


















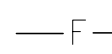























REVISIONS				
SYM	DESCRIPTION	PREPARED BY	DATE	APPROVED

COMMUNICATIONS SYSTEMS LEGEND








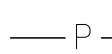
FIRE ALARM SYSTEM

	MANUAL PULL STATION, ADDRESSABLE TYPE, WALL MOUNTED.
	SMOKE DETECTOR, PHOTOELECTRIC TYPE, ADDRESSABLE TYPE, CEILING MOUNTED.
	SMOKE DETECTOR, 4 WIRE NON-ADDRESSABLE TYPE, CEILING MOUNTED.
	DUCT SMOKE DETECTOR, DETECTOR TYPE AS SPECIFIED, DUCT MOUNTED, R – MOUNT ON RETURN AIR DUCT; S – MOUNT ON SUPPLY AIR DUCT.
	WATER FLOW SWITCH ON SPRINKLER SYSTEM, INSTALLED BY SPRINKLER TRADE, CONNECTED BY ELECTRICAL.
	TAMPER SWITCH ON SPRINKLER SYSTEM, INSTALLED BY SPRINKLER TRADE, CONNECTED BY ELECTRICAL.
	POST INDICATOR VALVE SWITCH ON SPRINKLER SYSTEM, INSTALLED BY SPRINKLER TRADE, INSTALLED BY ELECTRICAL TRADE.
	HORN, WALL MOUNTED, LP–90dBA, NP–96dBA, HP–99dBA OUTPUT LEVEL.
	BELL, WALL MOUNTED, LP–90dBA, NP–96dBA, HP–99dBA OUTPUT LEVEL.
	AUDIOVISUAL NOTIFICATION APPLIANCE, HORN AND VISUAL, WALL MOUNTED, LP–80dBA, NP–96dBA, HP–99dBA OUTPUT LEVEL, NUMBER DENOTES UL CANDELA RATING.
	VISUAL NOTIFICATION APPLIANCE, WALL MOUNTED, NUMBER DENOTES UL CANDELA RATING.
	ELECTROMAGNETIC DOOR HOLDER, WALL MOUNTED. FURNISHED AND INSTALLED BY DOOR HARDWARE TRADE, CONNECTED BY ELECTRICAL TRADE.
	REMOTE ANNUNCIATOR, WALL MOUNTED.
	FIRE ALARM CONTROL PANEL (FACP), WALL MOUNTED.
	ADDRESSABLE MONITOR INTERFACE MODULE, ZONE INPUT STYLE AS SPECIFIED.
	ADDRESSABLE SIGNAL INTERFACE MODULE, NOTIFICATION CIRCUIT STYLE AS SPECIFIED.
	ADDRESSABLE CONTROL INTERFACE MODULE, NOTIFICATION CIRCUIT STYLE AS SPECIFIED.
	TERMINAL CABINET, SIZE AS SHOWN OR 305mm x 305mm x 152mm MINIMUM, WITH HINGED COVER, WOOD BACKBOARD AND TERMINAL STRIPS.
	NOTIFICATION APPLIANCE CIRCUIT EXTENDER, WALL MOUNTED.
	BRANCH CIRCUIT IN CONDUIT, NUMBER OF CONDUCTORS AS REQUIRED BY SYSTEM MANUFACTURER.
	FIRE ALARM SYSTEM CODED TRANSMITTER.
	RADIO TYPE MASTER BOX ANTENNA.
	MASTER BOX ANTENNA CABLE IN 21mm CONDUIT.
	ANTENNA COAX GROUNDING BLOCK. 1 #8GROUND–16mmC. TO NEAREST BUILDING SERVICE GROUND.
	SURGE SUPPRESSOR, LOW VOLTAGE, WALL MOUNT OR MOUNT IN CONTROL UNIT IF LISTED FOR INSTALLATION IN CONTROL EQUIPMENT.











INTRUSION DETECTION SYSTEM

	BALANCED MAGNETIC SWITCH, MOUNT IN TOP OF DOOR FRAME, 1E–1 DENOTES ZONE, TYPICAL ALL INITIATING DEVICES.
	CURTAIN DOOR SWITCH, CONCEALED IN DOOR FRAME.
	SAFE ALARM.
	DURESS SWITCH.
	DURESS SWITCH, FLOOR.
	ENTRY KEYPAD/ANNUNCIATOR, WALL MOUNTED.
	CARD READER WITH KEY PAD, WALL MOUNTED.
	PASSIVE INFRARED MOTION DETECTOR, WALL MOUNTED, ARROW INDICATES AIMING DIRECTION, WA–WIDE COVERAGE OPTICS, L–LONG COVERAGE OPTICS, CU–CURTAIN COVERAGE OPTICS, STANDARD COVERAGE OPTICS IF NO DESIGNATION.
	ESD92
	SYSTEM WIRING IN CONDUIT, NUMBER OF CONDUCTORS AS REQUIRED BY SYSTEM MANUFACTURER.
	STROBE ALARM LIGHT, WALL MOUNTED.
	HORN, WALL MOUNTED.
	CONNECTION TO PANIC HARDWARE.
	REMOTE TERMINAL UNIT.
	TERMINAL CABINET, SIZE AS SHOWN OR 305mm x 305mm x 152mm MINIMUM, WITH HINGED COVER, WOOD BACKBOARD AND TERMINAL STRIPS.
	SURGE SUPPRESSER, WALL MOUNTED














