



โครงการ อาคารศูนย์บริการวิชาการ และเผยแพร่ศิลปวัฒนธรรม

เจ้าของโครงการ :
สถาบันบัณฑิตพัฒนศิลป์
BUNDIPATNASILPA INSTITUTE

ที่ตั้งโครงการ :
ตำบลศาลายา อำเภอพุทธมณฑล จังหวัดนครปฐม

แบบวิศวกรรมระบบพิเศษโรงละคร

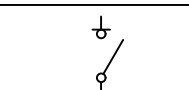
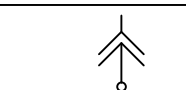
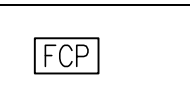
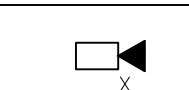
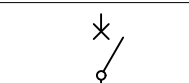
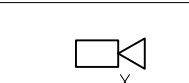
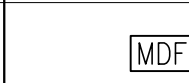
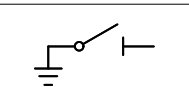
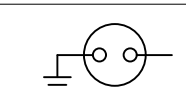
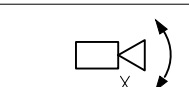
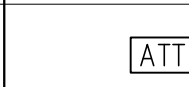
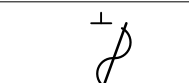
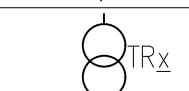
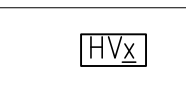
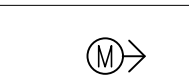
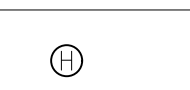
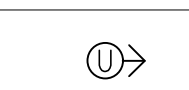
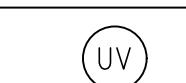
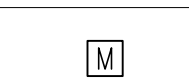
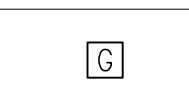
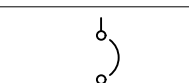
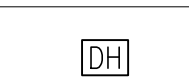
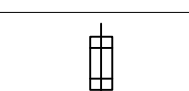
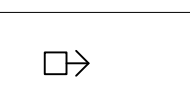
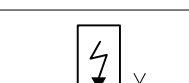
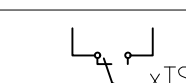
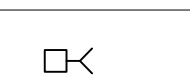
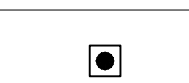
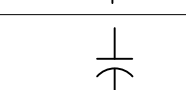
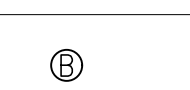
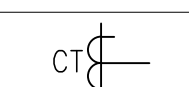
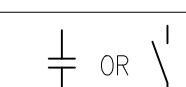
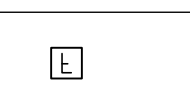
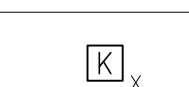
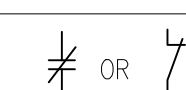
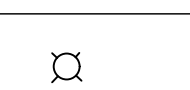
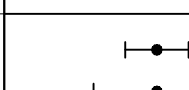
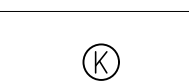
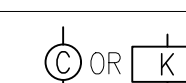
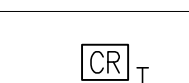
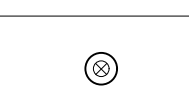
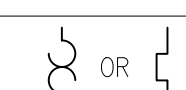
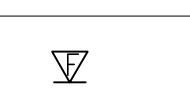
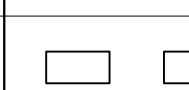
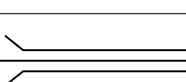
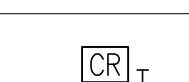
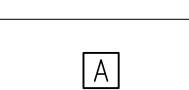
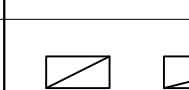
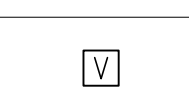
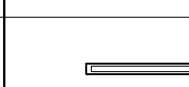
