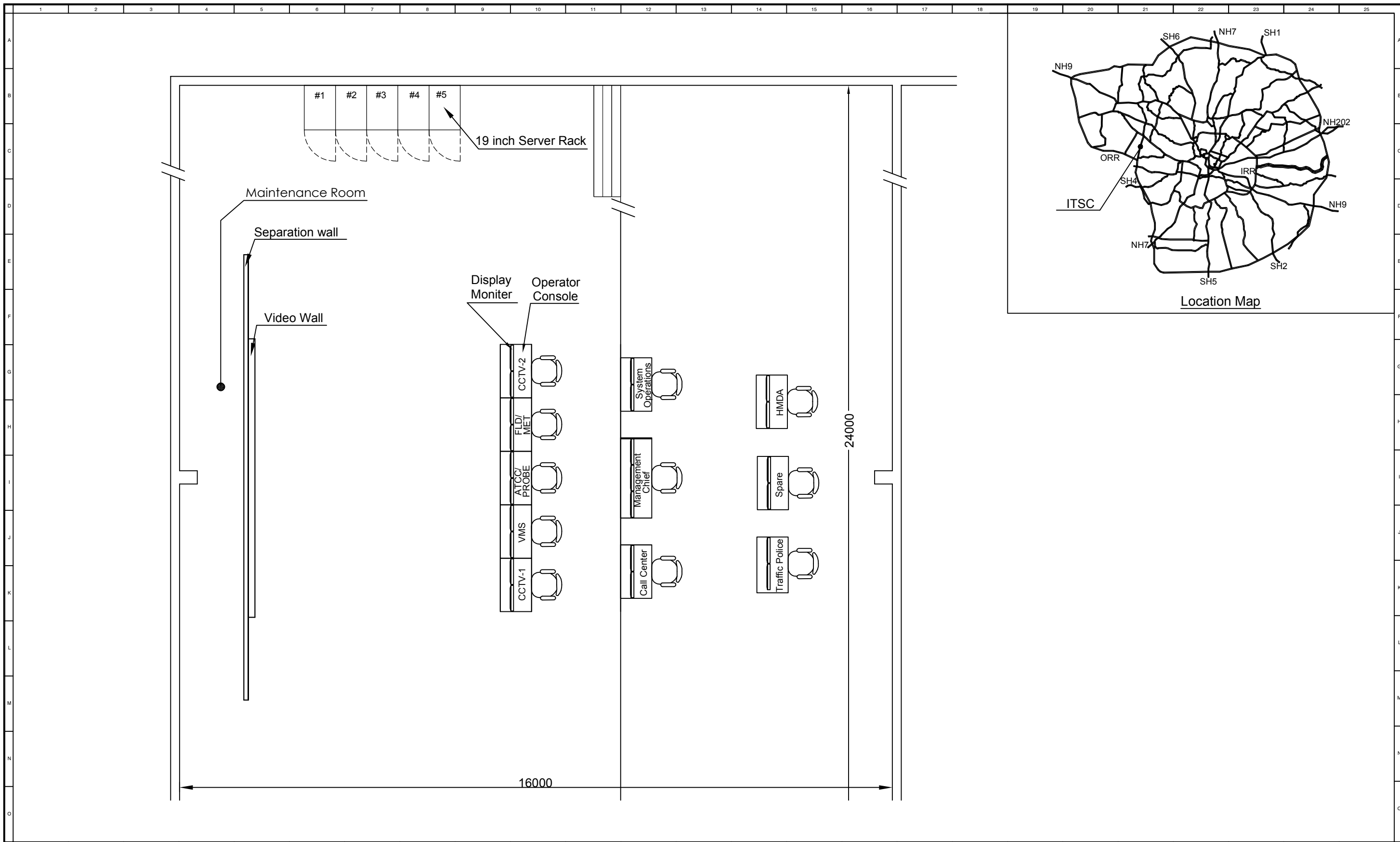
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**


