SYMBOLS LIST

WP	WEATHERPROOF
⬡	SPECIFIC NOTE REFERENCE
	BRANCH CIRCUIT HOMERUN– NUMBER OF SLASHES INDICATES NUMBER OF CURRENT CARRYING CONDUCTORS IF GREATER THAN TWO.
	BRANCH CIRCUIT WIRING– NUMBER OF SLASHES INDICATES NUMBER OF CURRENT CARRYING CONDUCTORS IF GREATER THAN TWO.
GFI	DENOTES INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER AT INDIVIDUAL OUTLET
▭	PANELBOARD
TV	TELEVISION OUTLET
F	FUSED HEAVY DUTY SAFETY SWITCH– NEMA 1 (INDOOR) ENCLOSURE UNLESS OTHERWISE NOTED. RATED 240 VAC UNLESS OTHERWISE NOTED. TWO POLE UNLESS OTHERWISE NOTED. 30 AMP UNLESS OTHERWISE NOTED.
	NON-FUSED HEAVY DUTY SAFETY SWITCH– NEMA 1 (INDOOR) ENCLOSURE UNLESS OTHERWISE NOTED. RATED 240 VAC UNLESS OTHERWISE NOTED. TWO POLE UNLESS OTHERWISE NOTED. 30 AMP UNLESS OTHERWISE NOTED.
	DUPLEX 15 AMP NEMA 5–15R CONVENIENCE OUTLET.
	DUPLEX 15 AMP NEMA 5–15R CONVENIENCE OUTLET, LOCATED 6 INCHES ABOVE COUNTERTOP OR BACKSPLASH.
	DUPLEX 20 AMP NEMA 5–20R OUTLET.
	DUPLEX OUTLET WITH TOP HALF CONNECTED TO SWITCHED LIGHTING CIRCUIT
	SPECIAL PURPOSE RECEPTACLE– RATED 240V, 30A UNLESS OTHERWISE NOTED.
J	JUNCTION BOX CONNECTION TO EQUIPMENT (HARDWIRED)
	SURFACE OR RECESSED MOUNTED FLUORESCENT FIXTURE
	WALL MOUNTED FIXTURE
	SURFACE, RECESSED, OR PENDANT MOUNTED INCANDESCENT OR HIGH INTENSITY DISCHARGE LIGHTING FIXTURE
S	SINGLE POLE SWITCH (15 AMP 120 VOLT)
S_3	THREE WAY SWITCH (15 AMP 120 VOLT)
S_4	FOUR WAY SWITCH (15 AMP 120 VOLT)
S_M	MANUAL TOGGLE–TYPE STARTER WITH OVERLOAD PROTECTION
T	TELEPHONE OUTLET
S	RESIDENTIAL TYPE SMOKE DETECTOR (120 VOLT)
	FAN CONNECTION
FACP	FIRE ALARM CONTROL PANEL
FM	FIRE ALARM MINI–HORN & STROBE
F	MANUAL PULL STATION
FH	FIRE ALARM HORN & STROBE
S_A	FIRE ALARM SMOKE DETECTOR WITH AUXILIARY CONTACTS
	FIRE ALARM HEAT DETECTOR

APARTMENT LOAD CALCULATIONS:

METRO PLACE
APARTMENT LOAD CALCULATIONS:

APARTMENT LOADS:

LIGHTING		LOAD
LARGEST UNIT AREA (GSF)= 2695 AT 3.0 VA/GSF, THIS EQUATES TO		8085 VA
SMALL APPLIANCE BRANCH CIRCUITS		3000 VA
LAUNDRY		1500 VA
FURNACE (1/2 HP)		1000 VA
AIR CONDITIONING		3600 VA
GAS RANGE		50 VA
ELECTRIC DRYER		5000 VA
WALL HEATER (1500W; NOT COINCIDENT W/ AC)		0 VA
GAS WATER HEATER		0 VA
MICROWAVE		2000 VA
DISPOSAL		1200 VA
DISHWASH		1200 VA
SUBTOTAL		26635 VA

CALCULATIONS FOR INDIVIDUAL APARTMENT FEEDER:

TOTAL "CONNECTED" LOADS FROM ABOVE		26635 VA
DEDUCT HVAC:	–	4600 VA
NET NON-HVAC LOADS		22035 VA
APPLY NEC 220-30 DF:		
22035 - 10000= 12035 12035 X 0.4 = 4814 4814 + 10000= 14814		14814 VA
ADD HVAC		4600 VA
NET		19414 VA
AT 120/208 V, 1 PH, 3 WIRE, THIS EQUATES TO		93 AMPS