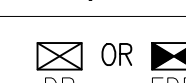
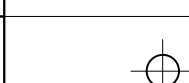
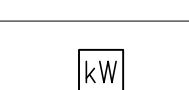
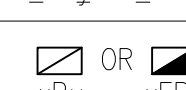
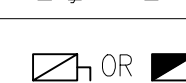
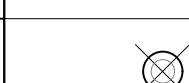
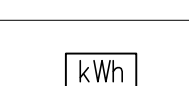
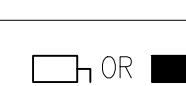
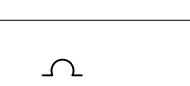
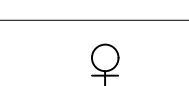
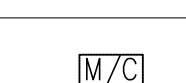
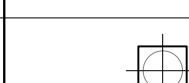
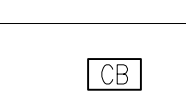
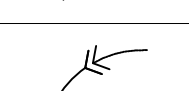
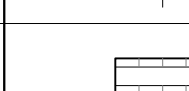
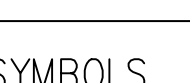
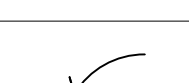
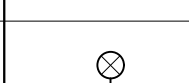
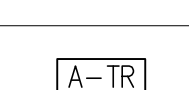
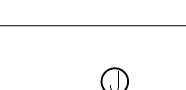
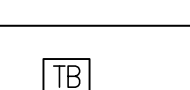
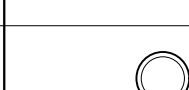
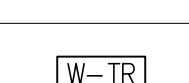
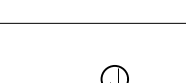
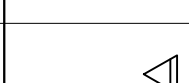
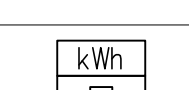
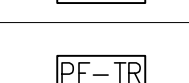
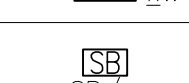
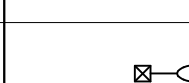
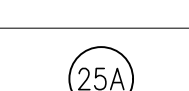
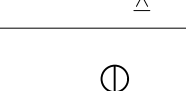
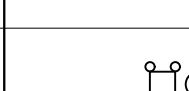
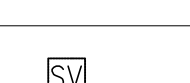
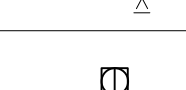
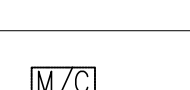
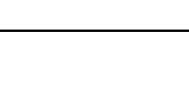
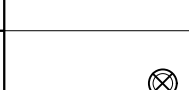
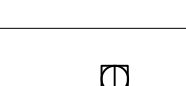
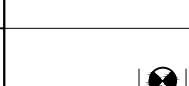
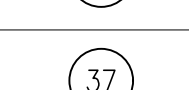
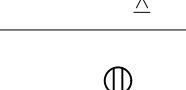
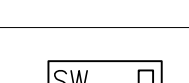
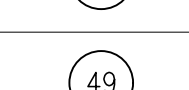
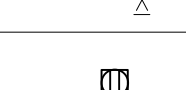
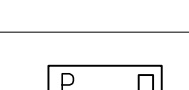
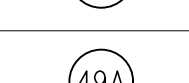
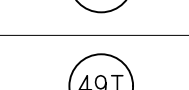
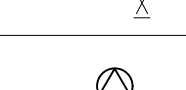
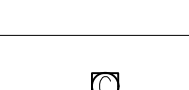
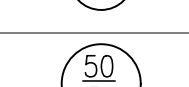
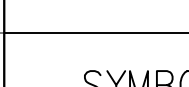
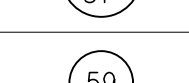
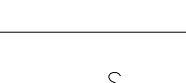
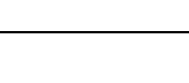
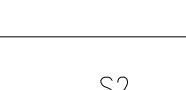
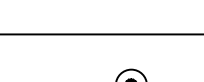
