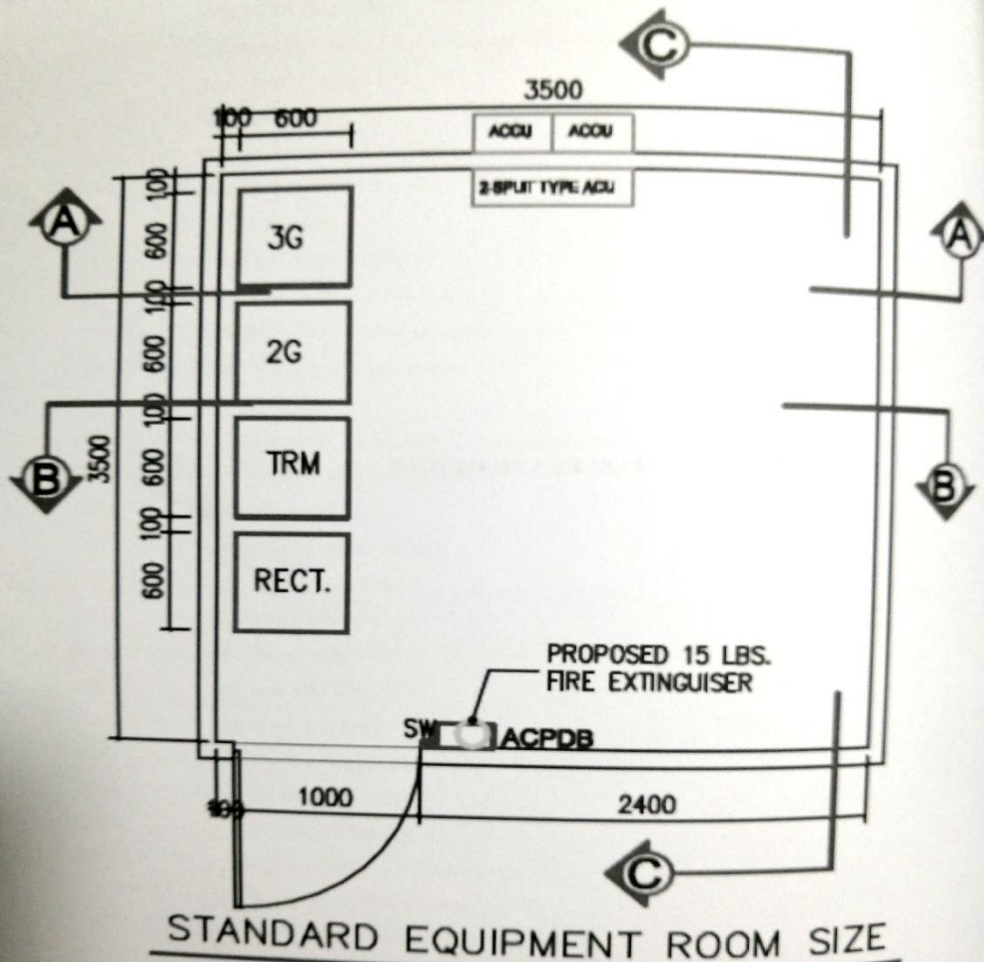
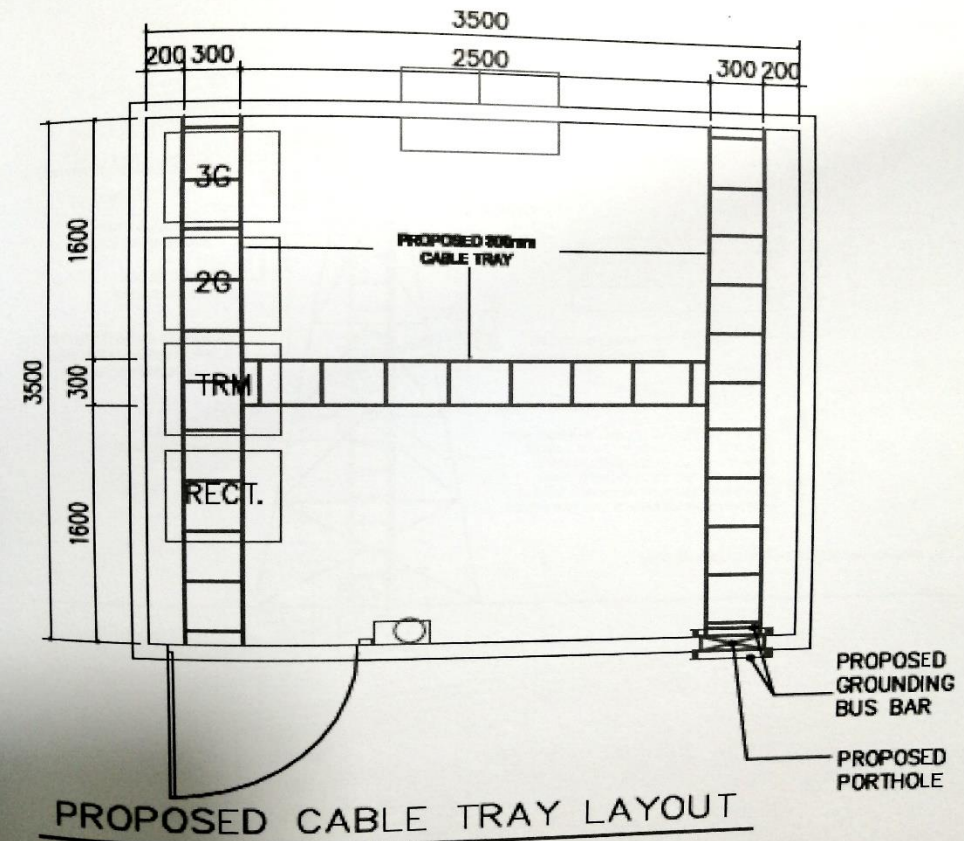


Sample of Floor Plan (TELECOMMUNICATION SYSTEM)