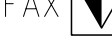
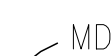



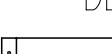
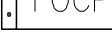

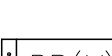
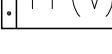
PUBLIC ADDRESS SYSTEM

	SPEAKER, RECESSED, CEILING MOUNTED, "s" DENOTES ZONE.
	SPEAKER, RECESSED, CEILING MOUNTED, WITH CONCEALED VOLUME CONTROL ON SPEAKER.
	SPEAKER, RECESSED, WALL MOUNTED.
	VOLUME CONTROL, WALL MOUNTED.
	AMPLIFIER, WALL MOUNTED.
	TERMINAL CABINET, SIZE AS NOTED OR 305mm x 305mm x 102mm MINIMUM, WITH WOOD BACKBOARD, HINGED DOOR AND TERMINAL STRIPS.
	TELEPHONE INTERFACE WITH ONE INPUT FOR EACH ZONE AND ONE INPUT FOR ALL CALL, WALL MOUNTED.
	SPEAKER CIRCUIT, WITHOUT FURTHER DESIGNATION 1#18AWG TWISTED SHIELDED PAIR–16mm C., 2 BARS 2#18AWG TWISTED SHIELDED PAIR–16mm C., ETC.







tone/VISUAL NURSE CALL SYSTEM

	TOILET EMERGENCY STATION WITH PULL CORD TO WITHIN 50mm OF FLOOR, WALL MOUNTED.
	EMERGENCY STATION WITH PUSH BUTTON, WALL MOUNTED.
	DUTY STATION, WALL MOUNTED.
	CORRIDOR DOME LIGHT, MULTICOLOR, NUMBER DENOTES NUMBER OF LAMPS, CEILING MOUNTED.
	EMERGENCY RED CORRIDOR LIGHT, WITH TONE SIGNAL, CEILING MOUNTED.
	ZONE LIGHT, CEILING MOUNTED.
	TONE/VISUAL NURSE CALL CONTROL EQUIPMENT CABINET, WALL MOUNTED.
	TONE/VISUAL NURSE CALL ANNUNCIATOR PANEL, WALL MOUNTED.
	TERMINAL CABINET, SIZE AS NOTED OR 305mm x 305mm x 102mm MINIMUM, WITH WOOD BACKBOARD, HINGED DOOR AND TERMINAL STRIPS.
	BRANCH CIRCUIT IN CONDUIT, NUMBER OF CONDUCTORS AS REQUIRED BY SYSTEM MANUFACTURER.