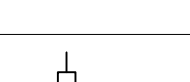
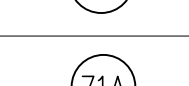
หมวดงาน

- ☐ ระบบเสียงประกอบเวทีการแสดง
Sound System
- ☐ ระบบแสงประกอบเวทีการแสดง
Stage Lighting System
- ☒ ระบบภาพประกอบเวทีการแสดง
Visual System
- ☐ ระบบลิฟต์ประกอบเวทีการแสดง
Stage Lift System
- ☐ ระบบรอกแขวนฉากประกอบเวทีการแสดง
Rigging System
- ☐ ระบบสื่อสารอินเตอร์คอมประกอบเวทีการแสดง
Intercom System
- ☐ ระบบม่านประกอบเวทีการแสดง
Curtain System

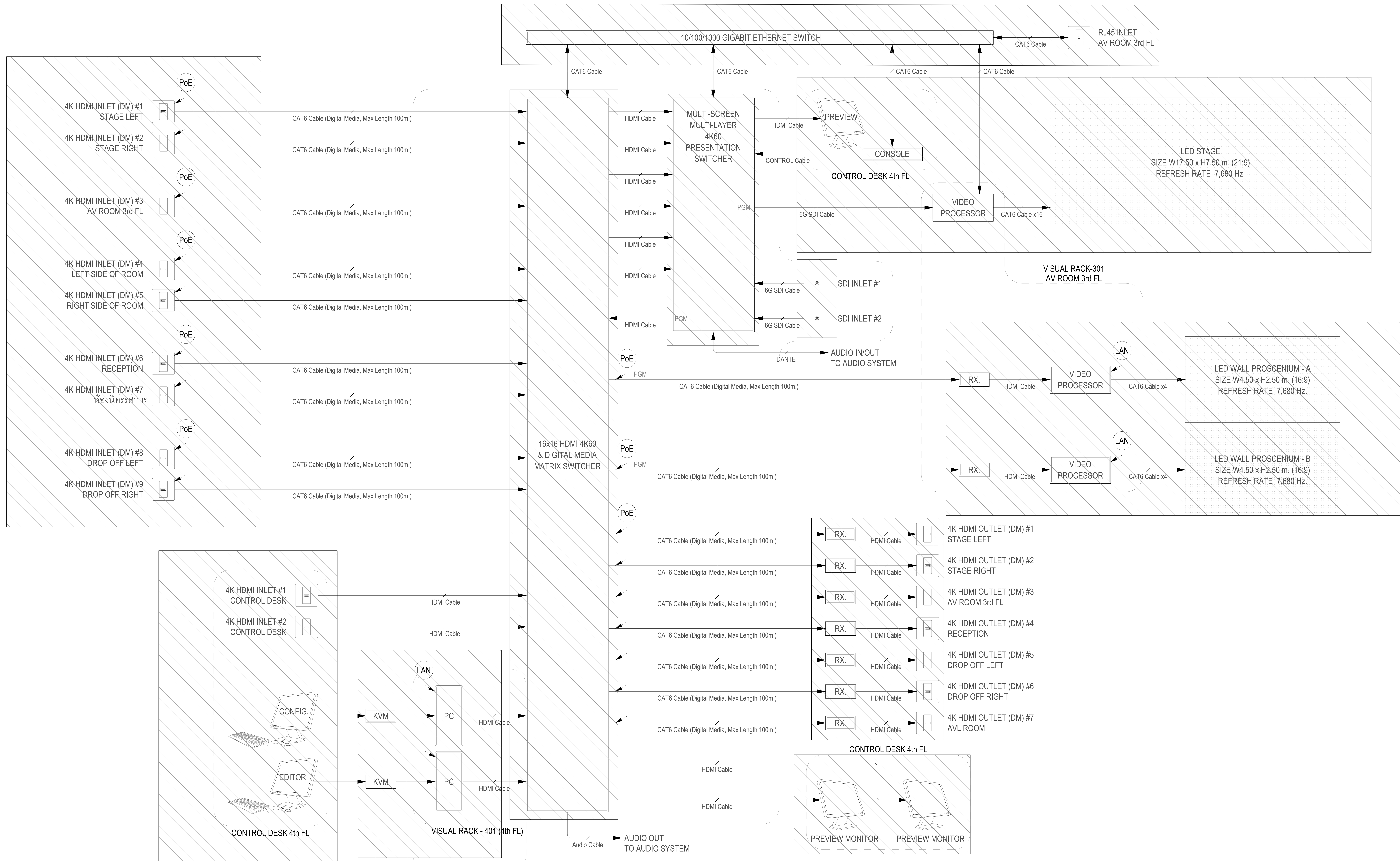
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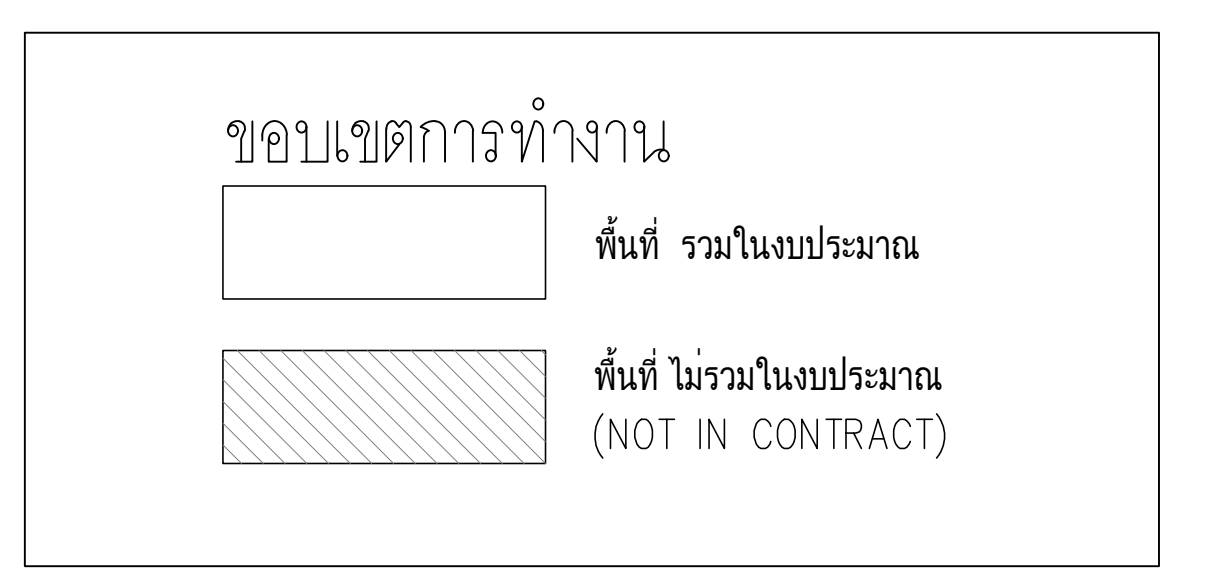
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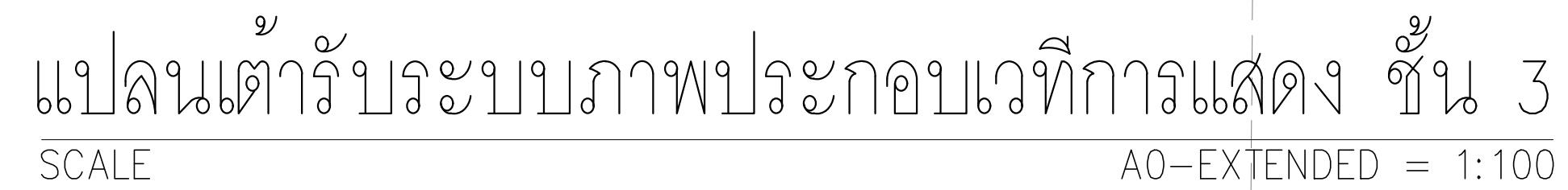
ELECTRICAL HIGH VOLT SYSTEM SYMBOLS				GENERAL ABBREVIATION		FIRE ALARM SYSTEM SYMBOLS		SECURITY SYSTEM SYMBOLS		TELEPHONE SYSTEM SYMBOLS	
SYMBOLS	DESCRIPTIONS	SYMBOLS	DESCRIPTIONS	CODE	DESCRIPTIONS	SYMBOLS	DESCRIPTIONS	SYMBOLS	DESCRIPTIONS	SYMBOLS	DESCRIPTIONS
	HIGH VOLTAGE LOAD BREAK SWITCH		HIGH VOLTAGE CIRCUIT BREAKER DRAWN OUT TYPE	A	AMPERE		FIRE ALARM CONTROL PANEL		CCTV IP CAMERA FIXED TYPE (x : SEE SUBSCRIPTION)		PRIVATE AUTOMATIC BRANCH EXCHANGE
	HIGH VOLTAGE CIRCUIT BREAKER FIXED TYPE			AT	SETTING OF OVERLOAD TRIP OF CIRCUIT IN AMPERE		SUB FIRE ALARM CONTROL PANEL		CCTV CAMERA FIXED TYPE (x : SEE SUBSCRIPTION)		MAIN DISTRIBUTION FRAME
	EARTHING SWITCH		LIGHTNING ARRESTER	AF	FRAME SIZE OF CIRCUIT BREAKER IN AMPERE		GRAPHIC ANNUNCIATOR BOARD		CCTV CAMERA PAN AND TILT TYPE (x : SEE SUBSCRIPTION)		ATTENDANT CONSOLE
	HIGH VOLTAGE FUSE		HIGH VOLT TERMINATOR	IC	INTERRUPTING CAPACITY (BREAKING CAPACITY)		REMOTE GRAPHIC ANNUNCIATOR		DIGITAL VIDEO RECORDER		TELEPHONE TERMINAL CABINET LOCATED AT x FLOOR, NUMBER y, WITH z TERMINALS
	DISTRIBUTION TRANSFORMER NO. x		HIGH VOLT SWITCH GEAR NUMBER y	LB	LOAD BREAK SWITCH		REMOTE TERMINAL UNIT		PASSIVE INFRARED MOTION DETECTOR		TELEPHONE OUTLET RJ 11 TYPE
				VA	VOLTAMPERE		FIRE ALARM TERMINAL BOX LOCATED AT x FLOOR, NUMBER y		MICROWAVE MOTION DETECTOR		TELEPHONE OUTLET RJ 45 TYPE
ELECTRICAL LOW VOLT SYSTEM SYMBOLS				V	VOLT		HEAT DETECTOR, COMBINATION TYPE (FIXED TEMPERATURE AT 135°F AND RATE-OF-RISE TEMPERATURE)		ULTRASONIC MOTION DETECTOR		TELEPHONE FLOOR OUTLET RJ 11 TYPE