TITLE : **LAYOUT PLAN OF VMS (9)**

SCALE: 1:600 DWG. NO. L -23



DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

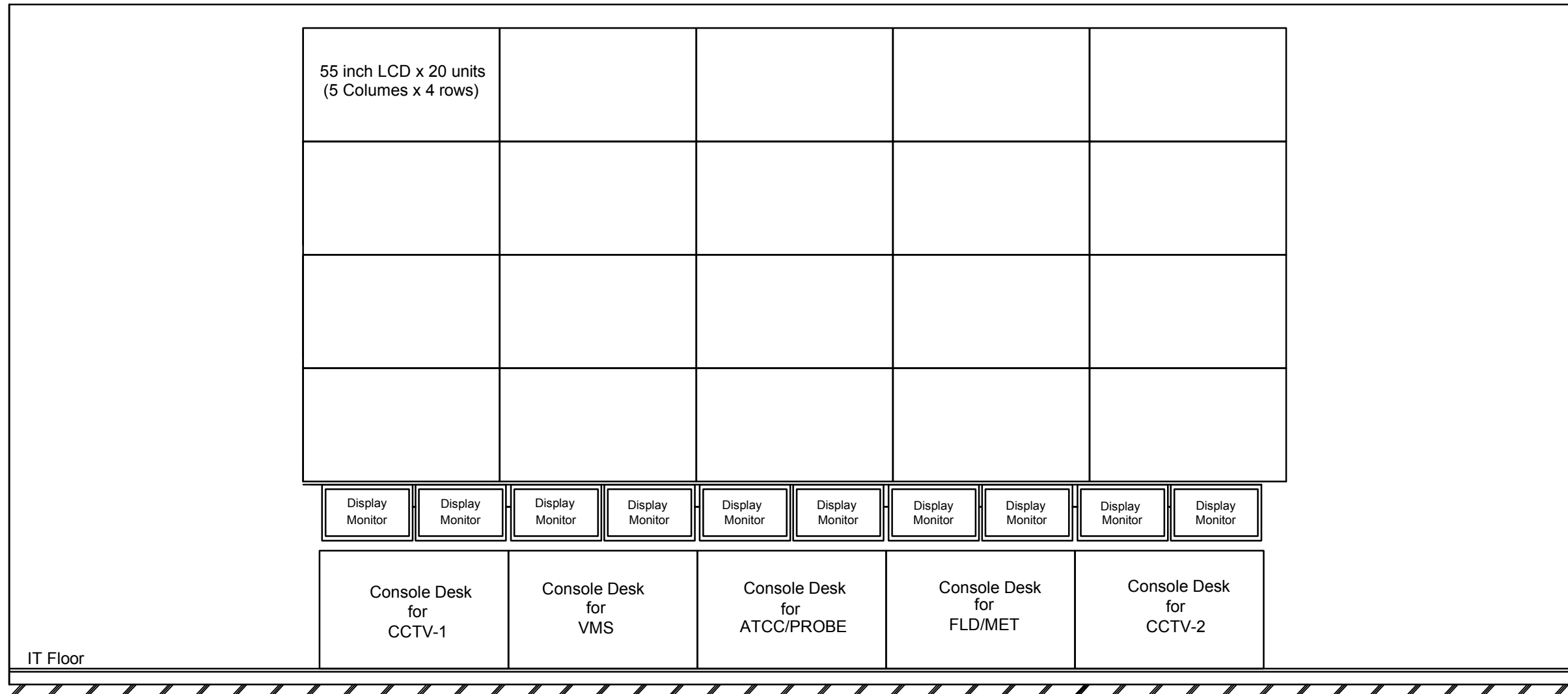

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007




HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)
 TITLE :
ITSC SYSTEM FLOOR PLAN
 SCALE: 1:80 DWG. NO. B-01

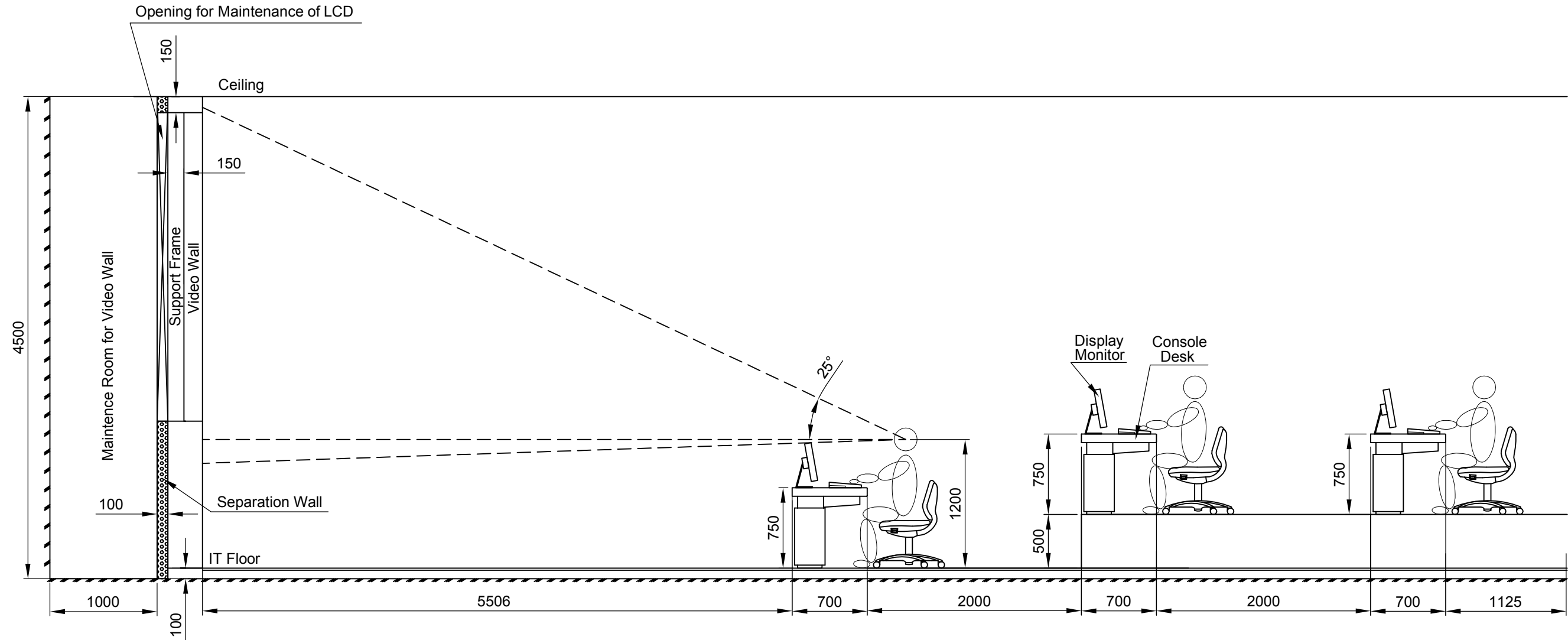
FRONT VIEW IMAGE

Ceiling



DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	 HYDERABAD GROWTH CORRIDOR LIMITED HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	PROJECT : NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)	
REVISION NO.	DATE	DESCRIPTION				TITLE : TYPICAL DRAWING OF ITSC FRONT VIEW IMAGE (Reference)	
01	-	FIRST SUBMISSION		SCALE: 1:30 DWG. NO. B -02			