A: Sample Telecom Room Diagram

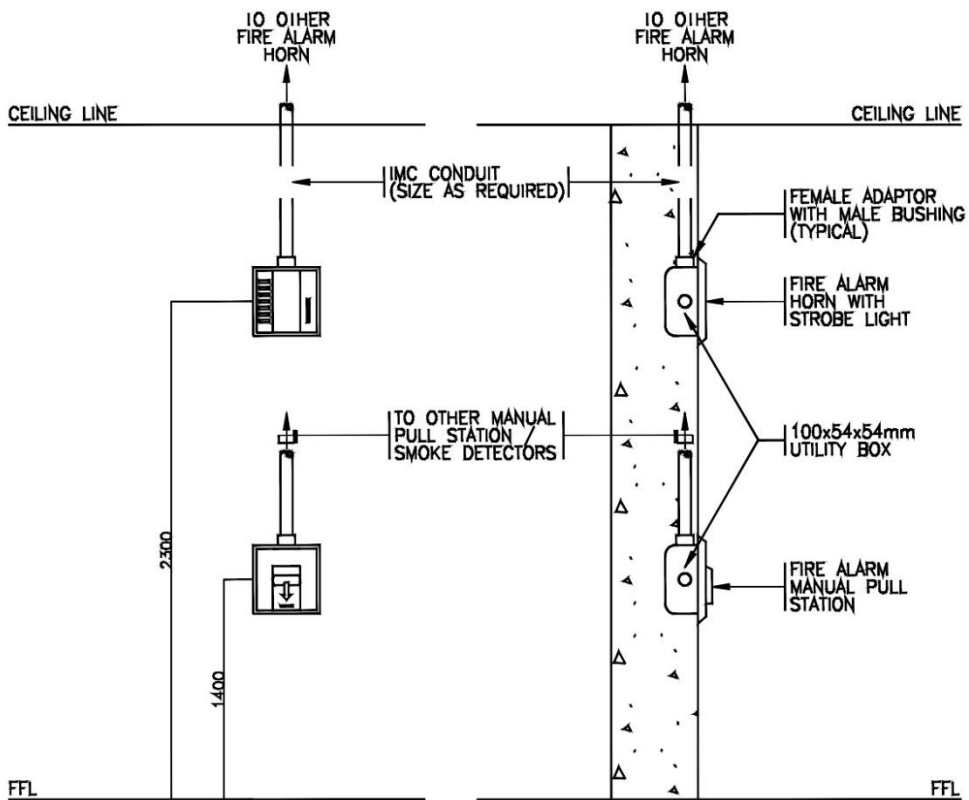


B: Cable Tray & Cable Entrance Facility Diagram





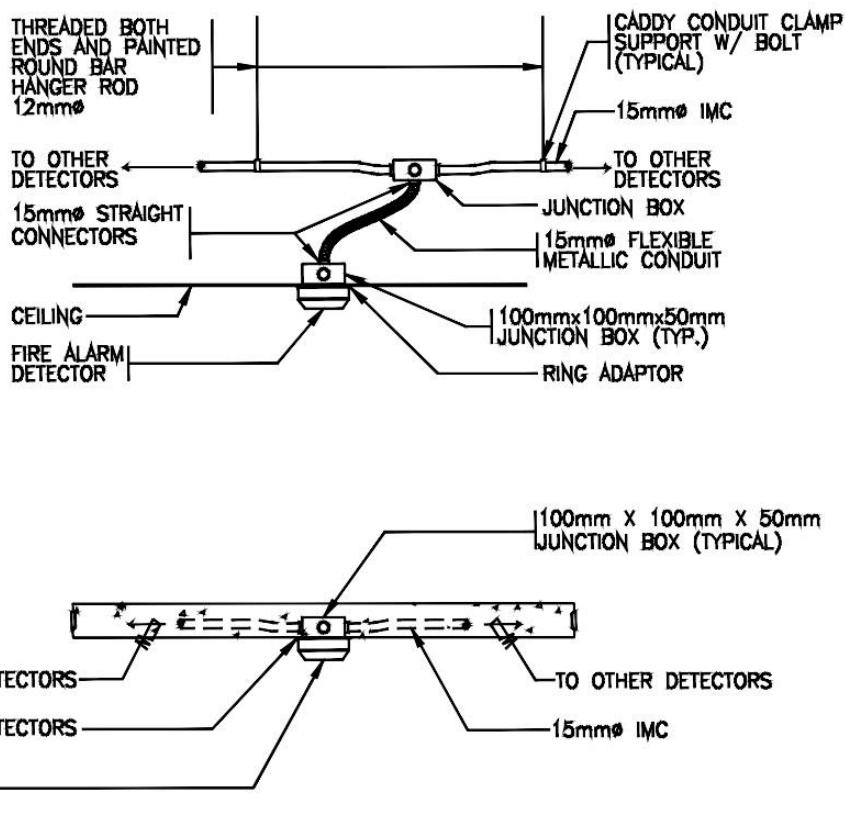
Electronics Details



FIRE ALARM MANUAL PULL STATION AND HORN INSTALLATION DETAIL

1
EC-8

NOT TO SCALE

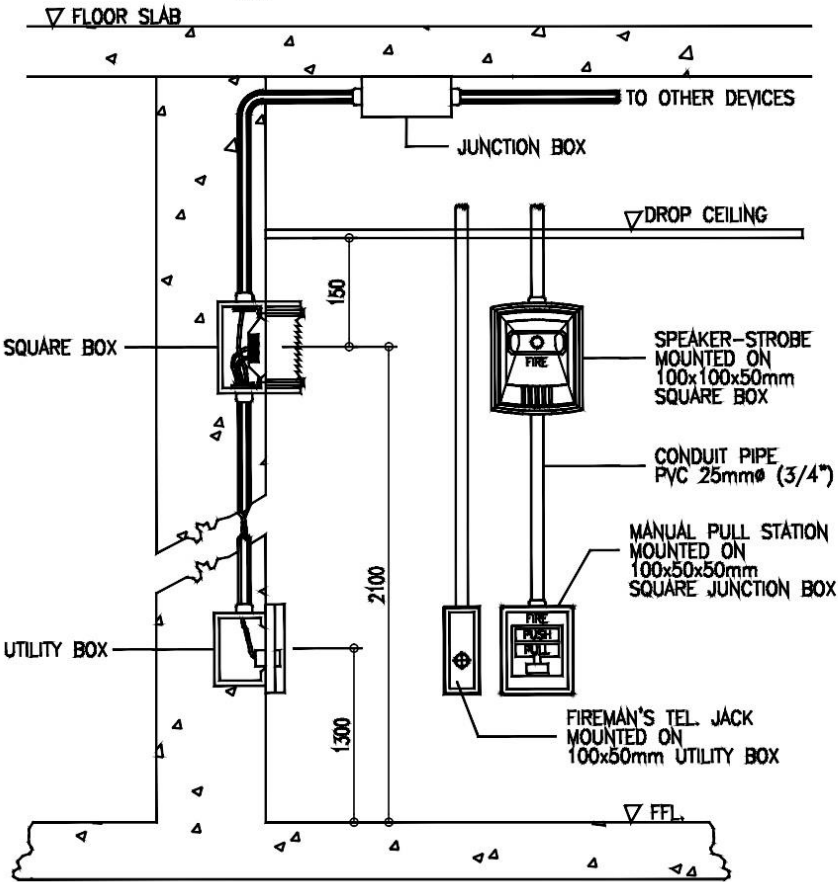


SMOKE DETECTOR MOUNTING DETAIL

4
EC-8

NOT TO SCALE

Electronics Details