	LOW VOLTAGE CIRCUIT BREAKER DRAWN OUT TYPE		UNDERVOLTAGE RELEASE TRIP COIL	VAC	VOLT ALTERNATING CURRENT		HEAT DETECTOR SAME AS (1) BUT FIXED TEMPERATURE AT 200°F		MAGNETIC CONTACT		TELEPHONE FLOOR OUTLET RJ 45 TYPE
			SHUNT TRIP COIL	VDC	VOLT DIRECT CURRENT		HEAT DETECTOR, COMBINATION TYPE (FIXED TEMPERATURE AT 135°F AND RATE-OF-RISE TEMPERATURE)/ALL WEATHER PROOF		GLASS BREAK SENSOR		WIRING WITH 1 LINE (4 CONDUCTORS PER LINE) IN 15 mm. DIAMETER CONDUIT
	LOW VOLTAGE CIRCUIT BREAKER FIXED TYPE		CLOSING COIL	VAR	REACTIVE POWER		SMOKE DETECTOR		MAGNETIC DOOR HOLDER		WIRING WITH 'x' LINES IN 15 mm. DIAMETER
	HRC FUSE		GENERATOR SET	LV	LOW VOLTAGE		PHOTOELECTRIC BEAM SMOKE DETECTOR (TRANSMITTER)		DOOR STRIKE, TYPE AS SPECIFIED		WIRING WITH 'x' LINES IN 'y' mm. DIAMETER
	SURGE ARRESTER AT SPECIES z CLASS		TRANSFER SWITCH z AS A=Automatic, M=Manual	HV	HIGH VOLTAGE		PHOTOELECTRIC BEAM SMOKE DETECTOR (RECEIVER)		PANIC PUSH BUTTON	p	SUBSCRIPTION FOR DEVICE WHICH IS PUBLIC TELEPHONE
	POTENTIAL TRANSFORMER		CAPACITOR BANK	W	WATT		ALARM BELL, SIZE AS SPECIFIED		VIBRATION SENSOR	LUMINAIRE SYMBOLS & ABBREVIATION	
	CURRENT TRANSFORMER		NORMALLY OPENED CONTACT	G	GROUND		MANUAL STATION, TYPE AS SPECIFIED w/KEY SWITCH		KEY STATION NO. 'y' (GUARD TOUR SYSTEM)	SYMBOLS	DESCRIPTIONS
	MOTOR OPERATION (FOR SWITCHGEAR)		NORMALLY CLOSED CONTACT	CAP	CAPACITOR		STROBE LIGHT		ALARM DEVICE		LUMINAIRE BASE TYPE WITH 1x15w AND 1x15w LED T8
	KEY INTERLOCK		OPERATING COIL FOR RELAY OR CONTACTOR	Cu	COPPER		FIRE ALARM HORN OR CEILING MOUNTED LOUDSPEAKER		ACCESS CONTROL CARD READER		LUMINAIRE RECESSED TYPE (PRISMATIC-C SHAPE COVER) WITH 1x15w AND 1x15w LED T8
	PILOT LAMP		OVERLOAD RELAY	Hz	HERTZ		FIRE ALARM TELEPHONE		ACCESS CONTROL CARD READER WITH KEY PAD		LUMINAIRE TYPE (PRISMATIC COVER) WITH 1x15w AND 1x36w FLUORESCENT
	SELECTOR SWITCH		ENCASED CONCRETE SLEEVE ACROSS THE ROAD	N	NEURAL		MAGNETIC DOOR HOLDER		TIME ATTENDANT CARD READER		LUMINAIRE TYPE (PRISMATIC COVER) WITH 2x15w OR 3x15w AND 2x36w OR 3x36w FLUORESCENT
	AMMETER		MANHOLE	ø	PHASE		MAGNETIC DOOR CONTACT	0	SUBSCRIPTION FOR DEVICE WITH IS OUTDOOR HOUSING		LUMINAIRE TYPE (ALUMINUM LOUVERS) R0391V LED365/665 PSU W50/120 3,600lm 6500K 45W
	VOLT-METER		HANDHOLE	CB	CIRCUIT BREAKER		PANIC PUSH BUTTON	0	SUBSCRIPTION FOR DEVICE WITH IS DOME HOUSING		LUMINAIRE TYPE (LED WATERPROOF) W1150, LED45 CW PSU 1,150w