SIDE VIEW IMAGE



DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

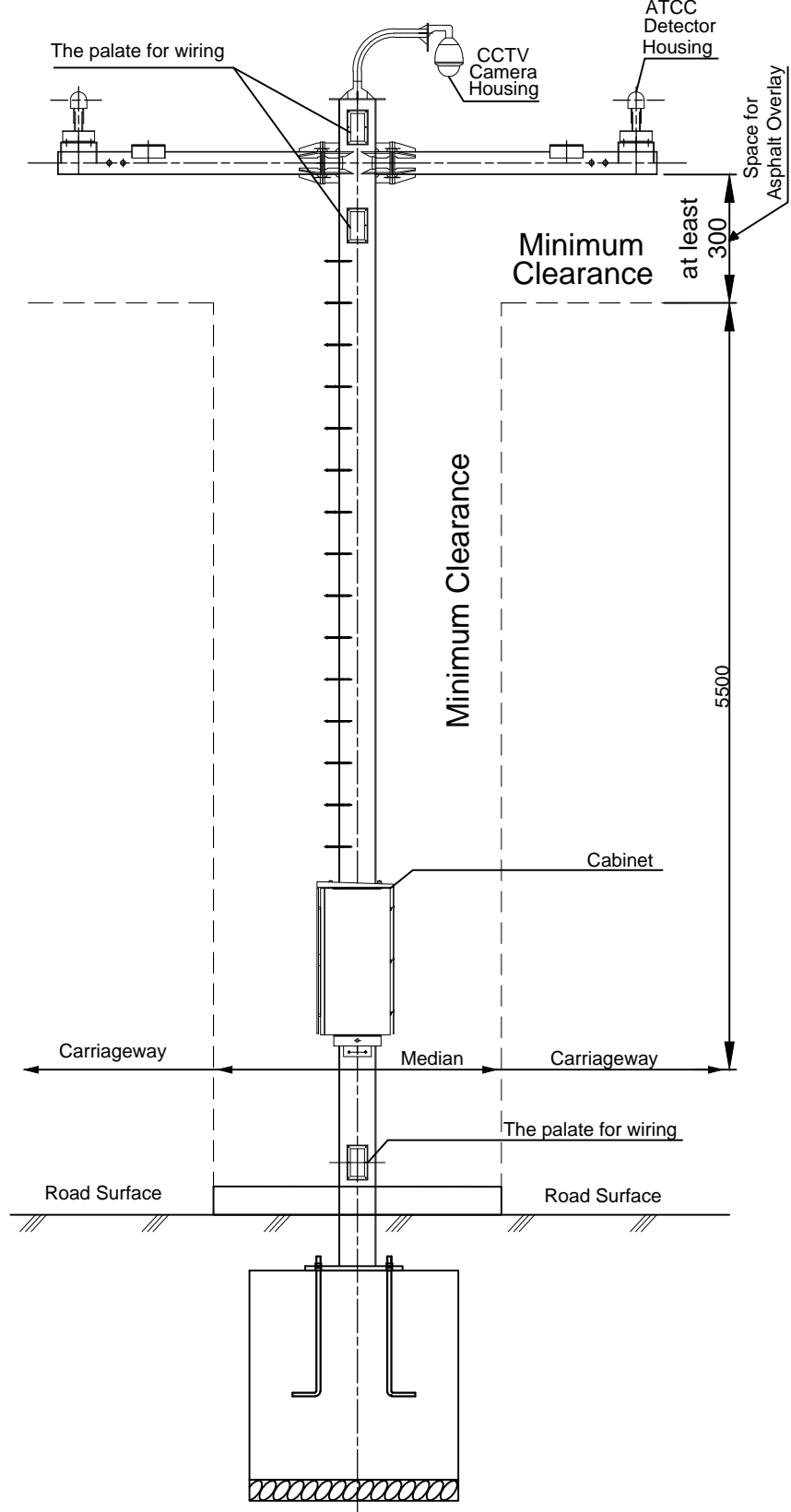
HYDERABAD GROWTH CORRIDOR LIMITED
 HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

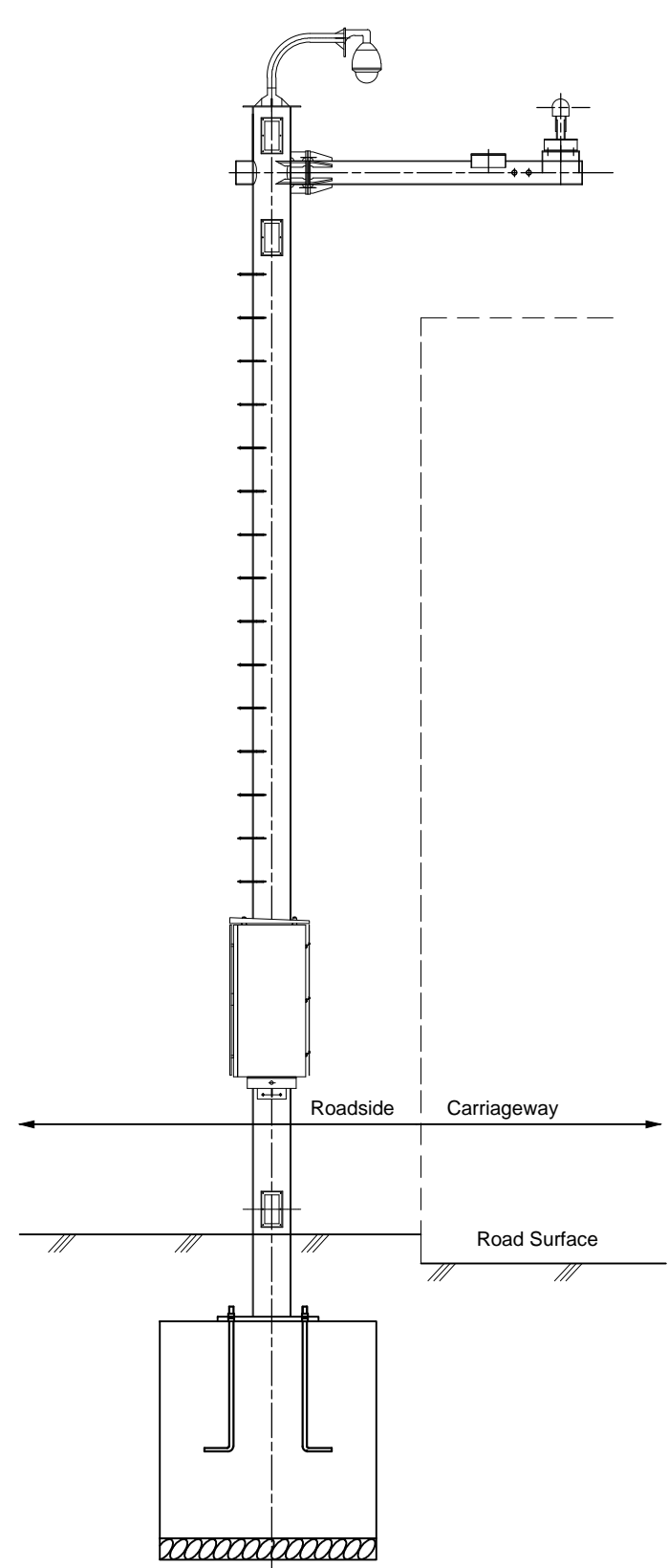
TITLE :
TYPICAL DRAWING OF ITSC SIDE VIEW IMAGE (Reference)