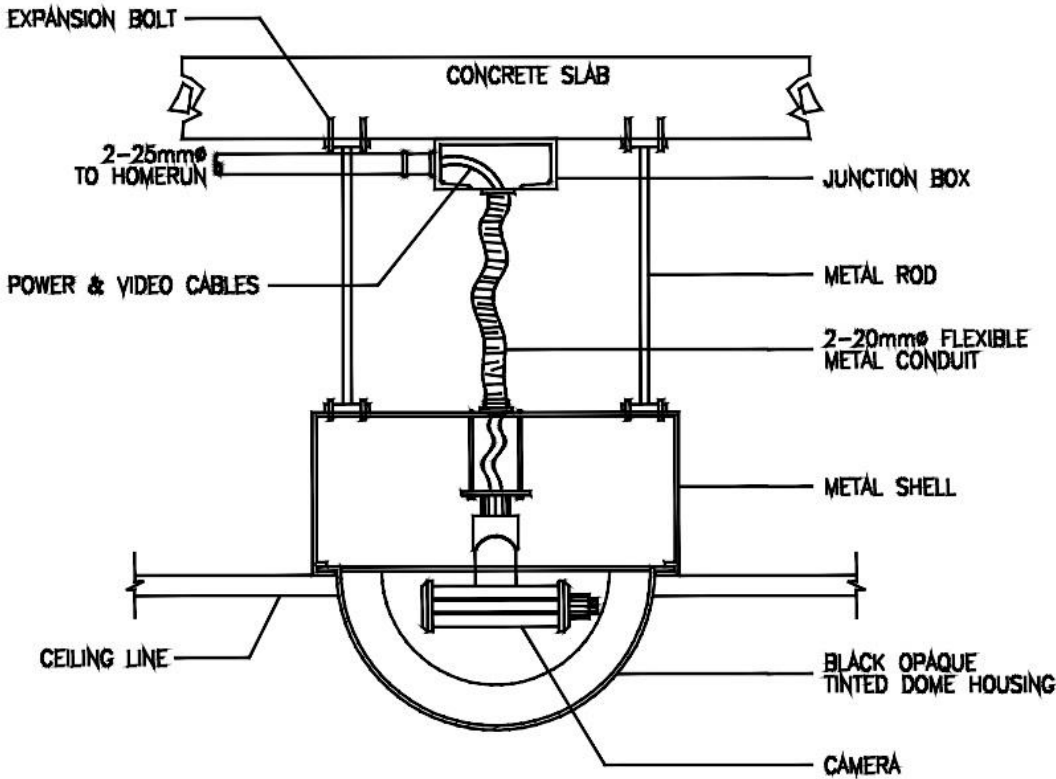


3 SPEAKER-STROBE, MANUAL PULL STATION AND FIREMAN'S TELEPHONE JACK MOUNTING DETAIL

3

EC-9 SCALE

NTS



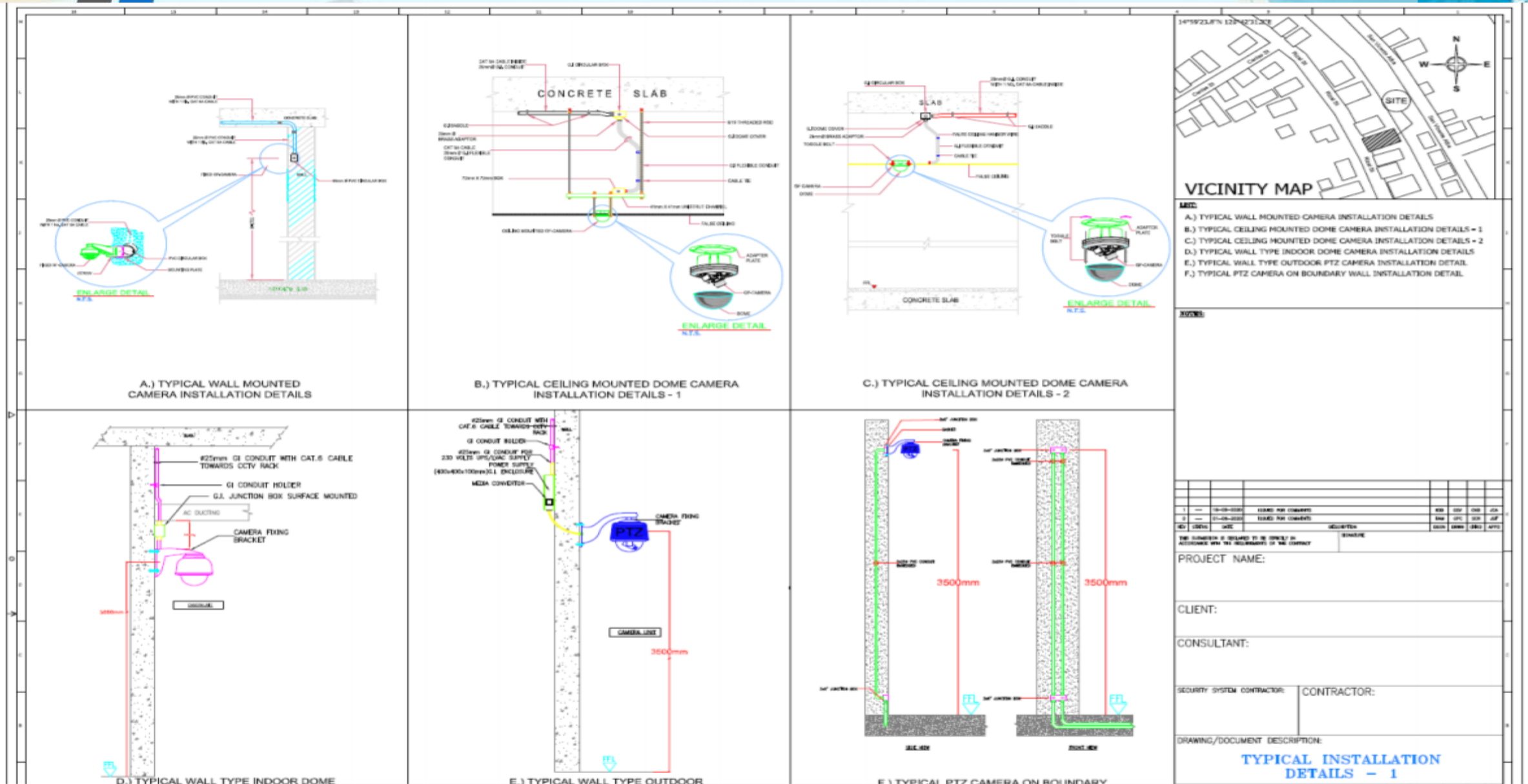
2 DOME TYPE CAMERA MOUNTING DETAIL

2

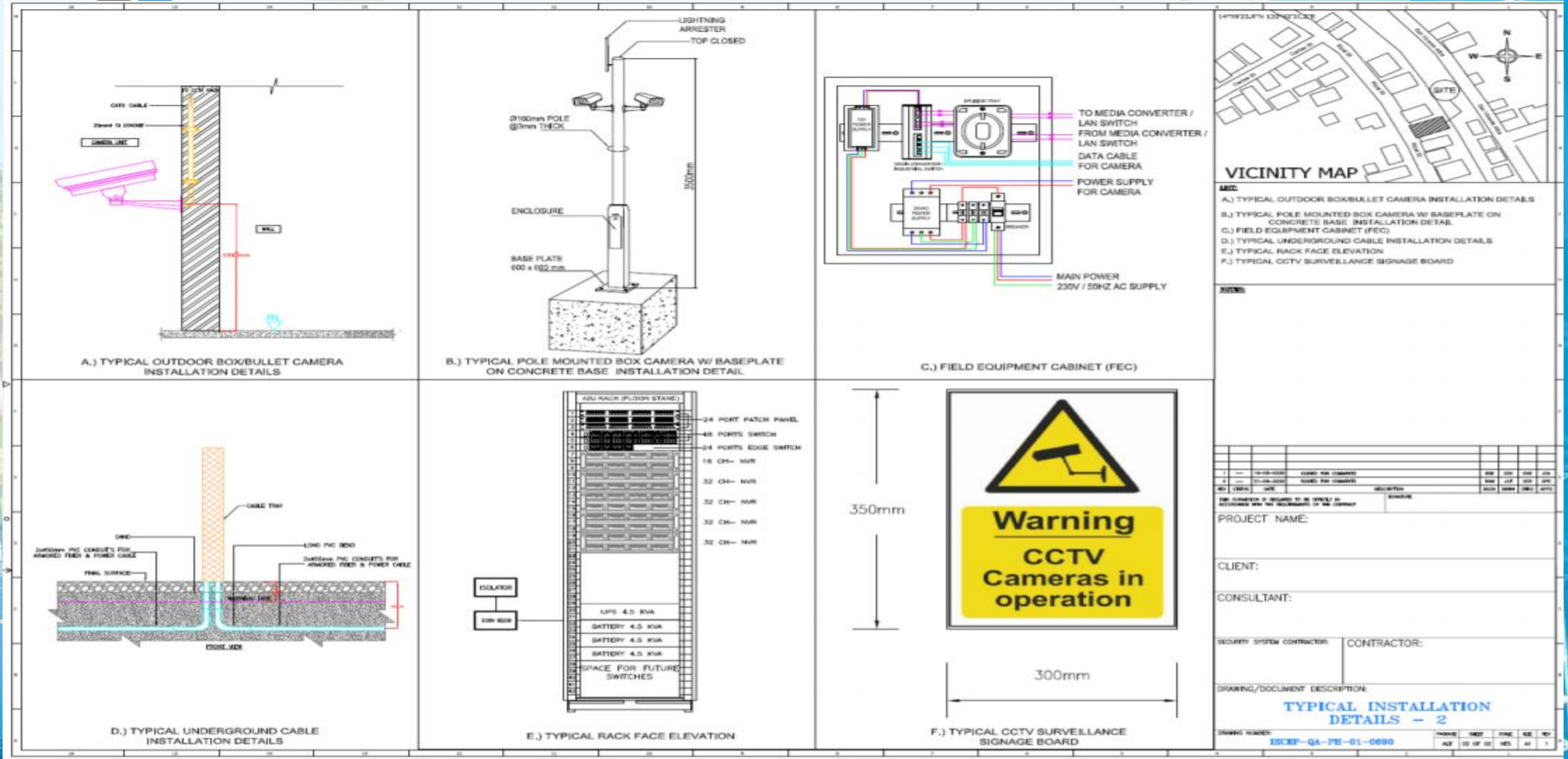
EC-9 SCALE

NTS

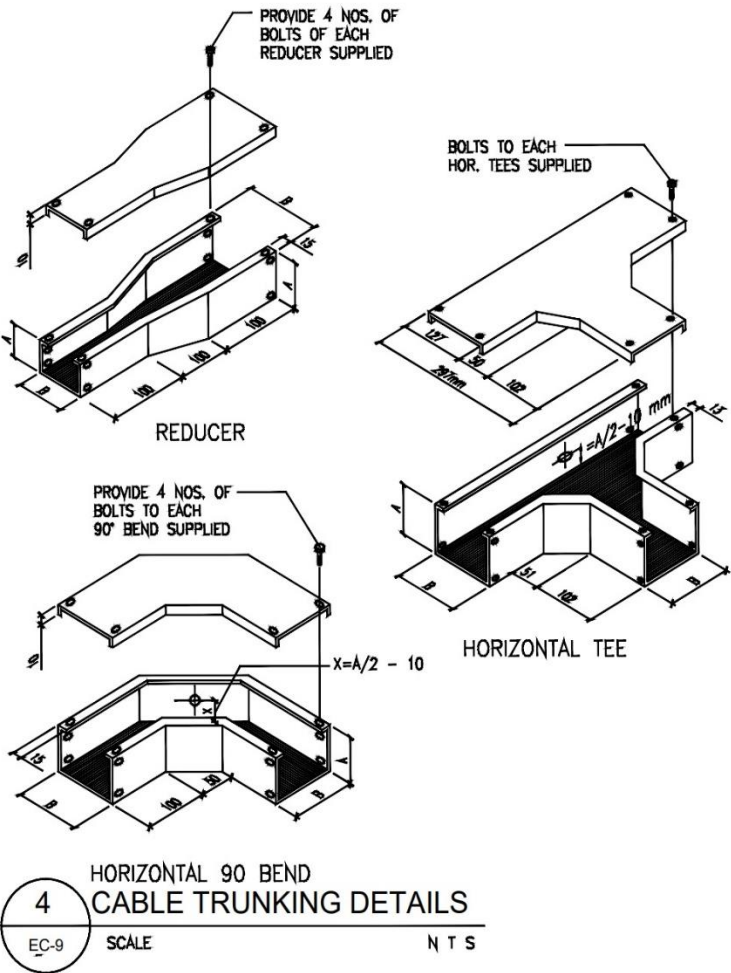
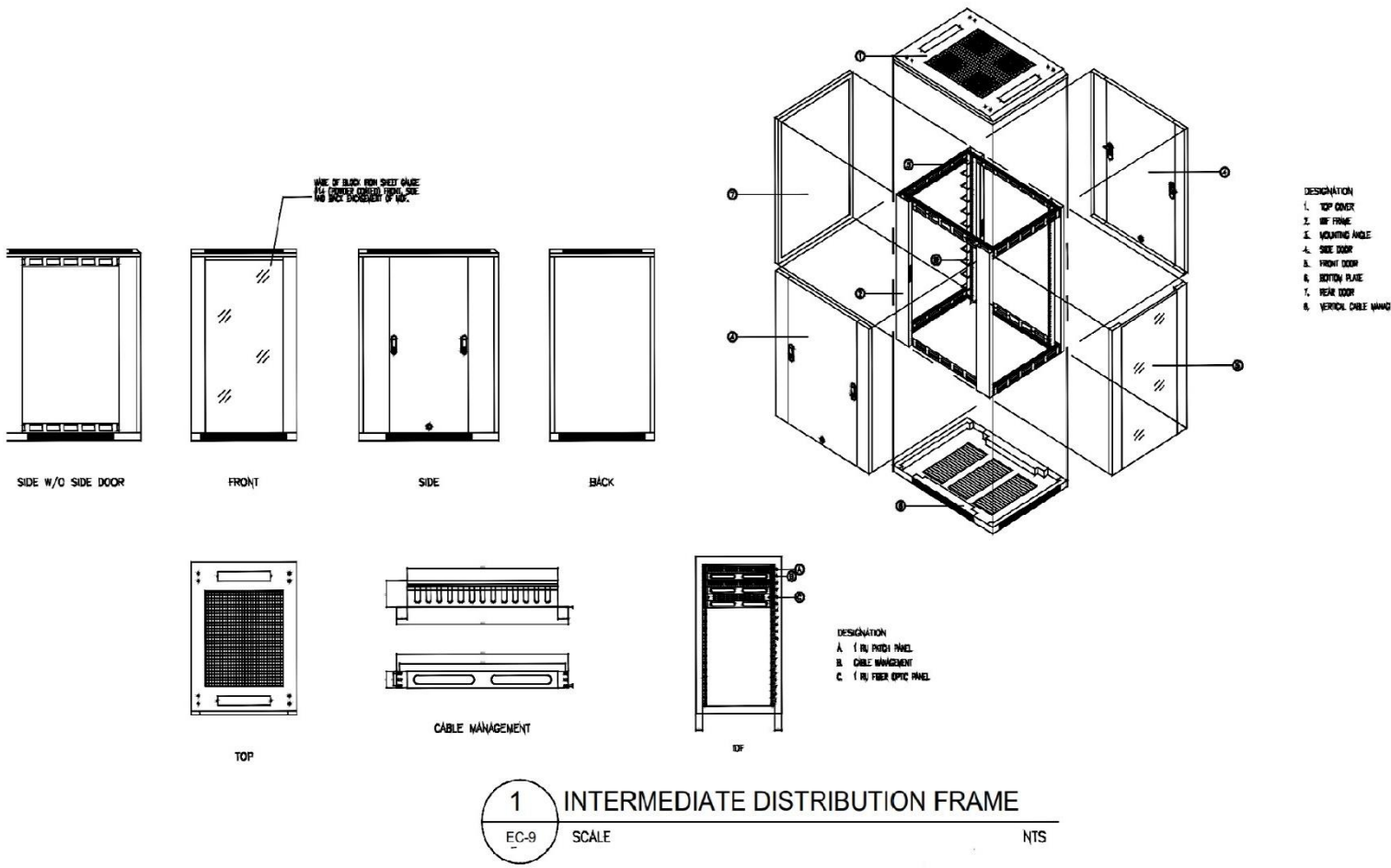
Electronics Details