	FREQUENCY METER		MAIN DISTRIBUTION BOARD FOR NORMAL LOAD OR ESSENTIAL LOAD LOCATED AT x FLOOR, NUMBER y	EXP	EXPLOSION PROOF		FLOW SWITCH (SUPPLIED BY OTHERS)	Z	SUBSCRIPTION FOR DEVICE WITH IS ZOOM LENS		LUMINAIRE TYPE (LED HIGH BAY) B8P500 5-W 100w
	POWER FACTOR METER		DISTRIBUTION BOARD FOR NORMAL LOAD OR ESSENTIAL LOAD LOCATED AT x FLOOR, NUMBER y	WP	WEATHERPROOF		SUPERVISORY SWITCH (SUPPLIED BY OTHERS)	SOUND SYSTEM SYMBOLS			DOWNLIGHT COMPACT LED - DN391B LED11_840 D150 PSU/W/1,100lm 4000K 9.5W
	KILOWATT-METER		PANELBOARD, FOR NORMAL LOAD OR ESSENTIAL LOAD LOCATED AT x FLOOR, NUMBER y				PRESSURE SWITCH (SUPPLIED BY OTHERS)	SYMBOLS	DESCRIPTIONS		DOWNLIGHT COMPACT LED - DN392B LED16_865 D220 PSU/W/1,600lm 6500K 16W
	KILOVAR-METER		FUSED DISCONNECTING SWITCH FOR NORMAL LOAD OR ESSENTIAL				SUBSCRIPTION FOR DEVICE WHICH IS ADDRESSABLE TYPE		MICROPHONE FIXED TYPE		DOWNLIGHT COMPACT LED - DN393B LED22_840 D220 PSU/W/2,200lm 4000K 19w OR EQUIVALENT
	KILOWATTHOUR METER		NON FUSED DISCONNECTING SWITCH FOR NORMAL LOAD OR ESSENTIAL	GENERAL SUBSCRIP			END OF LINE RESISTANCE		MICROPHONE REMOVABLE TYPE		SURFACE DOWNLIGHT - LAE S50C120 WITH LED 8W 4,000K E27 OR EQUIVALENT
	DIGITAL POWER METER		MECHANICAL DISTRIBUTION BOARD (SUPPLIED BY OTHER)	TYPE	TYPICAL	BUILDING AUTOMATION SYSTEM SYMBOLS			SIGNAL SOCKET OUTLET, FIXED MOUNTING		HIGH BAY - B1560P LED105/CW PSU WB 10,500lm 6500K 75w OR EQUIVALENT
	KILOVAR CONTROLLER FOR POWER FACTOR IMPROVEMENT		CIRCUIT BREAKER BOX RATING AS SPECIFIED	EMT	ELECTRICAL METALLIC TUBING	SYMBOLS	DESCRIPTIONS		SIGNAL PLUG, REMOVABLE		WALL MOUNTED LUMINAIRE
	VOLTAGE TRANSDUCER		PULL BOX	IMC	INTERMEDIATE METAL CONDUIT		TERMINAL BOX		CEILING MOUNTED LOUDSPEAKER		HIGH BAY LUMINAIRE
	AMPERE TRANSDUCER		JUNCTION BOX	RSC	RIGID STEEL CONDUIT		REMOTE PROCESSING UNIT		HORN LOUDSPEAKER RATED 'x' WATTS		STREET OR AREA LIGHTING LUMINAIRE MOUNTED ON WALL
	WATT TRANSDUCER		JUNCTION BOX (x = SEE SUBSCRIP)	NIC	NOT IN CONTRACT		MARSHALLING BOX		SOUND COLUMN RATED 'x' WATTS		STREET OR AREA LIGHTING LUMINAIRE MOUNTED ON POLE 8 m. B8P391 LED104W 80W 220-240V DM OR EQUIVALENT
	KILOWATTHOUR WITH PULSE INITIATOR		JUNCTION BOX w/GROUND	MCC	MOTOR CONTROL CENTER BOARD		PRESSURE SWITCH (SUPPLIED BY OTHERS)		TERMINAL BOX, LOCATED AT 'x' FLOOR		SELF-CONTAINED SEALED LEAD BATTERY EMERGENCY LIGHT WITH REMOTE LAMP