SCALE: 1:40 DWG. NO. B -03

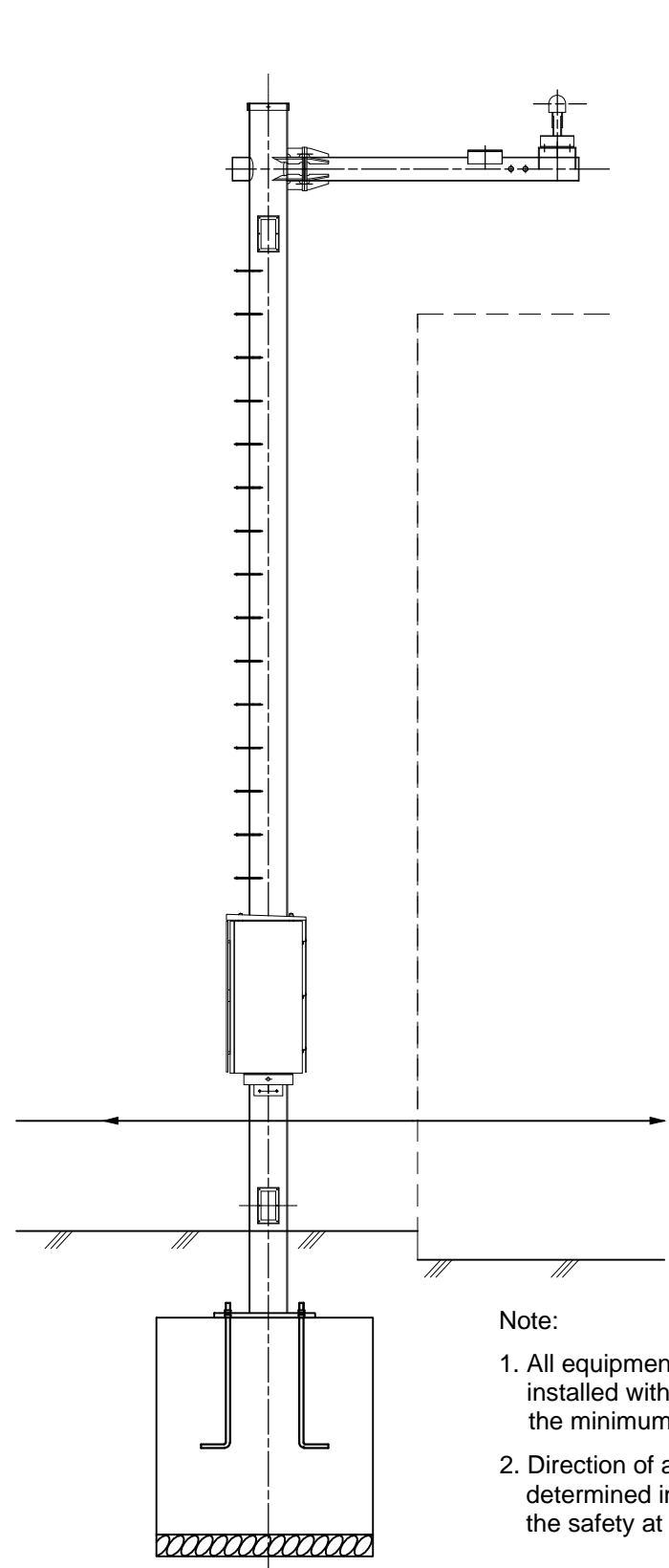
TYPE-A
(Median installation type)



TYPE-B
(Roadside installation type with CCTV Camera Housing)



TYPE-C
(Roadside installation type without CCTV Camera Housing)