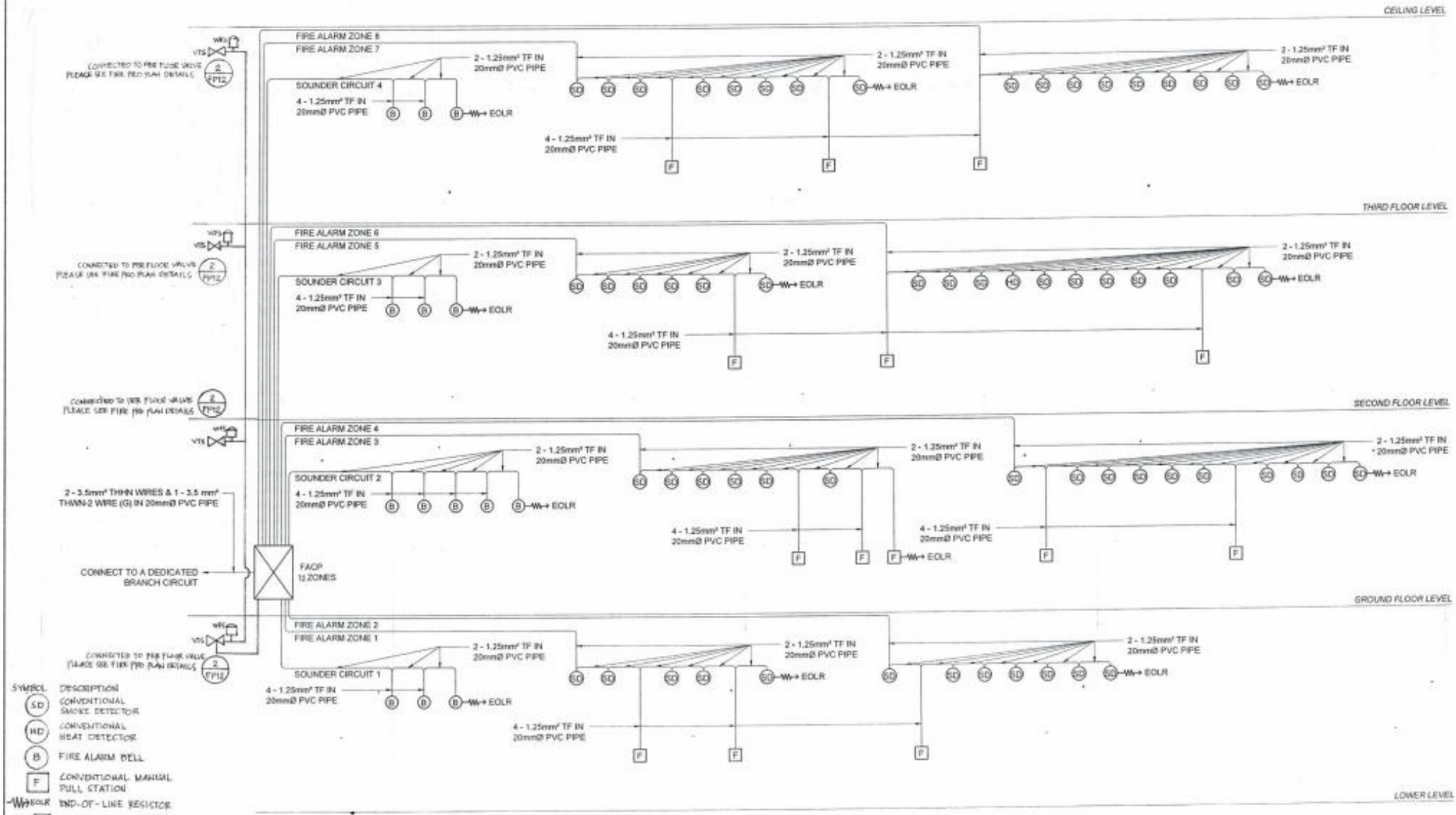
Electronics Details



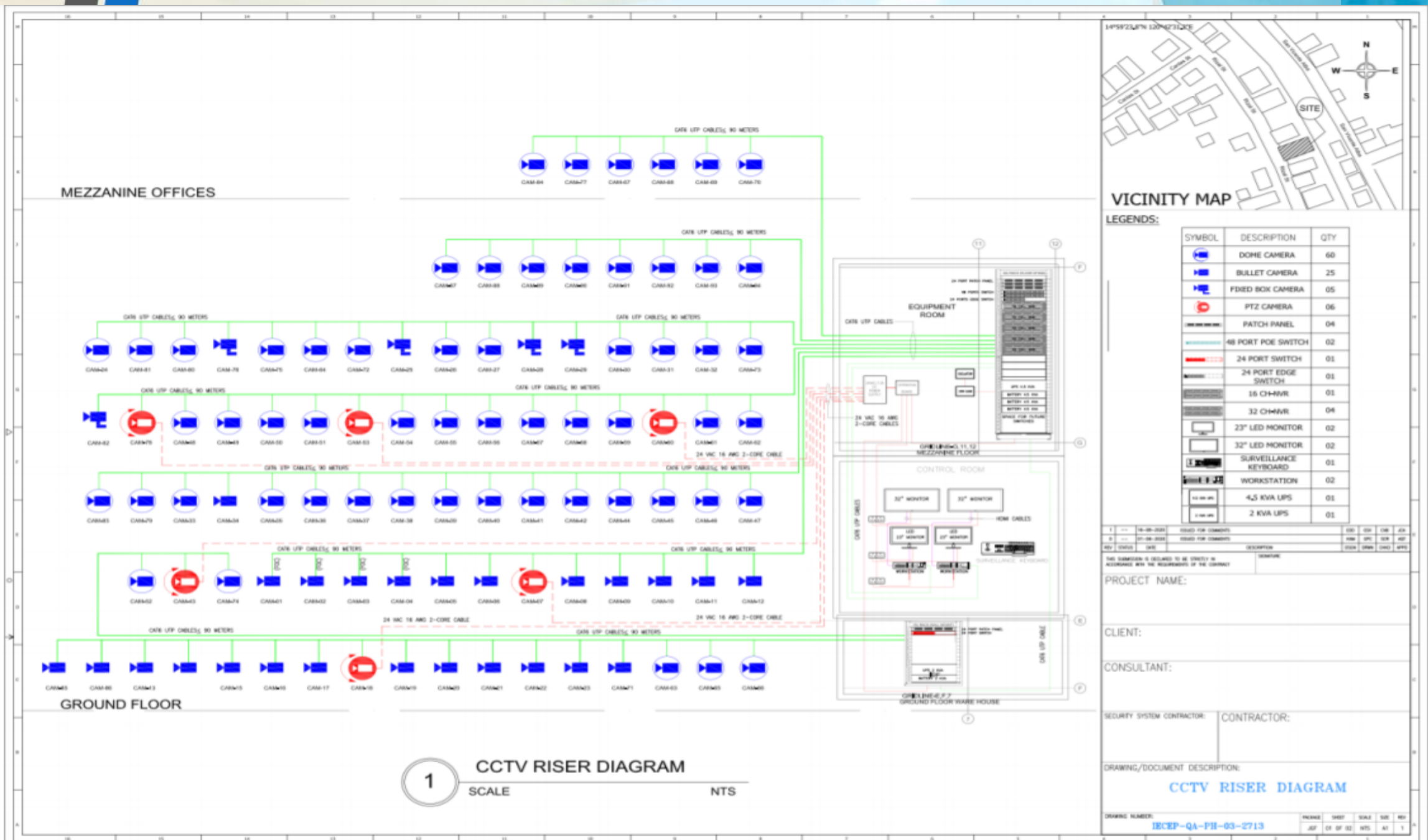
Electronics Details



Single Line Diagram



2 FIRE DETECTION AND ALARM SYSTEM SINGLE LINE DIAGRAM
FDAS-1 NOT TO SCALE



d. Valid PRC
License &
Current PTR of
Professionals
with dry seal and
specimen
signature

ENGR.
PROFESSIONAL ELECTRONICS ENGINEER

Address: _____ TIN _____ Mobile _____
FB: _____

Accountable Form No. 51
Revised January, 1992 ORIGINAL

Republic of the Philippines
CITY OF PASAY
Office of the Treasurer

NO PC _____ Date 01/06/2021

Agency PASAY CITY Fund _____
Payer _____

Nature or Collection	Account Code	Amount	
REGISTRATION FEE - PASAY CITY		200.00	
PTR 2021 PRO. ELECTRONICS ENGINEER			
TOTAL		200.00	
Amount in Words _____			
Time Received: _____			
<input type="checkbox"/> Cash	Drawn	Number	Date
<input type="checkbox"/> Check			
<input type="checkbox"/> Money Order			
Received the amount stated above _____			
NOTE: Write the number and date of this receipt on the back of check or money order received.			

PRC REG. NO. _____ REG. DATE _____
PTR NO. _____ ISSUED ON: _____

VALIDITY: _____ IECEP LIFE MEMBER: _____

This PTR is for this Project ONLY:
AS-BUILT PLAN
= PLDG.

3 - Specimen Signatures: _____

To BUILDING OFFICIAL EVALUATORS:
This PTR-PRC Cover is NOT VALID WITHOUT the Original 3-specimen signatures and Dry Seal
If PHOTO COPY, contact me ASAP a _____ Thank You!

e. Bill of Materials & Cost Estimate

ITEM NO	DESCRIPTION	QTY	UNIT	MATERIAL	LABOR & M.U.	TOTAL
FIRE DETECTION & ALARM SYSTEM						
I. AUX	A. ROUGHING-IN					
TEL	Conduits, fittings					
A. ROU	including boxes					
Con	PVC - Emerald					
inclu	1 1/2" Ø Pipe					
PVC	2 1/2" Ø Adapter					
1 3/4"	IMC - Panasonic					
2 3/4"	1 1/2" Ø Bushing					
3 2" Ø	2 1/2" Ø Locknut					
4 2" Ø	BOXES, Fumac					
IMC	1 Junction Box ga.					
1 3/4"	2 Utility Box ga. 16					
2 3/4"	3 Square Box ga. 1					
3 2" Ø	4 Pull box ga. 16					
4 2" Ø						
CAE	B. WIRES and CABLES					
1 Utilit	1 1.25mm ² TF Wire					
2 Pull	2 2.0mm ² THHN Wire					
3 Tele						
4 Main	C. DEVICES, EQUIPMENT & CABINETS					
	1 Manual Pull Station					
B. WIR	2 Fire Alarm Control Unit					
1 Cat5	3 Back-up Battery					
	4 Loop Card					
C. DEV	5 Uninterruptible Power Supply					
1 Data	6 AVR 1000 Watts					
2 Tele	7 Horn Strobe					
3 Main	8 Smoke Detector					
4 Inter						
5 Unin	D. LABOR					
6 Priv	1 Supply, Testing					
7 Serv						
D. OTH	E. OTHER CONSUMABLES					
	Sub-total (Fire Detection & Alarm System)					
CATV SYSTEM						
	A. ROUGHING-IN					
	Conduits, fittings					
	including boxes					
	PVC - Emerald					
	1 3/4" Ø Pipe					
	2 3/4" Ø Adapter					
	IMC - Panasonic					
	1 3/4" Ø Bushing					
	2 3/4" Ø Locknut					
	BOXES, Fumaco					
	1 Junction Box ga. 16					
	2 Pullbox, ga. 16					
	B. WIRES and CABLES, Duraflex Brand					
	1 RG-6 Coaxial Cable					
	C. DEVICES, EQUIPMENT & CABINETS					
	1 CATV Outlet					
	D. CONSUMABLES					
	Sub-total (CATV System)					
CCTV SYSTEM						
	A. ROUGHING-IN					
	Conduits, fittings, hangers and supports					
	including boxes					
	PVC - Emerald Brand					
	1 3/4" Ø Pipe	434	lgth.	77.17	33,492.65	19,425.74
	2 3/4" Ø Adapter	76	pc.	4.53	344.37	199.74
	IMC - Panasonic Brand					
	1 3/4" Ø Bushing	76	pc.	8.15	619.70	359.43
	2 3/4" Ø Locknut	152	pc.	2.59	393.98	228.51
	BOXES, Fumaco Brand					
	1 Junction Box ga. 16, deep type with cover	38	pc.	48.00	1,824.00	1,057.92
	2 Pullbox, ga. 16	2	pc.	1,800.00	3,600.00	2,088.00
	Sub-total					23,359.33
	B. WIRES and CABLES, Duraflex Brand					
	1 Cat5e UTP Cable	1562	lm.	25.00	39,050.00	9,762.50
	2 AWG #16/2c Flat Cord	1562	lm.	30.00	46,860.00	11,715.00
	Sub-total					21,477.50
	C. DEVICES, EQUIPMENT & CABINETS					
	1 Network Video Recorder	1	set	4,500.00	4,500.00	2,610.00
	2 HD Camera with IR 2MP	38	set	1,950.00	74,100.00	42,978.00
	4 4TB Hard Disc Drive	1	set	7,500.00	7,500.00	4,350.00
	5 Centralized Power Supply 12V/25amp	1	set	3,600.00	3,600.00	2,088.00
	6 24" LED Monitor	1	set	6,000.00	6,000.00	3,480.00
	7 Video Balun	38	set	75.00	2,850.00	1,653.00
	8 1kVA UPS	1	set	9,000.00	9,000.00	5,220.00
	Sub-total					62,379.00
	D. CONSUMABLES	1	lot	18,000.00	18,000.00	10,440.00
	Sub-total					10,440.00
	Sub-total (CCTV System)					117,655.83
	TOTAL COST (Item I)					1,584,685.16



5. NBCDO MEMORANDUM CIRCULAR NO. 03, SERIES 2016

NEW SCHEDULE OF FEES AND OTHER CHARGES

SECTION 7. ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

a.