LOAD AT EACH HOUSE PBD. 'H'

INTERIOR LIGHTING	9600 VA
STAIR HEATER	4500 VA
SITE LIGHTING (FUTURE)	1600 VA
EXTERIOR BLDG. LTG	450 VA
SUBTOTAL- PBD. 'H' LOADS	16150 VA
AT 120/208 V, 1 PH, 3 WIRE, THIS EQUATES TO	78 AMPS

SERVICE ENTRANCE CALCULATIONS (PER NEC 220-30):

BUILDING NO.	1A	1B	2	3	4	
NO. OF APARTMENTS	28	24	12	28	24	
BLDG. GSF	51049	43757	24880	51734	45127	SF
VA CONNECTED LOAD PER APARTMENT, FROM CALCS. ABOVE (LESS HVAC, LESS LTG.):	13950	13950	13950	13950	13950	VA
TOTAL CONNECT. APT. LOAD, LESS HVAC, LESS LTG	390600	334800	167400	390600	334800	VA
ADD 3.0 VA/SF FOR LTG	153148	131270	74640	155202	135381	VA
TOTAL CONNECT. APT. LOAD, LESS HVAC	543748	466070	242040	545802	470181	VA
APPLY NEC 220-30 D.F.:						
NET DEMAND LOAD, LESS HVAC, =	223499	192428	102816	224321	194072	VA
HVAC CONNECTED LOAD PER APT:	4600	4600	4600	4600	4600	VA
TOTAL CONNECT. HVAC LOAD:	128800	110400	55200	128800	110400	VA
NET DEMAND (LESS HVAC) + TOTAL CONNECTED HVAC =	352299	302828	158016	353121	304472	VA
ADD HOUSE LOAD:	16150	16150	16150	16150	16150	VA
TOTAL	368449	318978	174166	369271	320622	VA
AT 208 VAC 3 PH. THIS EQUATES TO	1023	886	484	1026	891	AMPS

SERVICE ENTRANCE CALCULATIONS (PER NEC 220-32; ELECTRIC RANGE):

BUILDING NO.	1A	1B	2	3	4	
NO. OF APARTMENTS	28	24	12	28	24	
BLDG. GSF	51049	43757	24880	51734	45127	
VA LOAD PER APARTMENT, LESS LIGHTING	18550	18550	18550	18550	18550	VA
TOTAL CONNECTED VA LOAD= (LESS LIGHTING)	519400	445200	222600	519400	445200	VA
LIGHTING GSF	51049	43757	24880	51734	45127	SF
LTG. AT 3.0 VA/SF	153148	131270	74640	155202	135381	VA
ADD 8.0 KW/APT "PHANTOM" COOKING LOAD	224000	192000	96000	224000	192000	VA
TOTAL CONNECT. VA	896548	768470	393240	898602	772581	VA
NEC 220-32 DEMAND FACTOR	0.33	0.35	0.41	0.33	0.35	
NET DEMAND LOAD	295861	268964	161228	296539	270403	VA
ADD HOUSE LOAD:	16150	16150	16150	16150	16150	VA
TOTAL	312011	285114	177378	312689	286553	VA
AT 208 VOLTS 3 PH. THIS EQUATES TO	867	792	493	869	796	AMPS
SERVICE SIZE	1000	1000	600	1000	1000	AMPS

METER STACK SCHEDULE - METRO PLACE

BLDG NO.	1A	1B	2	3	4
QTY OF METER STACKS AT EACH BUILDING	1	1	1	1	1
QTY OF APT METERS (125A) AT EACH METER STACK	28	24	12	28	24
QTY OF HOUSE METERS (125A) AT EACH METER STACK	1	1	1	1	1
TOTAL METER QTY AT EACH METER STACK	29	25	13	29	25
MAIN SERVICE DISCONNECT CB TRIP RATING (AMPS) AT EACH METER STACK	1000	1000	600	1000	1000
QTY OF 4" CONDUITS FOR SERVICE LATERAL AT EACH METER STACK	4	4	3	4	4
CONSTRUCTION (I = INDOOR O = OUTDOOR)	I	I	I	I	I