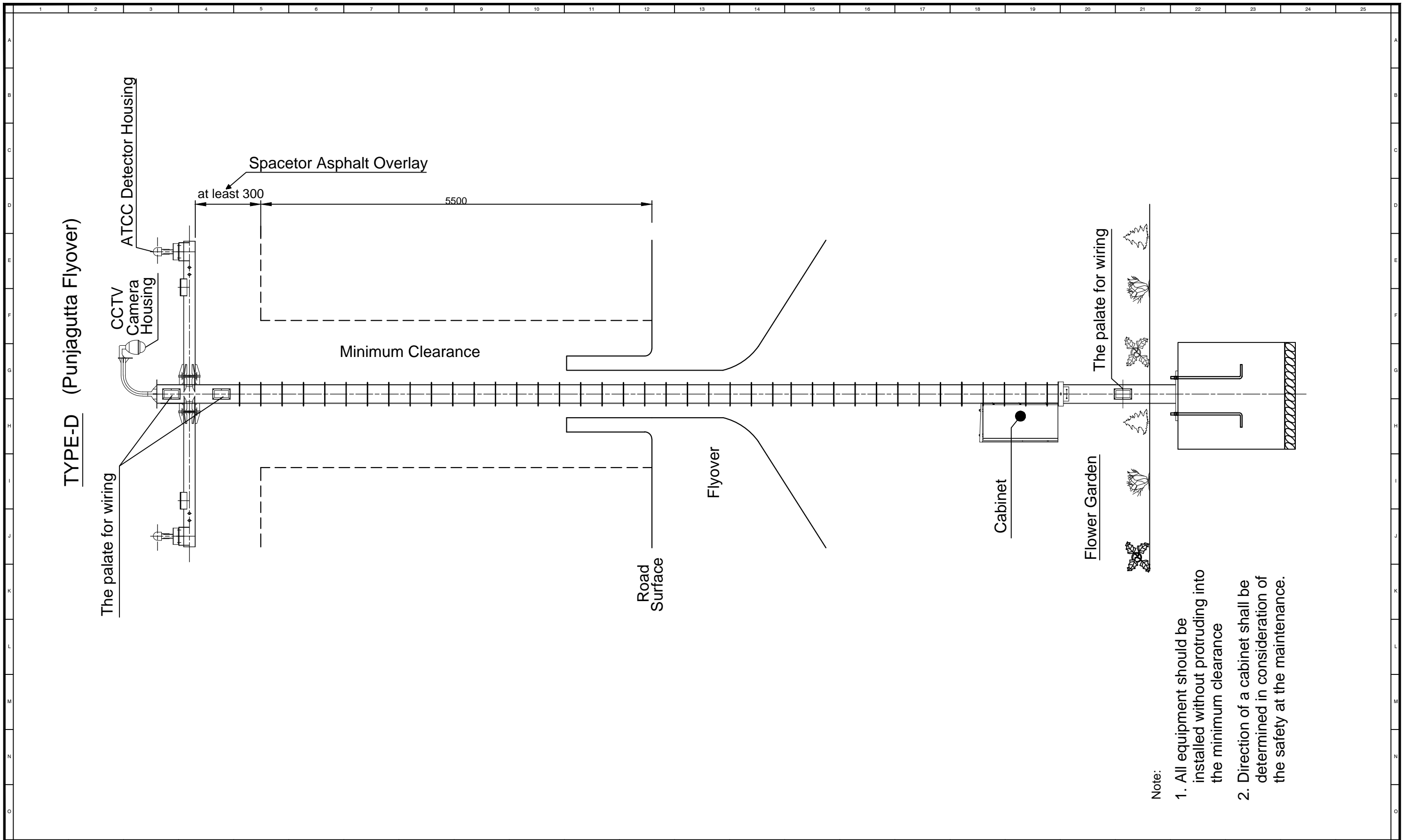
- Note:**
1. All equipment shall be installed without protruding into the minimum clearance.
 2. Direction of a cabinet shall be determined in consideration of the safety at the maintenance.



DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

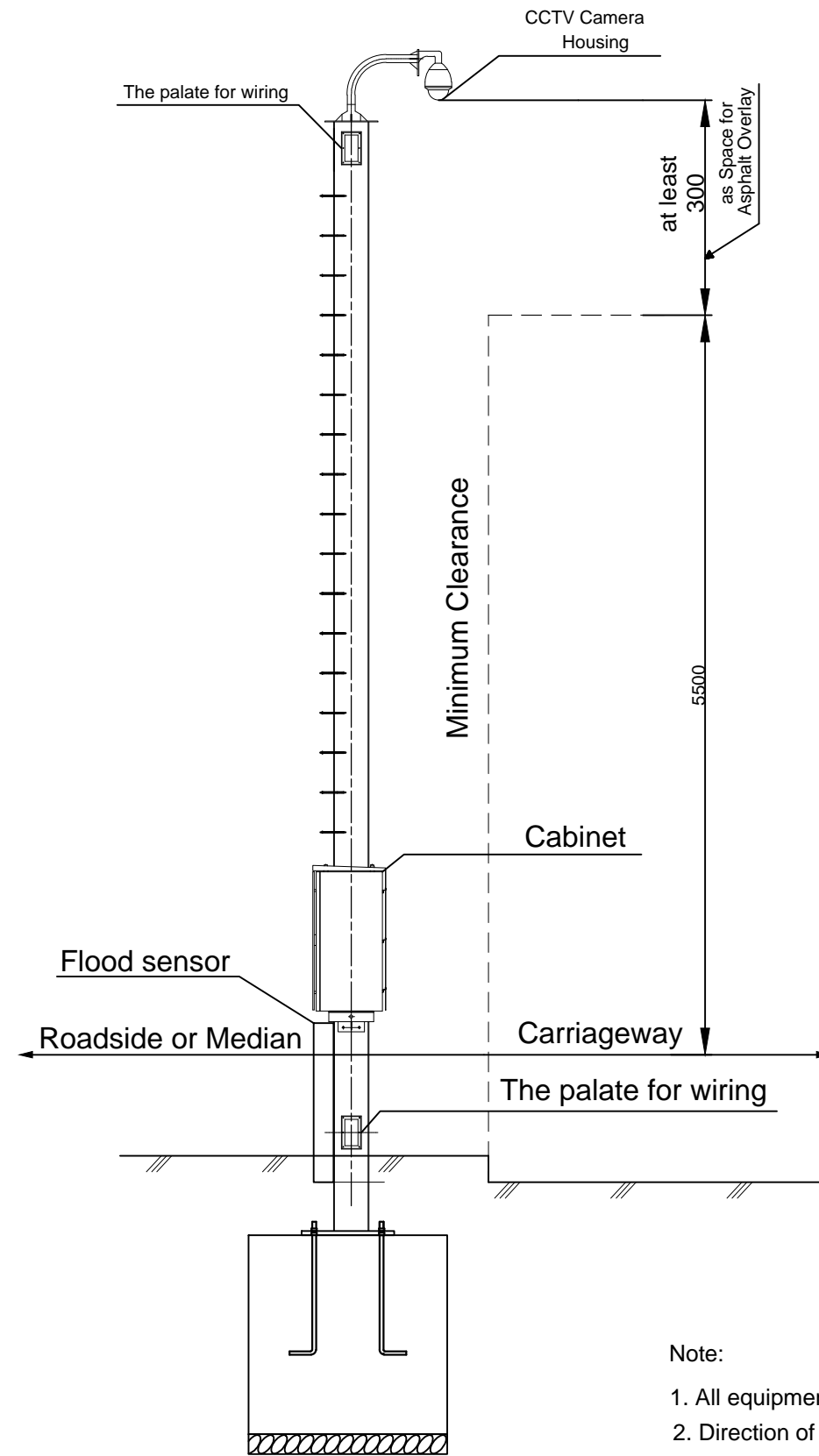
JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA
 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED
 HYDERABAD GROWTH CORRIDOR LIMITED
 HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT : **NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)**
 TITLE : **TYPICAL DRAWING OF ATCC AND CCTV-(1)**
 SCALE: 1:50 DWG. NO. T -01



DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	 HYDERABAD GROWTH CORRIDOR LIMITED HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	PROJECT : NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)	
REVISION NO.	DATE	DESCRIPTION				TITLE : TYPICAL DRAWING OF ATCC AND CCTV(2) (Reference)	
01	-	FIRST SUBMISSION		SCALE: 1:50		DWG. NO. T -02	



- Note:
1. All equipment shall be installed without protruding into the minimum clearance
 2. Direction of a cabinet shall be determined in consideration of the safety at the maintenance.

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

HYDERABAD GROWTH CORRIDOR LIMITED

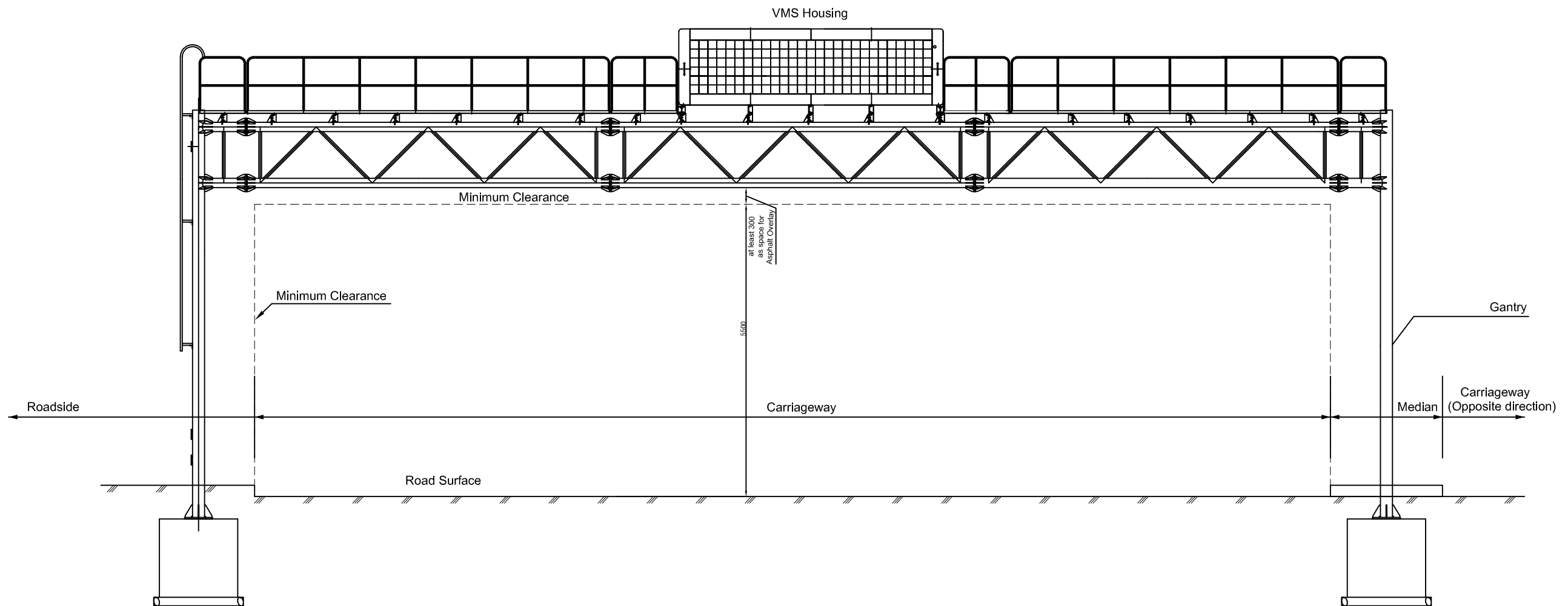
HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)



TITLE :
TYPICAL DRAWING OF FLD AND CCTV

SCALE: 1:50 DWG. NO. T -03

TYPE-A
(Gantry installation type)