- Central Office Switching Equipment
- Remote Switching Units
- Concentrators
- PABX/PBX's
- Cordless/Wireless Telephone And Communication Systems
- Intercommunication System
- Other types of switching/routing/distribution used for voice, data, image, text, facsimile, internet service, cellular, paging and other types/forms of wired or wireless communications

**₱ 2.40
per port**



ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

- | | |
|----|--|
| b. | <ul style="list-style-type: none">▪ Broadcast station for radio and TV for both commercial and training purposes▪ CATV head-end, transmitting/ receiving /relay radio and broadcasting communications stations,▪ Communications centers,▪ Switching centers,▪ Control centers,▪ Operation and/or maintenance centers,▪ Call centers,▪ Cell sites,▪ Equipment silos/shelters▪ Other similar locations/structures used for electronics and communications services, including those used for navigational aids, radar, telemetry, tests and measurements, global positioning and personnel/vehicle location |
|----|--|

**₱ 1,000.00
per
location**



Photo Courtesy of wikimapia

ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

c.

- Automated Teller Machines,
- Ticketing,
- Vending and other types of electronic dispensing machines,
- Telephone booths, pay phones,
- Coin changers,
- Location or direction finding systems, navigational equipment used for land, aeronautical or maritime applications,
- Photography and reproduction machines,
- X-ray machines,
- Scanners,
- Ultrasounds and other apparatus/equipment used for medical, biomedical, laboratory and testing purposes
- Other similar electronic or electronically-controlled apparatus or devices whether located indoors or outdoors

**₱ 10.00
per unit**





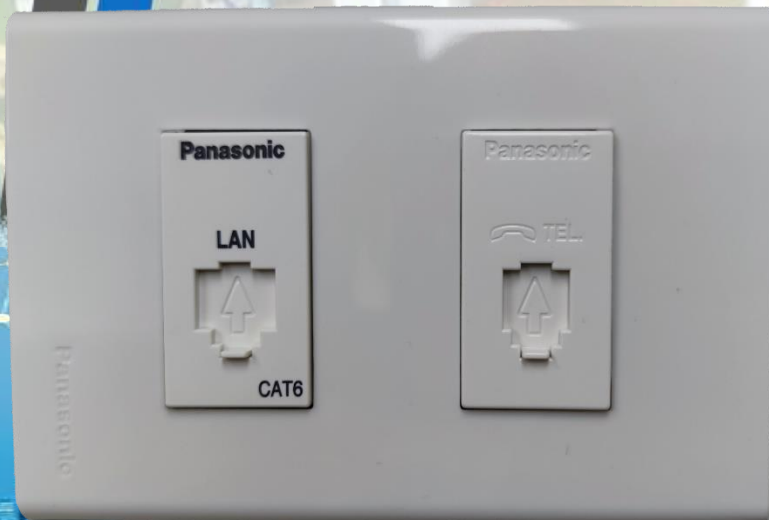
ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

d.

- Electronics and communications outlets used for connection and termination of voice, data
- Computer (including workstations, servers, routers, etc.), audio, video, or any form of electronics and communications services, irrespective of whether a user terminal is connected

**₱ 2.40
per
outlet**



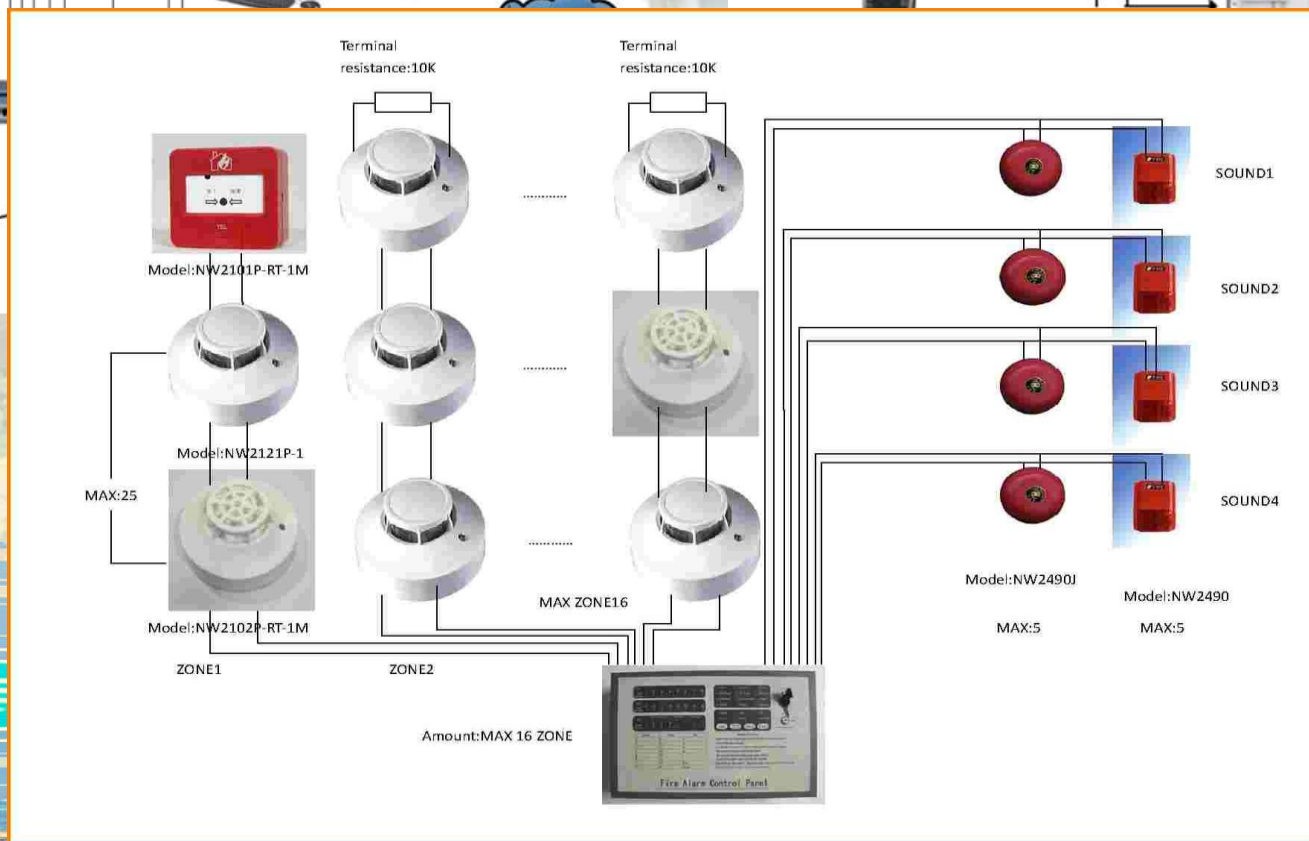
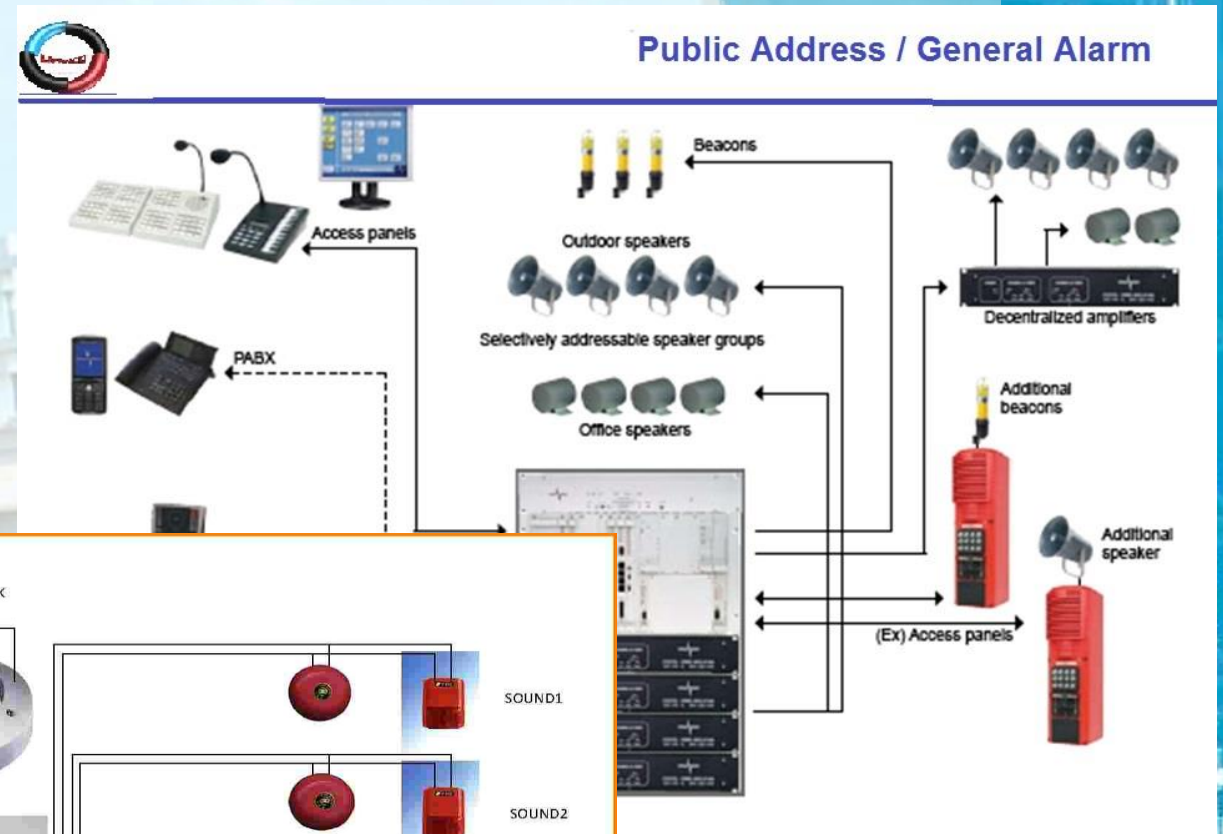
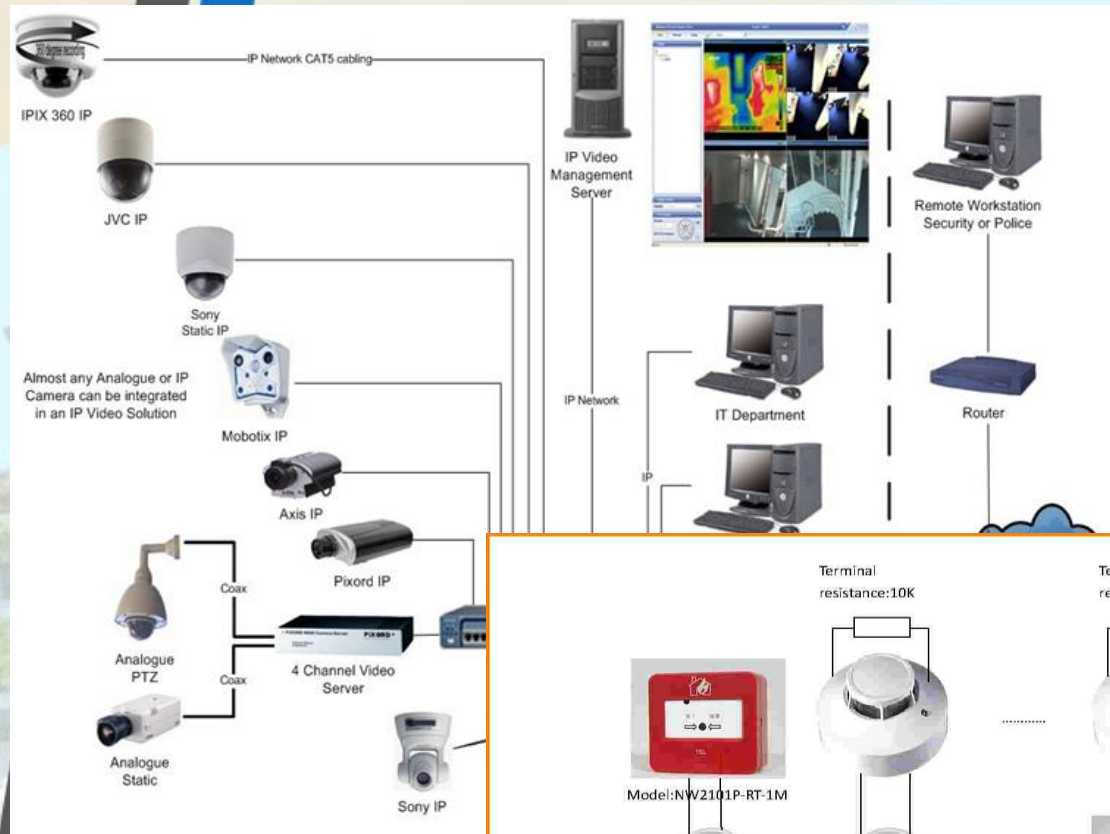
ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