LOAD SUMMARY CALCULATIONS- GARAGE LOADS

METRO PLACE BLDG 1 & 2 GARAGE

PBD. 'G1A':

(17)- 'UH-4' UNITS @ 2.5 KW, 208/1	42500 VA
LIGHTING	12123 VA
(2)- FC-18, 24A, 208V	9984 VA
(2)- ACCU-12, 11A, 208V	4576 VA
EF- 4, 5 (2)- 1.5 HP	4752 VA
EF- 14, 15, 16	800 VA
WATER HEATER	1000 VA
(3)- 'UH-2' UNITS @ 3.1 KW, 208/1	9300 VA
SUBTOTAL, PBD. 'G1A':	85035 VA
AT 120/208 V, 3 PH THIS EQUATES TO	236 AMPS

PBD. 'G1B':

(16)- 'UH-4' UNITS @ 2.5 KW, 208/1	40000 VA
LIGHTING	10956 VA
(1)- FC-18, 24A, 208V	4992 VA
(1)- ACCU-12, 11A, 208V	2288 VA
EF- 2, 3 (2)- 1.5 HP	4752 VA
EF- 8, 9, 10	800 VA
(1)- 'UH-2' UNITS @ 3.1 KW, 208/1	3100 VA
SUBTOTAL, PBD. 'G1B':	66888 VA
AT 120/208 V, 3 PH THIS EQUATES TO	186 AMPS

PBD. 'MDP1' ⚠

SUBFEED TO PBD. 'PE'	15000 VA
SUBFEED TO PBD. 'G1A'	85035 VA
SUBFEED TO PBD. 'G1B'	66888 VA
(3)- 40 HP ELEVATORS	123120 VA
TOTAL, PBD. 'MDP1':	290043 VA ⚠
AT 120/208 VOLTS, 3 PH THIS EQUATES TO	806 AMPS

METRO PLACE BLDG 3 & 4 GARAGE

PBD. 'G3':

(14)- 'UH-4' UNITS @ 2.5 KW, 208/1	35000 VA
LIGHTING	7634 VA
(1)- FC-18, 24A, 208V	4992 VA
(1)- ACCU-12, 11A, 208V	2288 VA
EF- 20	300 VA
WATER HEATER	1000 VA
(2)- 'UH-2' UNITS @ 3.1 KW, 208/1	6200 VA
SUBTOTAL, PBD. 'G3':	57414 VA
AT 120/208 V, 3 PH THIS EQUATES TO	159 AMPS

PBD. 'G4':

(13)- 'UH-4' UNITS @ 2.5 KW, 208/1	32500 VA
LIGHTING	7529 VA
(1)- FC-18, 24A, 208V	4992 VA
(1)- ACCU-12, 11A, 208V	2288 VA
EF- 6, 7 (2)- 2 HP	5400 VA
EF- 19	300 VA
(1)- 'UH-2' UNITS @ 3.1 KW, 208/1	3100 VA
SUBTOTAL, PBD. 'G1B':	56109 VA
AT 120/208 V, 3 PH THIS EQUATES TO	156 AMPS

PBD. 'MDP2' ⚠

SUBFEED TO PBD. 'G3'	57414 VA
SUBFEED TO PBD. 'G4'	56109 VA
(2)- 40 HP ELEVATORS	82080 VA
TOTAL, PBD. 'MDP2' ⚠	195603 VA
AT 120/208 VOLTS, 3 PH THIS EQUATES TO	543 AMPS

GENERAL ELECTRICAL REQUIREMENTS AND NOTES

METRO PLACE

1 ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE NEW AND UL LISTED AND LABELED. CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL BEAR THE COSTS OF ALL PERMITS AND INSPECTIONS. CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS, EQUIPMENT, AND LABOR FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS AND BEAR COSTS FOR ANY TEMPORARY ELECTRIC SERVICE REQUIRED DURING CONSTRUCTION. ALL ITEMS OF EQUIPMENT SHOWN ON THESE PLANS ARE NEW EXCEPT ITEMS SPECIFICALLY IDENTIFIED AS EXISTING.

2 ALL WORK AND MATERIALS SHALL COMPLY WITH THE 1996 NATIONAL ELECTRICAL CODE (NEC) AND ALL APPLICABLE LOCAL CODES AND REGULATIONS.