	POWER FACTOR TRANSDUCER		JUNCTION BOX w/GROUND (x = SEE SUBSCRIP)	AP	AIR-CONDITIONING PANELBOARD		FLOW SWITCH (SUPPLIED BY OTHERS)		VOLUME CONTROL		SELF-CONTAINED SEALED LEAD BATTERY EMERGENCY LIGHT WITH REMOTE LAMP
	AUTOMATIC SYNCHRONIZING RELAY		SINGLE CONVENIENT OUTLET 15 A., 250 V. w/GROUND EXCEPT OTHERWISE INDICATED	SP	SANITARY PANELBOARD		SUPERVISORY SWITCH (SUPPLIED BY OTHERS)	DATA CABLING SYSTEM SYMBOLS			OBSTRUCTION LIGHT
	MANUAL SYNCHRONIZING RELAY		SINGLE CONVENIENT OUTLET 15 A., 250 V. w/GROUND EXCEPT OTHERWISE INDICATED (x = SEE SUBSCRIP)	FP	FIRE PROTECTION PANELBOARD		MECHANICAL SANITARY OR OTHER PANELBOARD	SYMBOLS	DESCRIPTIONS		EXIT OR FIRE EXIT SIGN LUMINAIRE
	UNDERVOLTAGE RELAY		SINGLE FLOOR OUTLET 15 A. 250 V. w/GROUND	B	BATTERY EMERGENCY LIGHT		TEMPERATURE TRANSMITTER OR OTHER PROVIDED BY THE CONTRACTOR		RACK PANEL		EXIT OR FIRE EXIT SIGN LUMINAIRE (WALL TYPE)
	DIRECTIONAL POWER RELAY		DUPLEX CONVENIENT OUTLET 15 A., 250 V. w/GROUND EXCEPT OTHERWISE INDICATED	C	MOUNTED ABOVE CEILING LEVEL				SWITCH (SUPPLIED BY OTHERS)		EXIT OR FIRE EXIT SIGN LUMINAIRE (FLOOR TYPE)
	UNDERCURRENT OR UNDERPOWER RELAY		DUPLEX CONVENIENT OUTLET 15 A., 250 V. w/GROUND EXCEPT OTHERWISE INDICATED (x = SEE SUBSCRIP)	F	EXHAUST FAN				PATCH PANEL		REMOTE LAMP FOR BATTERY EMERGENCY LIGHT DECORATIVE TYPE
	PHASE SEQUENCE VOLTAGE RELAY		DUPLEX FLOOR OUTLET 15 A. 250 V. w/GROUND			SYMBOLS	DESCRIPTIONS		DATA OUTLET RJ 45 TYPE		CENTRAL BATTERY
	THERMAL RELAY		DUPLEX FLOOR OUTLET 15 A. 250 V. w/GROUND (x = SEE SUBSCRIP)			MATV. SYSTEM SYMBOLS			DATA FLOOR OUTLET RJ 45 TYPE	INTERCOM SYSTEM	
	TRANSFORMER TEMPERATURE RELAY, ALARM CONDITION		POWER OUTLET WITH GROUND RATED AS FOR SPECIFY	LIGHTNING PROTECTION AND GROUNDING SYSTEM			ANTENNA FOR TV. AND AM/FM		ACCESS POINT	SYMBOLS	DESCRIPTIONS
	TRANSFORMER TEMPERATURE RELAY, TRIPPING CONDITION		ON-OFF PUSH BUTTON FOR TWO WIRE REMOTE SWITCH SYSTEM LOCATED AT x FLOOR, SWITCH y	SYMBOLS	DESCRIPTIONS		SATELLITE DISH		HDMI OUTLET		
	OVERCURRENT AND INSTANTANEOUS TRIP RELAY		SWITCH PANEL OR CONTROL SWITCH PANEL LOCATED AT x NUMBER, SWITCH y		AIR TERMINAL ø 19 mm. x 600 mm. LONG		'x' - WAY SPLITTER	MASTER TIME SYSTEM			HDMI INLET WITH Tx.