e.

- Station/terminal/control point/port/central or remote panels/outlets for security and alarm systems,
- Electronics fire alarm,
- Sound-reinforcement/background music/paging/ conference systems and the like,
- CATV/MATV/CCTV and off-air television,
- Electronically-controlled Conveyance Systems,
- Building Automation/ Management systems
- And other similar types of electronic or electronically-controlled installations whether user terminal is connected

₱ 2.40
per
termination



ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

- | | | |
|----|---|---------------------------------------|
| f. | Studios, auditoriums, theaters, and similar structures for radio and TV broadcast, recording, audio/video reproduction/ simulation and similar activities | ₱1,000.00
per
location |
|----|---|---------------------------------------|

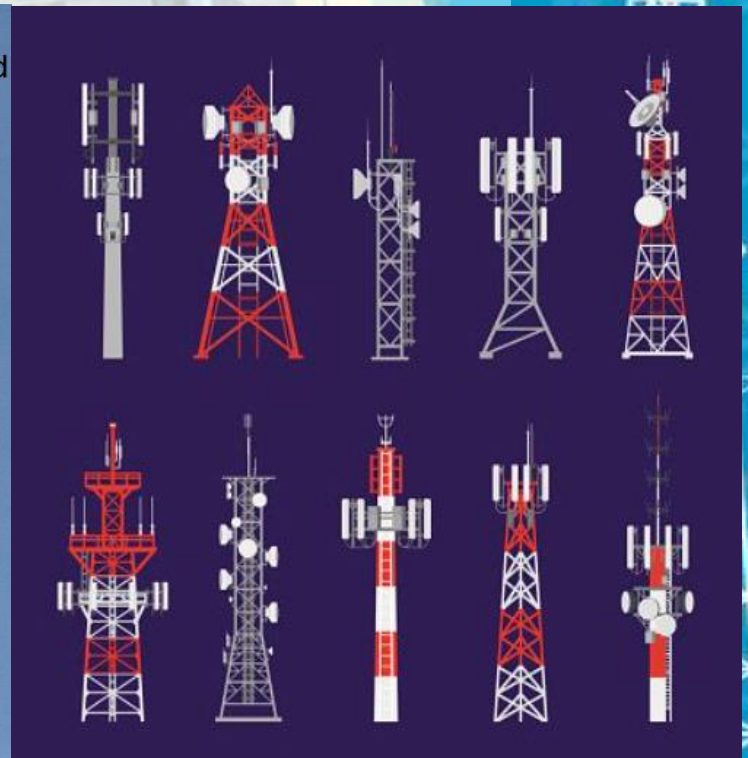
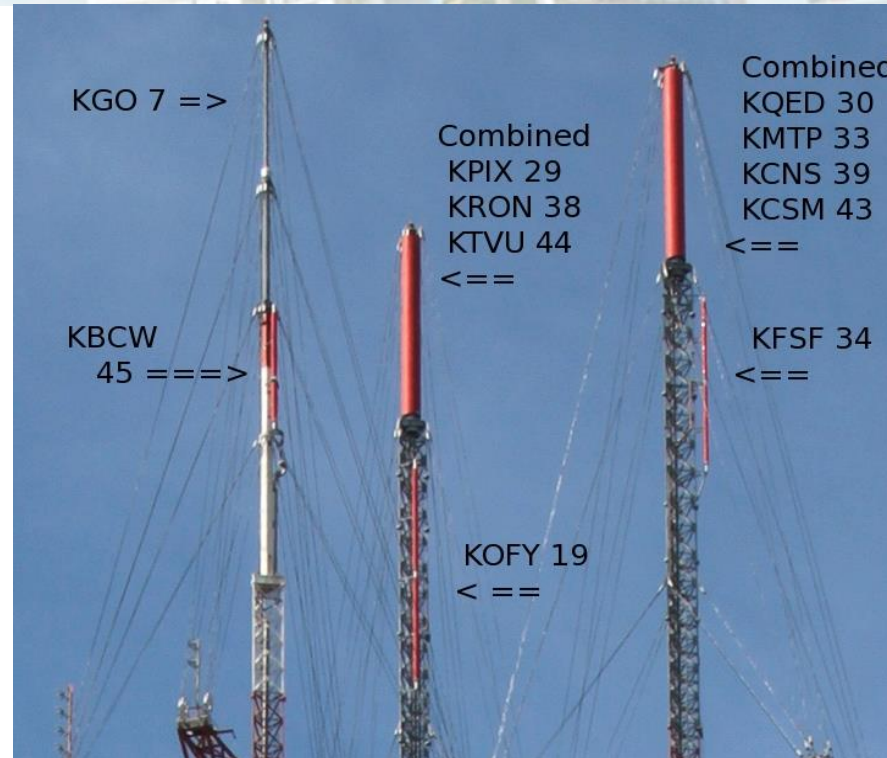
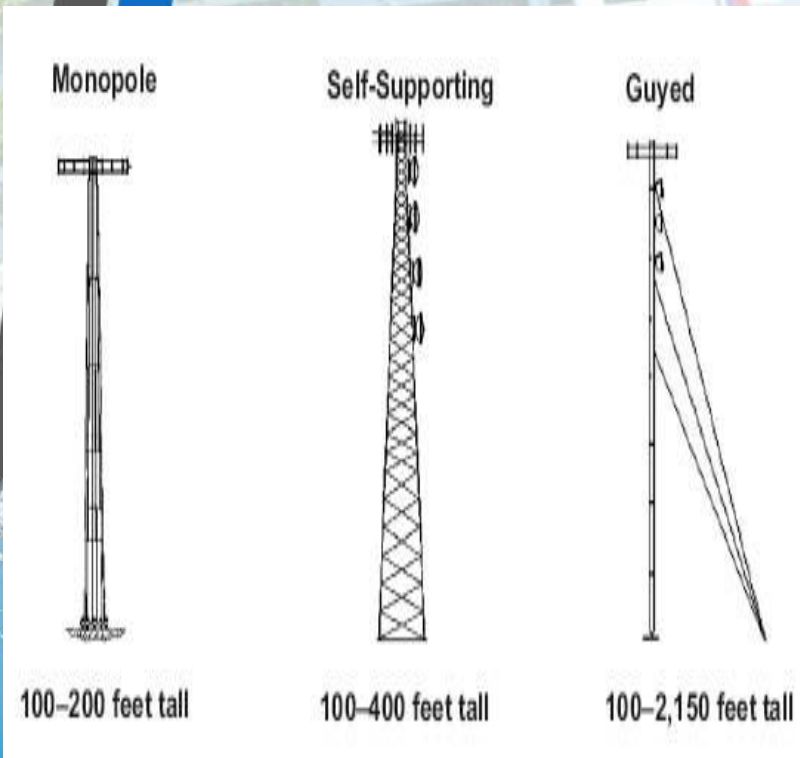


ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

- g. ■ Antenna towers/masts or other structures for installation of any electronic and/ or communications transmission/ reception

**₱1,000.00
per
structure**



ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

- h. ■ Electronic or electronically-controlled indoor and outdoor signage's and display systems, including TV monitors, multi-media signs, etc.

**₱50.00
per unit**



ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

Poles and attachment :

i. **Per Pole** (to be paid by owner)

₱20.00

ii. **Per attachment** (to be paid by any entity who attaches to the pole of others).