3 CONTRACTOR SHALL COORDINATE ALL WORK WITH THAT OF OTHER TRADES. FIELD VERIFY SERVICE VOLTAGES AND LOADS FOR ALL HVAC EQUIPMENT. FIELD VERIFY ELECTRICAL CONNECTION REQUIREMENTS FOR ALL KITCHEN EQUIPMENT. DETERMINE EXACT LIGHTING FIXTURE LOCATIONS FROM ARCHITECTURAL REFLECTED CEILING PLANS. COORDINATE EXACT OUTLET LOCATIONS WITH ARCHITECTURAL PLANS AND DETAILS. SELECT COLORS FOR OUTLETS, SWITCHES, AND COVER PLATES AFTER CONSULTATION WITH ARCHITECT. MOUNTING HEIGHTS FOR RECEPTACLES IS 18" AFF EXCEPT WHERE OTHERWISE NOTED.

4 CONTRACTOR SHALL PROVIDE ALL NECESSARY COORDINATION WITH LOCAL ELECTRIC POWER AND TELEPHONE COMPANIES TO ARRANGE FOR NEW SERVICES AS INDICATED.

5 SUBMIT SHOP DRAWINGS FOR THE FOLLOWING ITEMS OF EQUIPMENT AND MATERIALS TO THE ARCHITECT/ENGINEER TO PERMIT VERIFICATION OF SUITABLE SELECTION OF EQUIPMENT. DO NOT ORDER ANY EQUIPMENT, NOR SHIP ANY EQUIPMENT TO JOBSITE, UNTIL CORRESPONDING SHOP DRAWINGS HAVE BEEN APPROVED. FOR EACH GROUP OF EQUIPMENT LISTED BELOW, SUBMIT ALL ITEMS AS A COMPLETE PACKAGE (DO NOT PROVIDE PARTIAL SUBMITTALS).

FIRE ALARM-ALARM DEVICES, CONTROL PANEL, ANNUNCIATOR DEVICES
SERVICE ENTRANCE/METERING EQUIPMENT
PANELBOARDS

6 NOTE THAT WHERE SPECIFIC BRAND NAMES HAVE BEEN INDICATED ON THESE DRAWINGS, SUCH INDICATION IS INTENDED ONLY TO ESTABLISH A REFERENCE STANDARD OF QUALITY. UNLESS AN ITEM IS IDENTIFIED AS "NO SUBSTITUTIONS", ALTERNATE MANUFACTURERS OF EQUIVALENT PRODUCTS WILL BE CONSIDERED.

7 ALL NEW WIRING SHALL BE COPPER EXCEPT WHERE OTHERWISE INDICATED. MINIMUM CONDUCTOR SIZE IS #12 AWG FOR 20 AMP CIRCUITS, #14 AWG FOR 15 AMP CIRCUITS. WITHIN FINISHED AREAS, ALL WIRING METHODS SHALL BE CONCEALED. FEEDERS FROM METERING ASSEMBLIES TO INDIVIDUAL APARTMENT/CONDO PANELBOARDS SHALL CONSIST OF TYPE "SE" MULTICONDUCTOR ALUMINUM CABLES OF THE INDICATED SIZE, WITH RUBBER-COVERED OR THERMOPLASTIC INSULATED CONDUCTORS RATED 75 DEGREES C. SUCH FEEDERS SHALL BE PROTECTED BY A 15 MINUTE RATED MATERIAL PER ARTICLE 331 OF THE NEC. ALL OTHER CONDUCTORS SHALL BE COPPER. CIRCUITS SHALL GENERALLY CONSIST OF DUAL RATED THWN/THHN CONDUCTORS IN ENT, WITH THE FOLLOWING EXCEPTIONS: (A) INTERIOR CONCEALED BRANCH CIRCUIT WIRING AT LEVELS ABOVE THE GARAGE MAY CONSIST OF NONMETALLIC SHEATHED CABLE ("ROMEX"), PROVIDED THAT SUCH CABLE IS PROTECTED BY A 15 MINUTE RATED MATERIAL PER ARTICLE 331 OF THE NEC; (B) INTERIOR BRANCH CIRCUIT WIRING IN GARAGE LEVEL MAY CONSIST OF ARMORED CABLE ("BX"); AND (C) BELOW-GRADE WIRING SHALL CONSIST OF DUAL RATED THWN/THHN CONDUCTORS IN PVC CONDUIT. WHEN RUNNING THWN/THHN CONDUCTORS IN PVC CONDUIT, PROVIDE SEPARATE INSULATED GREEN COPPER GROUND WIRE (SIZE PER CODE). WHEN NM AND NMC WIRING IS RUN FROM WITHIN A 15-MINUTE RATED WALL OR SPACE TO A NON-RATED AREA, A JUNCTION BOX SHALL BE PROVIDED AND A TRANSITION SHALL BE MADE AT THE JUNCTION BOX TO ARMORED CABLE.