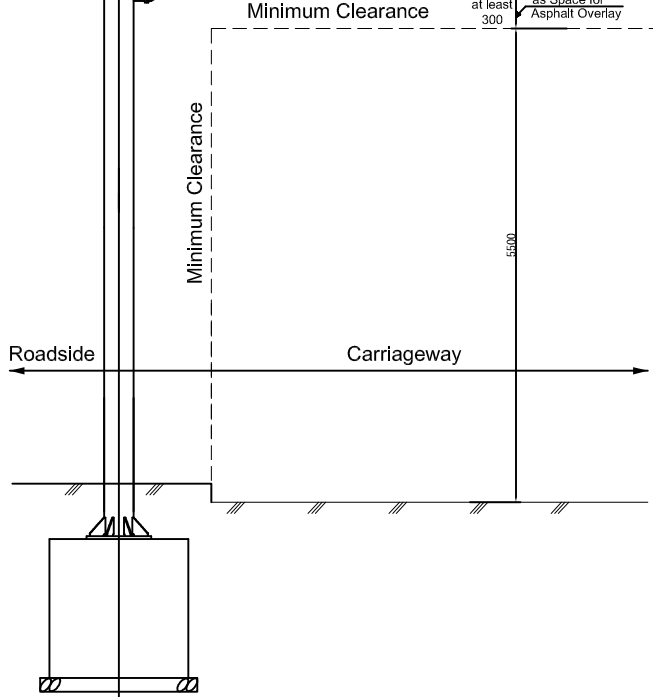
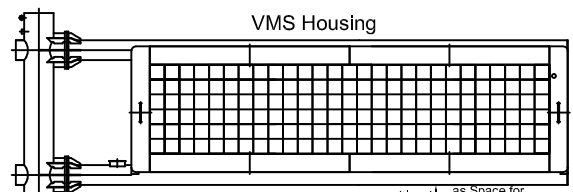
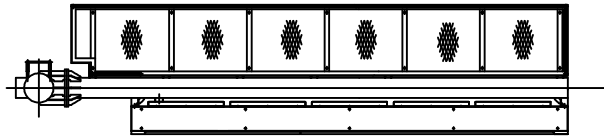


Note:
1. All equipment shall be installed without protruding into the minimum clearance

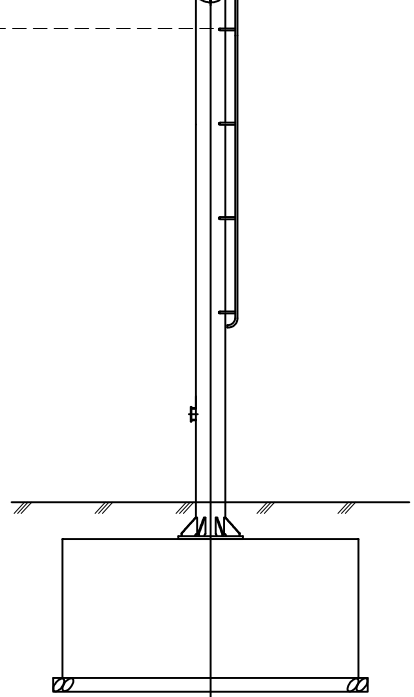
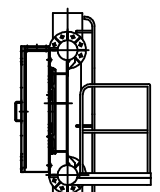
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA 2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	 HYDERABAD GROWTH CORRIDOR LIMITED HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007	PROJECT : NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)	
REVISION NO.	DATE	DESCRIPTION				TITLE : TYPICAL DRAWING OF VMS TYPE-A	
01	-	FIRST SUBMISSION		SCALE: 1:80	DWG. NO. T-04		

TYPE-B

(Roadside cantilever installation type)



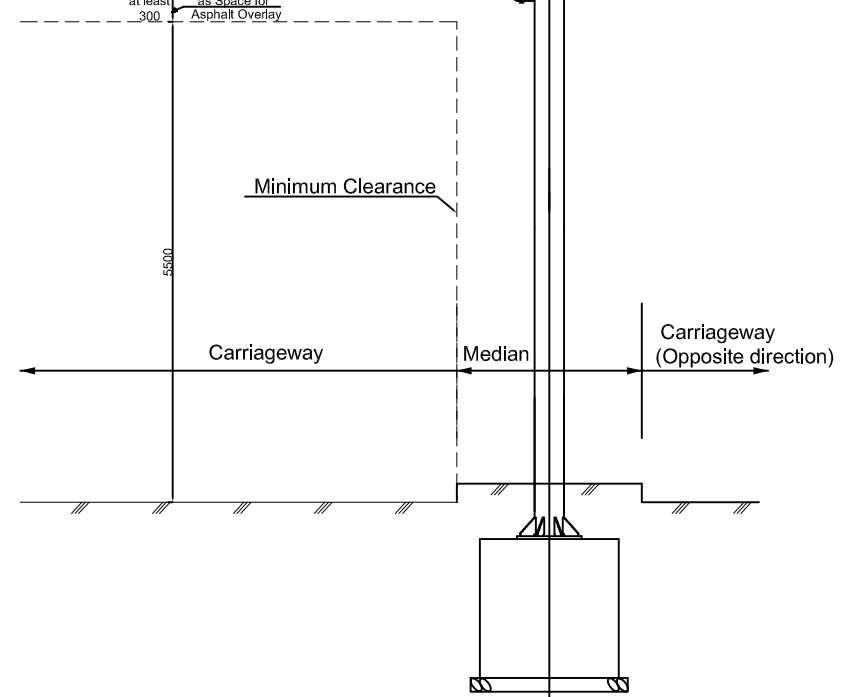
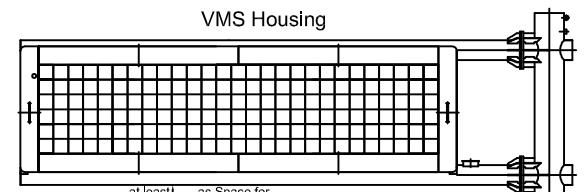
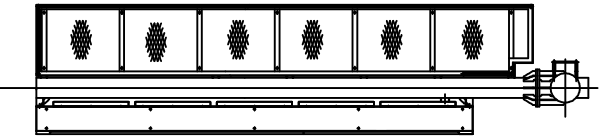
FRONT VIEW



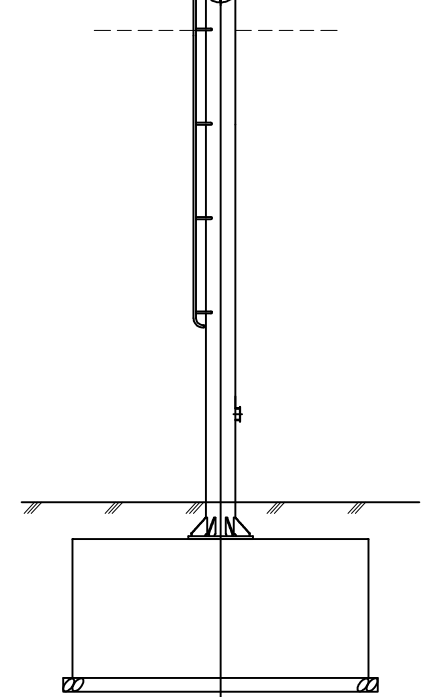
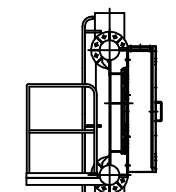
SIDE VIEW