₱20.00

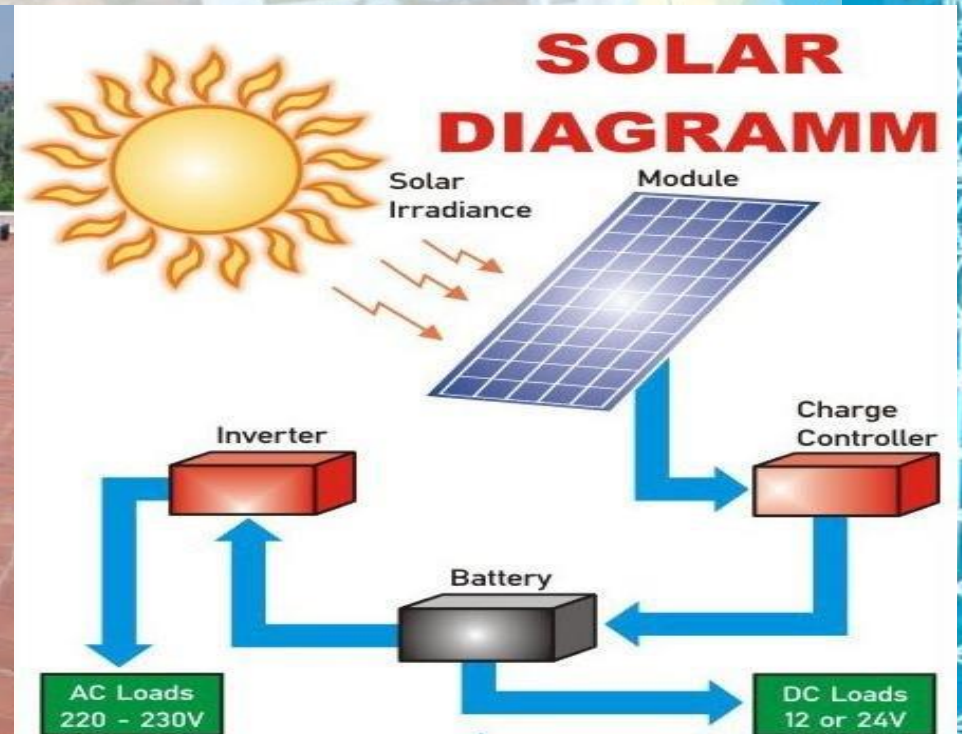


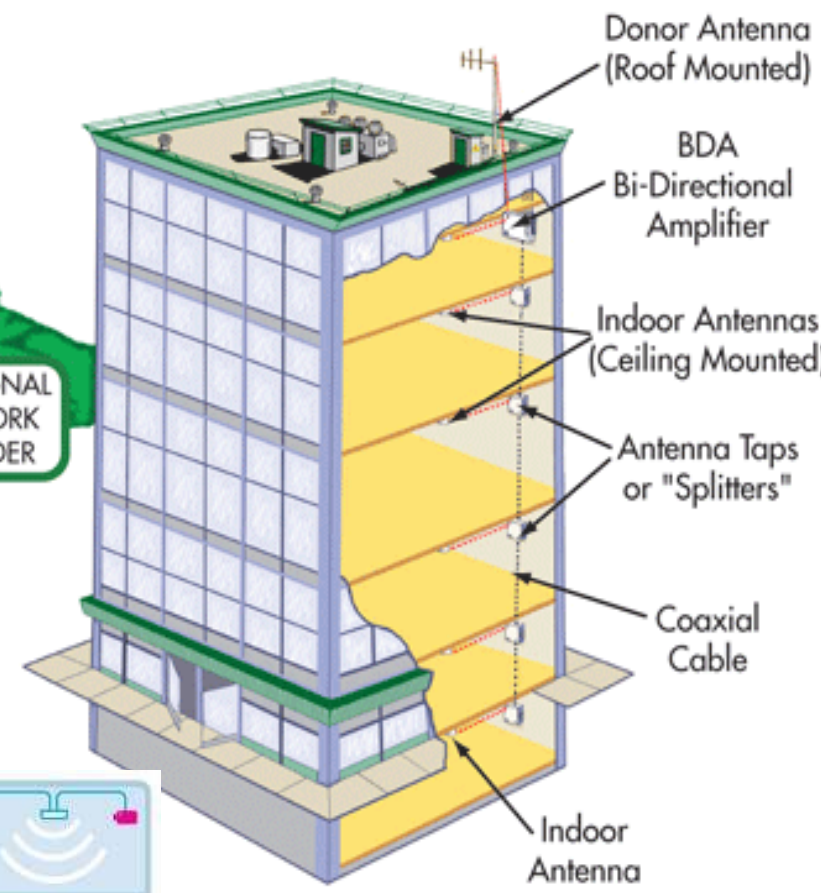
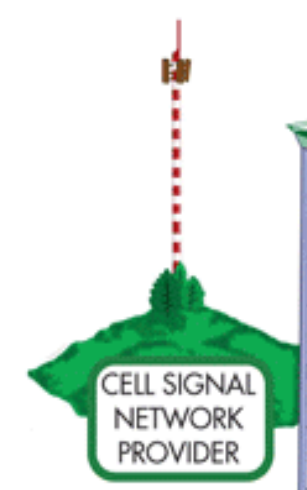
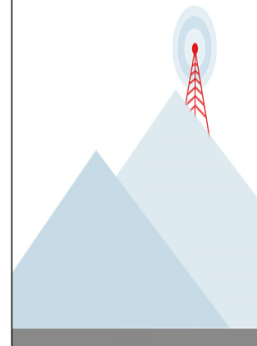
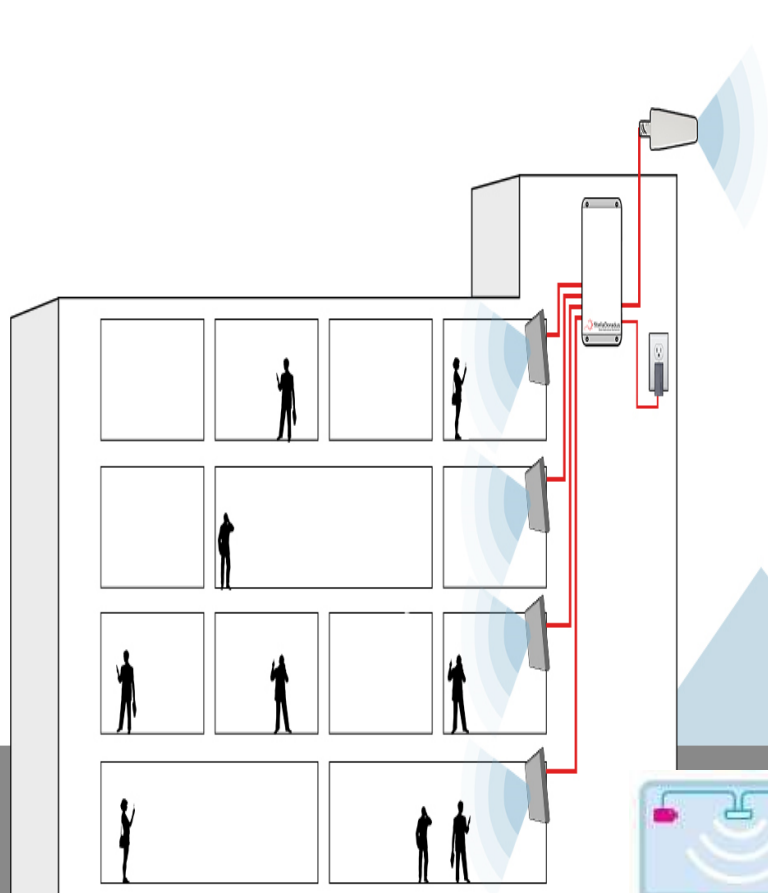
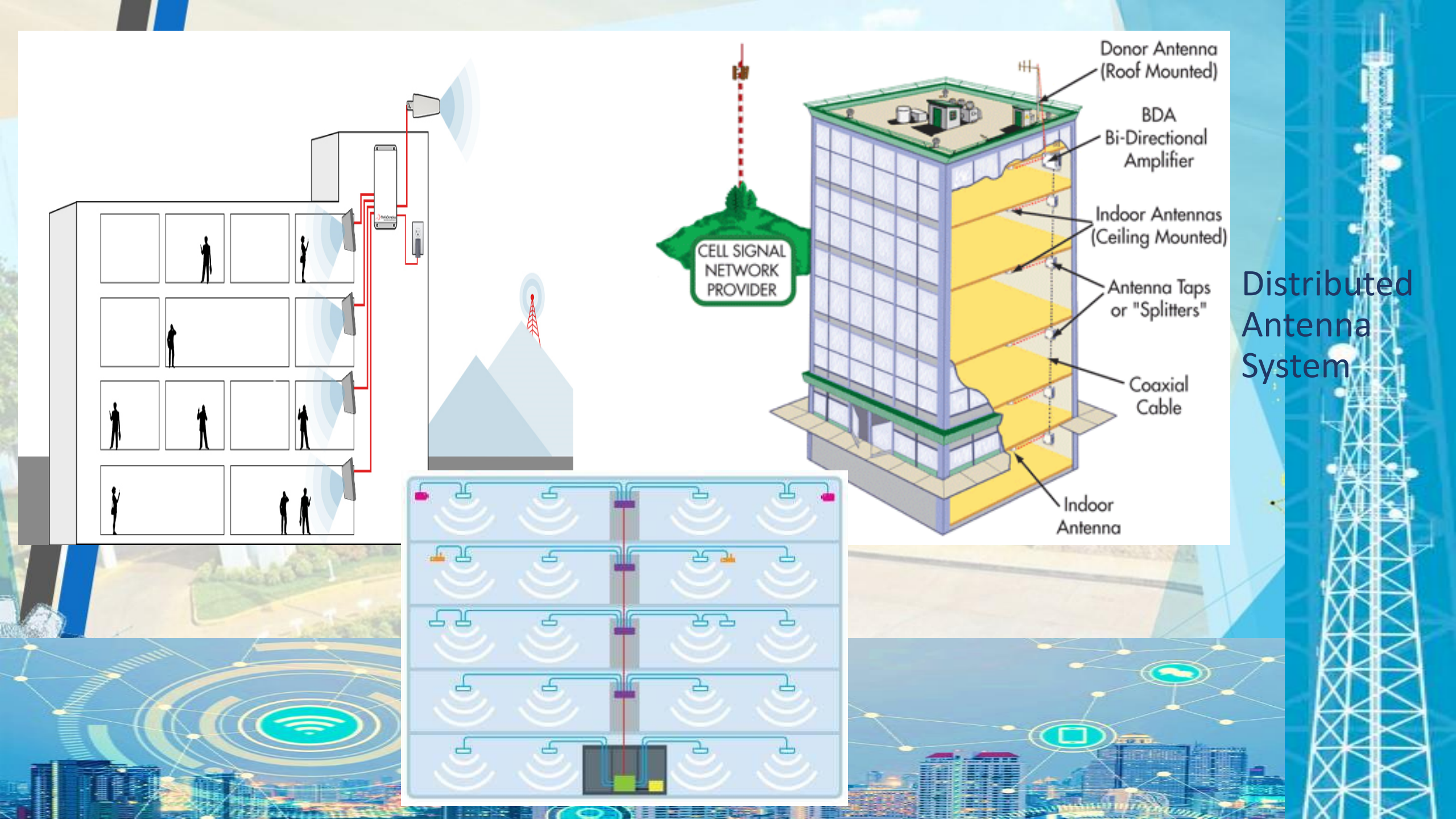
ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