8 PROVIDE A DEDICATED GROUND CONDUCTOR FOR ALL FEEDERS AND BRANCH CIRCUIT WIRING. IF THE CURRENT-CARRYING CONDUCTORS OF A CIRCUIT ARE ALUMINUM, THE GROUND CONDUCTOR SHALL BE PERMITTED TO BE ALUMINUM; OTHERWISE, THE GROUND CONDUCTOR SHALL BE COPPER. IF THE CIRCUIT CONSISTS OF MULTICONDUCTOR CABLE, THE GROUNDING CONDUCTOR SHALL BE A BARE CONDUCTOR CONTAINED WITHIN THE CABLE ASSEMBLY, OTHERWISE, THE GROUNDING CONDUCTOR SHALL BE AN INSULATED CONDUCTOR CONTAINED WITHIN THE SAME RACEWAY AS THE CURRENT-CARRYING CONDUCTORS.

NOTE THAT, IN GENERAL, THIS CONDUCTOR IS NOT INDICATED ON PLANS FOR BRANCH CIRCUIT WIRING. IN ADDITION, GROUND ALL METALLIC RACEWAYS IN ACCORDANCE WITH THE NEC.

9 FUSE SIZES WHICH ARE NOT INDICATED ON THE DRAWINGS SHALL BE SELECTED TO COMPLY WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE SERVED EQUIPMENT. IN GENERAL, FUSES SHALL BE UL CLASS RK1 UNLESS OTHERWISE INDICATED OR REQUIRED, EXCEPT THAT CLASS RK5 FUSES SHALL BE UTILIZED FOR FUSED SWITCHES AT MECHANICAL EQUIPMENT.

10 PANELBOARDS (OTHER THAN FUSIBLE TYPE) SHALL BE OF CIRCUIT BREAKER CONSTRUCTION, WITH MOLDED CASE BREAKERS. PROVIDE A PANELBOARD DIRECTORY FOR EACH PANEL. DIRECTORIES SHALL BE TYPED, EXCEPT THAT "SPACES" AND "SPARES" SHALL BE HAND-LETTERED IN ERASEABLE GRAPHITE PENCIL ON DIRECTORIES.

11 EMERGENCY AND EXIT LIGHT FIXTURES SHALL INCLUDE INTEGRAL BATTERY AND CHARGER, RATED 90 MINUTES. CONNECT ALL LIGHTING FIXTURES CONTAINING EMERGENCY BATTERY PACKS AND ALL RESIDENTIAL SMOKE DETECTORS ON UNSWITCHED CIRCUITS.

12 SERVICE ENTRANCE METER STACKS SHALL EACH CONSIST OF SERVICE ENTRANCE PULL/SPLICE BOX AS INDICATED, CIRCUIT BREAKER SERVICE DISCONNECT(S) AS INDICATED, AND BUSSED METERING CUBICLES AS INDICATED. CIRCUIT BREAKER SERVICE DISCONNECT SHALL BE CENTER MOUNTED. PROVIDE COMPRESSION LUGS FOR TERMINATION OF UTILITY COMPANY INCOMING ALUMINUM SERVICE LATERALS– COORDINATE WITH UTILITY COMPANY. INCOMING SERVICE CONDUITS FROM PAD-MOUNTED UTILITY TRANSFORMER SHALL BE PROVIDED WITH NEOPRENE COMPRESSION FITTINGS (O-Z GEDNEY OR EQUAL) TO PROVIDE WATERTIGHT SEALING OF SERVICE LATERAL CABLES AT ENTRY POINT INTO ELECTRICAL EQUIPMENT ROOMS. (COORDINATE SEAL SIZE WITH UTILITY COMPANY CABLE SIZE, AND PROVIDE FULL SEALS AT SPARE CONDUITS.) INDIVIDUAL METER CUBICLES SHALL BE COORDINATED WITH UTILITY COMPANY– METER CUBICLES SHALL INCLUDE CIRCUIT BREAKER OF RATING AS INDICATED.