TYPE-C

(Median cantilever installation type)



FRONT VIEW



SIDE VIEW

Note:
1. All equipment shall be installed without protruding into the minimum clearance

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

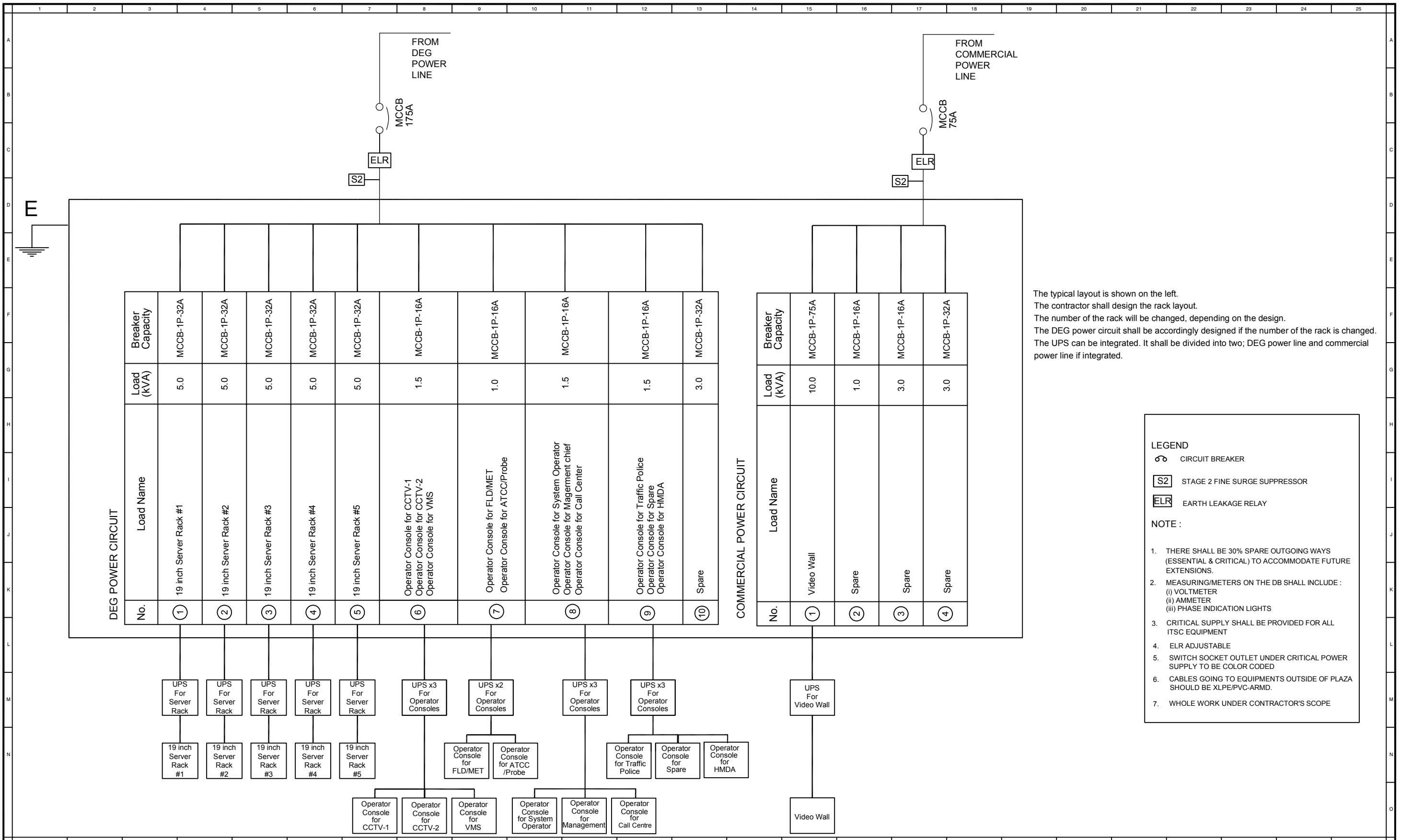
HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

TITLE :
TYPICAL DRAWING OF VMS TYPE-B AND TYPE-C

SCALE: 1:80 DWG. NO. T -05



The typical layout is shown on the left.
 The contractor shall design the rack layout.
 The number of the rack will be changed, depending on the design.
 The DEG power circuit shall be accordingly designed if the number of the rack is changed.
 The UPS can be integrated. It shall be divided into two; DEG power line and commercial power line if integrated.

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REVISION NO.	DATE	DESCRIPTION	
01	-	FIRST SUBMISSION	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

JICA SPECIAL ASSISTANCE FOR PROJECT IMPLEMENTATION (SAPI) FOR THE ASSISTANCE FOR THE INTRODUCTION OF ITS ON ROADNETWORK IN HYDERABAD METROPOLITAN AREA

2ND FLOOR, HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

HYDERABAD GROWTH CORRIDOR LIMITED

HYDERABAD GROWTH CORRIDOR LIMITED

HUDA COMPLEX, TARNAKA, HYDERABAD - 500 007

PROJECT :
NEHRU OUTER RING ROAD PROJECT (HYDERABAD CITY INTELLIGENT TRANSPORT SYSTEM)

TITLE :
POWER DISTRIBUTION BOARD SINGLE LINE DIAGRAM OF ITSC

SCALE: NOT TO SCALE DWG. NO. P -01