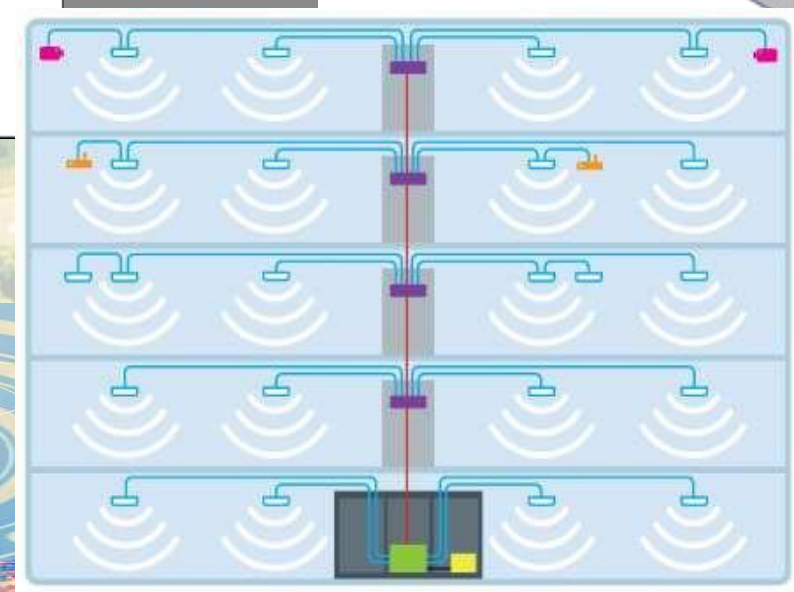
- j. Other types or electronics or electronically- controlled device, apparatus, equipment, instrument or units not specifically identified above

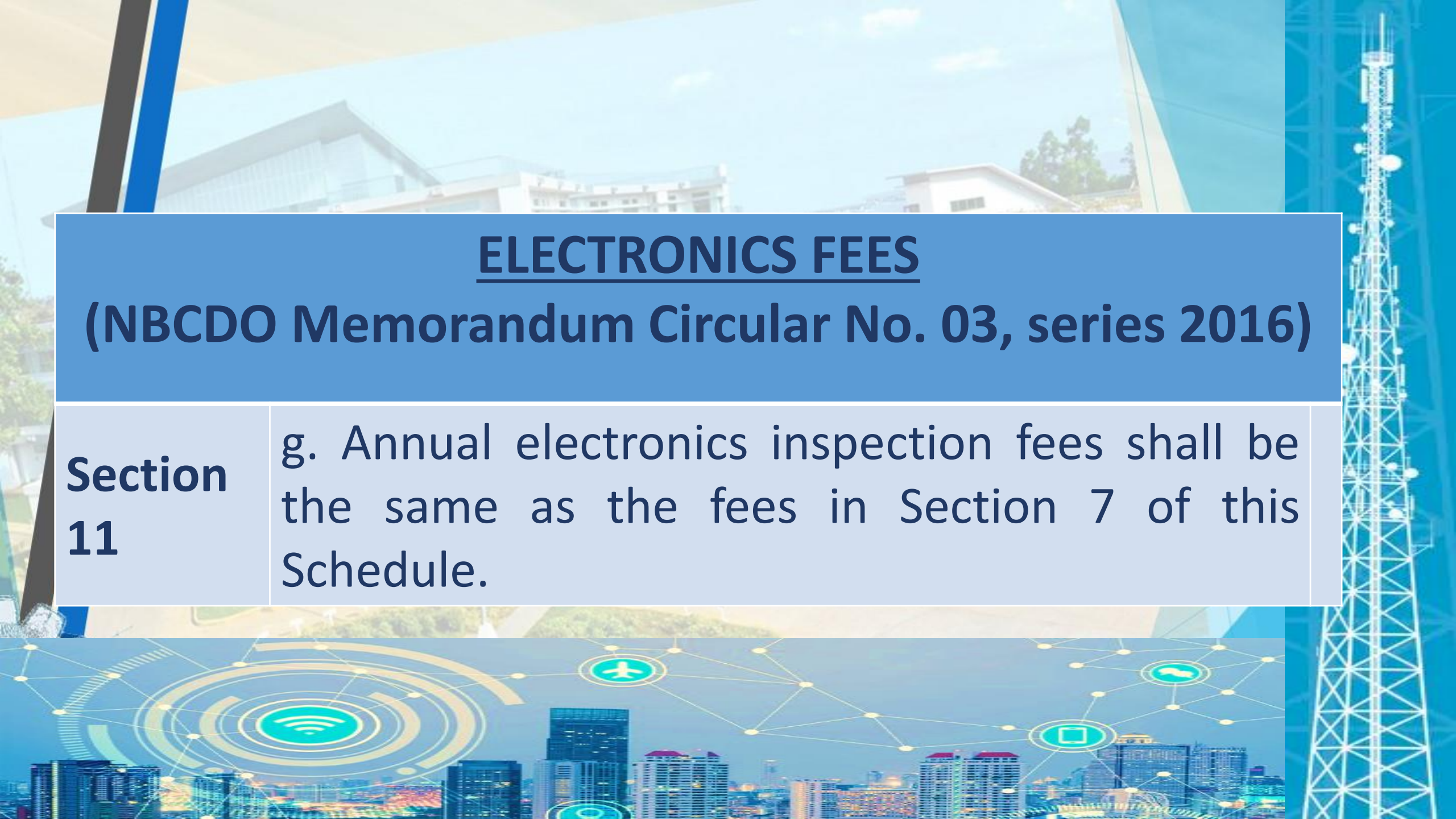
**₱50.00
per unit**





Distributed Antenna System





ELECTRONICS FEES

(NBCDO Memorandum Circular No. 03, series 2016)

Section 11

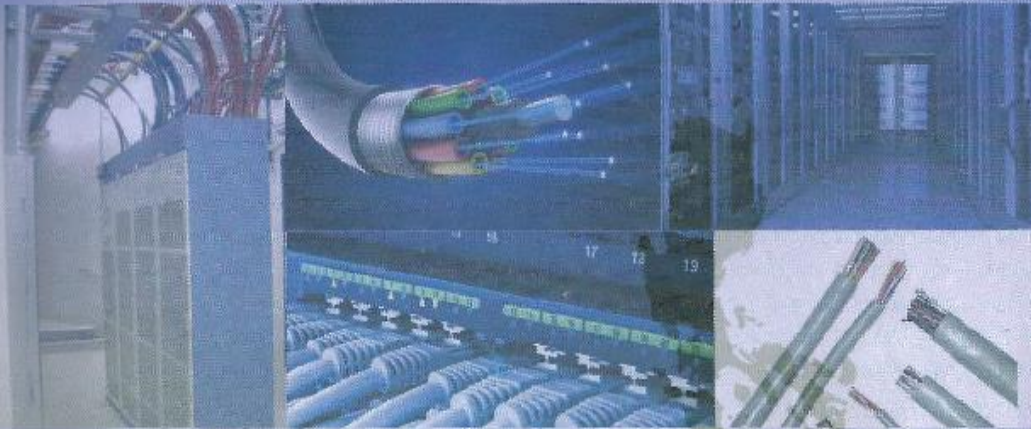
g. Annual electronics inspection fees shall be the same as the fees in Section 7 of this Schedule.

6. REFERRAL CODES

- 1. National Building Code Of The Philippines**
- 2. Philippine Electronics Code,
Volume I – Safety - 1977**
- 3. Philippine Electronics Code,
Volume II - Building
Telephone Facilities – 1994**
- 4. Telecommunications Outside Plant
Networks - 1994**

Philippine Electronics Code

**BOOK
1**



Telecommunications Facilities Distribution System



IECEP

Institute of Electronics Engineers of the Philippines, Inc.
The Integrated Accredited Professional Organization of
Professional Electronics Engineers, Electronics Engineers and Electronics Technicians
by the Professional Regulations Commission, Republic of the Philippines (I-APC No.105)

Telecommunications Facilities Distributions System - 2016



Philippine Electronics Code

BOOK
2

Fire Detection and Alarm System



IECEP

Institute of Electronics Engineers of the Philippines, Inc.
The Integrated Accredited Professional Organization of
Professional Electronics Engineers, Electronics Engineers and Electronics Technicians
by the Professional Regulations Commission, Republic of the Philippines (I-APO No. 83)

Fire Detection and Alarm System - 2016



Philippine Electronics Code

**BOOK
3**



Cable Television System



IECEP

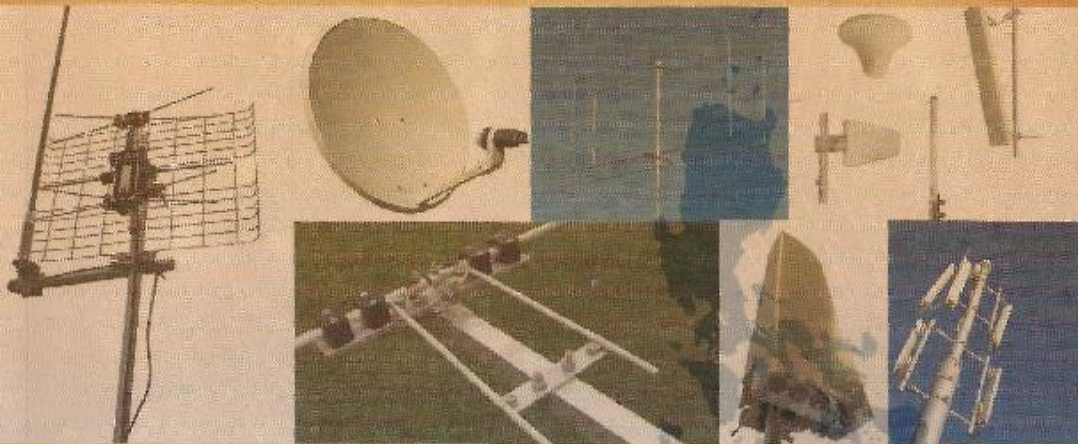
Institute of Electronics Engineers of the Philippines, Inc.
The Integrated Accredited Professional Organization of
Professional Electronics Engineers, Electronics Engineers and Electronics Technicians
by the Professional Regulations Commission, Republic of the Philippines (I-APC No.03)

Cable Television System - 2016



Philippine Electronics Code

**BOOK
4**



Distributed Antenna System



IECEP

Institute of Electronics Engineers of the Philippines, Inc.
The Integrated Accredited Professional Organization of
Professional Electronics Engineers, Electronics Engineers and Electronics Technicians
by the Professional Regulations Commission, Republic of the Philippines (I-APC No.09)

Distributed Antenna System - 2016