INDIVIDUAL RATINGS AND CHARACTERISTICS AS FOLLOWS:

SERVICE LATERAL VOLTAGE: 120/208 VOLTS 3 PHASE 4 WIRE
BUSWORK: 3 PHASE 4 WIRE
METER SOCKET FEEDERS: 2 PHASE 3 WIRE (2 PHASES + NEUTRAL)
(BALANCE CONNECTIONS OF METER SOCKETS TO BUSWORK SO AS TO PREVENT PHASE LOADING IMBALANCE.)
BYPASS SWITCHES AT EACH METER SOCKET: NOT REQUIRED.
BUSWORK FAULT BRACING: 65000 AMPS RMS SYMMETRICAL
APPLICATION: INDOOR

SERVICE ENTRANCE METERING BOARDS SHALL BE SQUARE D "EZ METER-PAK" OR EQUAL.

13 NEUTRAL CONDUCTORS OF BRANCH CIRCUITS (20 AMP RATED) ON SEPARATE PHASES MAY BE COMBINED IN HOMERUN WIRING, EXCEPT WHERE OTHERWISE INDICATED.

14 FIRE ALARM SYSTEM SHALL BE A UL LISTED, 2-WIRE, 24 VOLT DC, ZONED, NON-CODED, SUPERVISED, CLOSED CIRCUIT, POSITIVE NON-INTERFERING GENERAL EVACUATION ALARM TYPE SYSTEM. ALL FIRE ALARM SYSTEM WIRING SHALL BE IN CONDUIT. SYSTEM WORK SHALL INCLUDE CONNECTION TO PULL STATIONS, AREA SMOKE DETECTORS, DUCTWORK SMOKE DETECTORS, ALARM DEVICES AND STROBES, SPRINKLER FLOW SWITCHES, AND SPRINKLER VALVE TAMPER SWITCHES. SHOP DRAWING SUBMITTAL FOR FIRE ALARM SYSTEM SHALL INCLUDE ALARM SYSTEM WIRING DIAGRAM. CONTROL PANEL SHALL INCLUDE SEPARATE ALARM AND TROUBLE LED'S (LIGHT EMITTING DIODES) FOR EACH ZONE. CONTROL PANEL SHALL ALSO INCLUDE A LOCAL AUDIBLE ALARM AND SILENCE SWITCH. SILENCE SWITCH SHALL DEACTIVATE ONLY THE LOCAL AUDIBLE ALARM AT THE CONTROL PANEL, AND SUBSEQUENT ALARMS SHALL REACTIVATE THE LOCAL AUDIBLE ALARM. ALL ALARM DEVICES SHALL BE AUTOMATICALLY LOCKED IN AT CONTROL PANEL UNTIL ALARM DEVICES ARE RETURNED TO NORMAL AND CONTROL PANEL IS MANUALLY RESET. CONTROL PANEL SHALL BE FLUSH MOUNTED AND SHALL INCLUDE A LOCKABLE FRONT COVER. CONTROL PANEL SHALL INCLUDE INTEGRAL 120 VOLT TO 24 VDC POWER SUPPLY, AND SHALL INCLUDE SEALED BATTERY AND CHARGER UNIT TO OPERATE ENTIRE ALARM SYSTEM IN EVENT OF POWER FAILURE FOR 24 HOURS IN SUPERVISORY MODE FOLLOWED BY 5 MINUTES IN ALARM MODE.

ACTIVATION OF AN ALARM DEVICE SHALL RESULT IN INITIATION OF EVACUATION ALARMS AS FOLLOWS:

ACTIVATION OF ANY ELEVATOR MACHINE ROOM SMOKE DETECTOR OR ANY ELEVATOR SHAFT SMOKE DETECTOR SHALL INITIATE ALARM ACTIVATION THROUGHOUT THE GARAGE LEVEL, AND AT ALL UPPER FLOORS WHICH ARE SERVED BY THE RESPECTIVE ELEVATOR.

ACTIVATION OF ANY ELEVATOR LOBBY SMOKE DETECTOR AT GARAGE LEVEL, OR ANY MANUAL STATION AT THE GARAGE LEVEL, OR ANY FLOW SWITCH SERVING THE GARAGE LEVEL, SHALL INITIATE ALARM ACTIVATION THROUGHOUT THE GARAGE LEVEL AND AT ALL UPPER FLOOR LEVELS OF ALL BUILDINGS.