	OVERCURRENT GROUND FAULT RELAY		SINGLE POLE SWITCH 10 A., 250 V.		CONDUCTOR RUN FROM ONE LEVEL TO OTHER LEVEL		'x' - WAY TAP-OFF	SYMBOLS	DESCRIPTIONS		SD INLET WITH Tx.
	OVERVOLTAGE RELAY		THREE WAY SWITCH 10 A., 250 V.		COPPER CLAD STEEL GROUND ROD ø 16 mm. x 3000 mm. LONG		TERMINAL RESISTOR		MASTER TIME CONTROLLER		
	GROUND PROTECTION RELAY		FAN SWITCH WITH INDICATING LAMP 10 A., 250 V.		GROUNDING CONDUCTOR RUN TO GROUNDING SYSTEM		TV/FM OUTLET		SINGLE FACE SLAVE CLOCK		
	BLOCKING RELAY		LIMITING SWITCH 15 A., HEAVY DUTY		TEST BOX		WIRING WITH ONE CABLE IN 15 mm. DIAMETER CONDUIT		DOUBLE FACES SLAVE CLOCK		
	GAS OR BUCHHOLZ RELAY, ALARM CONDITION		DAMPER								

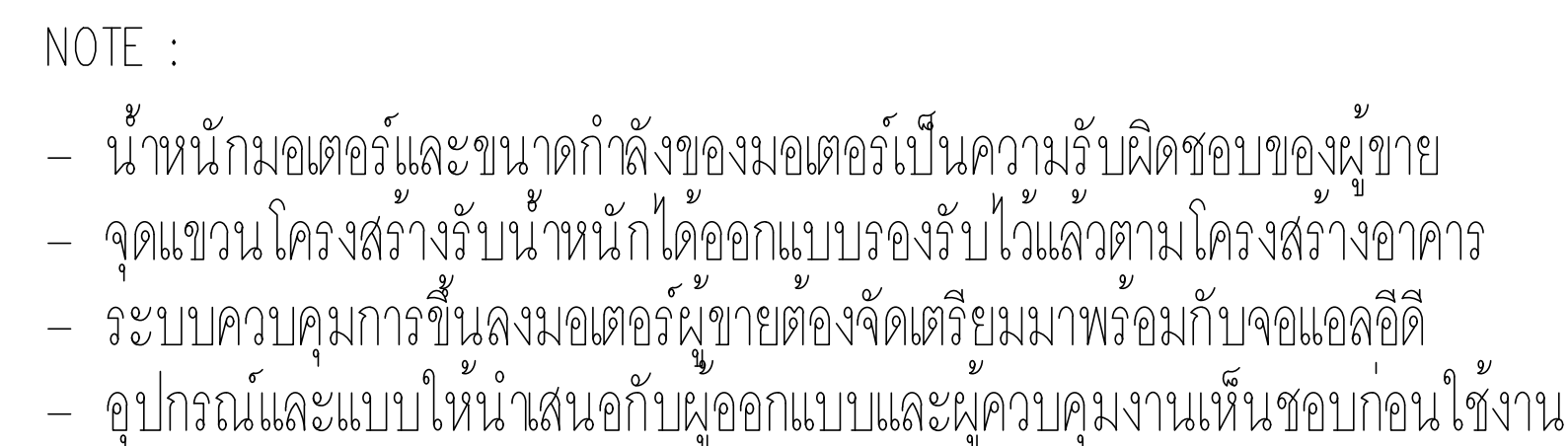
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RISER DIAGRAM
SCALE NTS



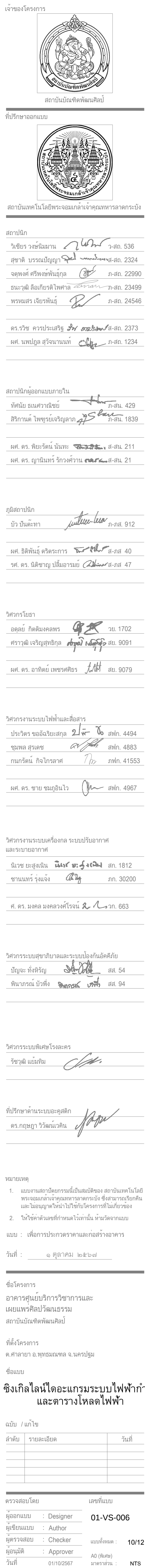
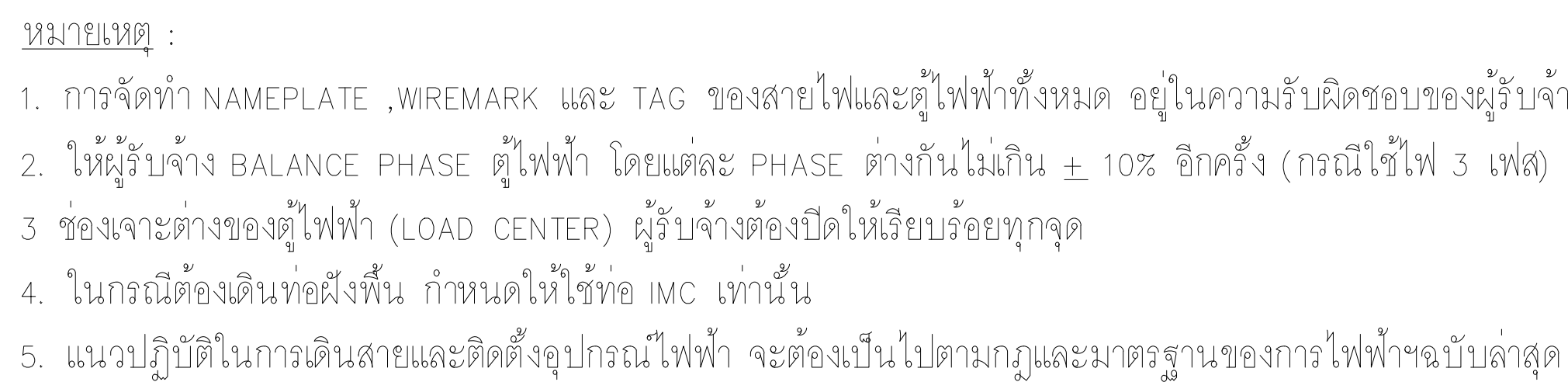
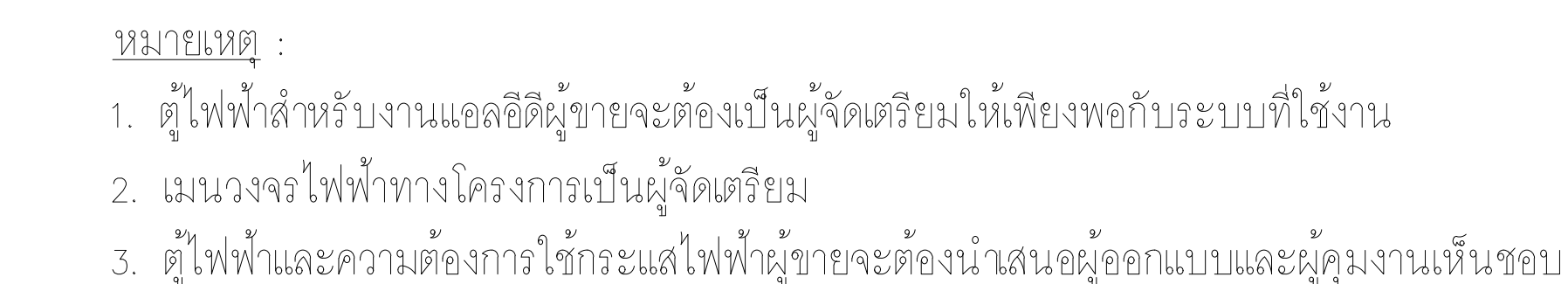


- นวัตกรรมคอมพิวเตอร์และขนาดกำลังของคอมพิวเตอร์เป็นความรู้ที่ติดของของมนุษย์
- จุดแนวโน้ตโครงสร้างรับน้ำหนักได้ออกแบบรองรับในแนวตามโครงสร้างอาคาร
- ระบบควบคุมการขึ้นลงมอเตอร์ลิฟต์ยี่ห้อจัดเตรียมมาพร้อมกับจอแอลซีดี
- อุปกรณ์และแบบให้ในส่นกับออกแบบและควบคุมงานเห็นชอบก่อนใช้งาน

พื้นที่ รวมในงบประมาณ

พื้นที่ ไม่รวมในงบประมาณ
(NOT IN CONTRACT)

SCALE AO-EXTENDED = 1:100





VISUAL RACK-301
FOR LED AT AV ROOM 3rd FL.