ACTIVATION OF ANY MANUAL STATION, FLOW SWITCH, OR ELEVATOR LOBBY SMOKE DETECTOR AT FLOOR LEVELS ABOVE THE GARAGE LEVEL SHALL INITIATE ALARM ACTIVATION AT LEVELS AT AND ABOVE THE FIRST FLOOR WITHIN THE RESPECTIVE BUILDING OR PORTION THEREOF, AND THROUGHOUT THE GARAGE LEVEL.

ADDITIONAL FUNCTIONS AND REQUIREMENTS:

ACTIVATION OF ANY DUCT SMOKE DETECTOR SHALL INITIATE SHUTDOWN SIGNAL TO RESPECTIVE AIR HANDLING UNIT, AND ANNUNCIATION AT GRAPHIC ANNUNCIATOR PANEL, BUT SHALL NOT INITIATE EVACUATION ALARM ACTIVATION.

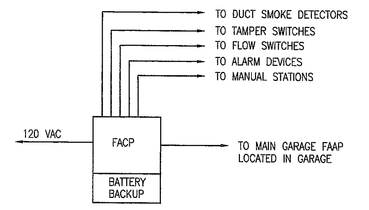
⚠ ELEVATOR MACHINE ROOM HEAT DETECTOR SHALL NOT BE WIRED TO FIRE ALARM PANEL. UPON ACTIVATION OF ELEVATOR MACHINE ROOM HEAT DETECTOR, SHALL SEND ELEVATOR SHUTDOWN SIGNAL TO ELEVATOR EQUIPMENT DIRECTLY

ELEVATOR MACHINE ROOM SMOKE DETECTORS, SHAFT SMOKE DETECTORS, AND ALL ELEVATOR LOBBY SMOKE DETECTORS, SHALL BE WIRED TO FIRE ALARM SYSTEM. UPON ACTIVATION OF ANY ELEVATOR MACHINE ROOM SMOKE DETECTOR, SHAFT SMOKE DETECTOR, OR ANY LOBBY SMOKE DETECTOR, FIRE ALARM SYSTEM SHALL SEND ELEVATOR RECALL SIGNAL TO ELEVATOR EQUIPMENT.

PROVIDE CONNECTION FROM HEAT DETECTORS TO SHUNT TRIP BREAKERS FEEDING ELEVATORS SO AS TO SHUT DOWN INDIVIDUAL ELEVATOR(S) UPON ACTIVATION OF RESPECTIVE ELEVATOR MACHINE ROOM HEAT DETECTOR.

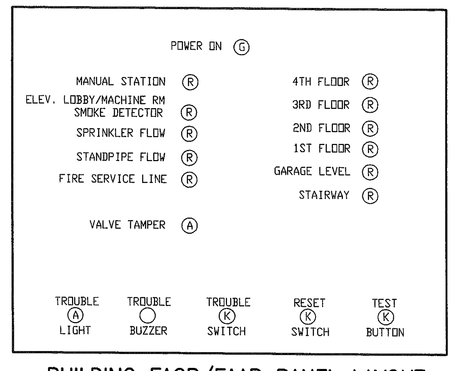
PROVIDE AUDIBLE MINI-HORN IN EACH UNIT, CONNECTED TO FIRE ALARM SYSTEM.

PROVIDE STROBE LIGHT IN HANDICAP ACCESSIBLE UNIT(S), CONNECTED TO FIRE ALARM SYSTEM.



BUILDING FIRE ALARM RISER DIAGRAM

NO SCALE
(TYPICAL OF 5 , 1 FOR EACH BUILDING)



BUILDING FACP/FAAP PANEL LAYOUT

NO SCALE
(TYPICAL OF 5 , 1 FOR EACH BUILDING)

ACAD\LESSARD\METRO

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COMMONWEALTH OF VIRGINIA
JOSEPH C. SORRO
LICENSE No.12330

CHECKED BY :
DATE CHECKED :

NO.	REVISION	DATE
1	COUNTY COMMENTS	09/05/00
2	FIRE ALARM	12/11/00

DRAWING TITLE :
SCHEDULE & NOTES

PROJECT NAME :
METRO PLACE CONDOS
AT DUNN LORING
FAIRFAX COUNTY
VIRGINIA.

DRAWN BY :
PROJECT NO. : JAD-14
DATE : 01/01/00
SCALE :
SHEET NO. :
E-16