PREMISES DISTRIBUTION SYSTEM

	VOICE/DATA OUTLET WALL MOUNTED. 2 SIAMESE 2x2 CABLES TO EACH OUTLET. EACH OUTLET WITH 2 DATA AND 2 TELEPHONE INSERTS WITH 2 JACKS EACH. SEE DETAIL ON EC4–4. PROVIDE 21mmC FROM OUTLET TO CABLE TRAY.
	VOICE/DATA OUTLET HAND ACCESS, FLUSH FLOOR MOUNTED IN COMBINATION WITH RECEPTACLES. SAME CABLES AND JACKS AS VOICE/DATA OUTLET.
	VOICE OUTLET, WALL MOUNTED FOR WALL MOUNTED INSTRUMENT. PROVIDE 1 VOICE CABLE (WHITE, SIAMESE 2x2).
	VOICE/DATA OUTLET, WALL MOUNTED IN CASEWORK ABOVE COUNTER. SAME CABLES AND JACKS AS VOICE/DATA OUTLET.
	VOICE OUTLET, WALL MOUNTED FOR PAY TELEPHONE INSTRUMENT. PROVIDE 1 VOICE CABLE (WHITE, SIAMESE 2x2).
	VOICE/DATA OUTLET FOR FUTURE USE. PROVIDE BLANK FACEPLATE ENGRAVED "FUTURE VOICE/DATA" AND 21mm EMPTY CONDUIT WITH PULL STRING TO CABLE TRAY.
	VOICE/DATA OUTLET FOR FAX MACHINE, WALL MOUNTED. SAME CABLES AND JACKS AS VOICE/DATA OUTLET, WALL MOUNTED.
	VOICE/DATA OUTLET FOR FAX MACHINE, FLUSH FLOOR MOUNTED IN COMBINATION WITH RECEPTACLES. SAME CABLES AND JACKS AS VOICE/DATA OUTLET, WALL MOUNTED.
	DATA CABLE IN CONDUIT FOR MDIS SYSTEM. PROVIDE CABLE AS REQUIRED BY MANUFACTURER; SIZE CONDUIT PER NEC (TYPICALLY ONE SIAMESE 2x2 CAT 5 CABLE – 21mmC)
	CABLE TRAY, ABOVE CEILING, 305mm WIDE, 12B LOADING, 75mm LOADING DEPTH.
	VOICE BACKBONE
	DATA BACKBONE
	FIBER OPTIC CONNECTOR PANEL, RACK MOUNTED, 24 STRAND FIBER PORTS SHOWN.
	PATCH PANEL, FOR PREMISE WIRING, UNSHIELDED TWISTED PAIR VOICE/DATA CABLES, RACK MOUNTED, 24 PORTS SHOWN.
	PATCH PANEL, FOR BACKBONE VOICE DISTRIBUTION CABLES, RACK MOUNTED, 96 PORTS SHOWN.
	RELAY EQUIPMENT RACK, 483mmW x 2134mmH UNLESS OTHERWISE NOTED.
	POWER STRIP.
	SPLICE.
	VOICE/DATA SYSTEMS BACKBOARD, SIZE AS SHOWN OR 1219mm x 1219mm x 19mm, MINIMUM AC PLYWOOD, PAINT WITH 2 COATS BLUE FIRE RETARDANT ENAMEL PAINT.
	PUNCH DOWN BLOCKS, 110 TYPE.
	PUNCH DOWN BLOCKS WITH PROTECTORS.
	GROUND BUS, 24 CIRCUIT 225A PANELBOARD NEUTRAL BUS, ATTACHED TO WALL. WALL WITH SCREWS.
	MAIN GROUND BUS, 24 CIRCUIT 400A PANELBOARD NEUTRAL BUS, ATTACHED TO WALL. WALL WITH SCREWS.








PERSONAL ALERT SYSTEM

	RECIEVER, WALL MOUNTED.
	CONTROL EQUIPMENT CABINET, WALL MOUNTED.
	DOME LIGHT, CEILING MOUNTED.
	ZONE LIGHT, CEILING MOUNTED.
	ANNUNCIATOR PANEL.
	BRANCH CIRCUIT IN CONDUIT, NUMBER AND TYPE OF CABLES AS REQUIRED BY EQUIPMENT MANUFACTURER.
















MISCELLANEOUS EQUIPMENT

	HANDS FREE TELEPHONE, PEDESTAL MOUNTED, SEE SHEET EC9–1.
	ELEVATOR AUTOMATIC SHUTDOWN – CONTROL PANEL.
	GATE SWITCH








CLOSED CIRCUIT TELEVISION SYSTEM (CCTV)

	CAMERA, LENS FOCAL LENGTH AS SHOWN, WEATHER PROOF ENCLOSURE, MOUNTED ON BUILDING ROOF.
	CAMERA, LENS FOCAL LENGTH AS SHOWN, WEATHER PROOF ENCLOSURE, POLE MOUNTED.
	CAMERA, MINI DOME TYPE, PEDESTAL MOUNTED.
	MONITOR, SIZE AS SHOWN, DESK MOUNTED.
	CCTV SERVER
	BRANCH CIRCUIT IN CONDUIT, NUMBER AND TYPE OF CABLES AS REQUIRED BY EQUIPMENT MANUFACTURER.
	GROUNDING BLOCK, CONNECT TO BUILDING GROUND.





MASTER TELEVISION SYSTEM (MATV)

	TELEVISION OUTLET, WALL MOUNTED.
	TELEVISION OUTLET, WALL MOUNTED, MOUNT HIGH.
	AMPLIFIER, RACK MOUNTED.
	LINE TAP, MOUNTED IN JUNCTION BOX OR IN CABLE TRAY, ABOVE ACCESSIBLE CEILING.
	LINE TERMINATOR.
	ATTENUATOR.
	SPLITTER/MIXER, INPUT–OUTPUT CONNECTOR RATIO AS SHOWN, WALL MOUNTED.
	GROUNDING BLOCK, CONNECT TO BUILDING GROUND.
	VIDEO CASSETTE RECORDER, MOUNT IN EQUIPMENT RACK.
	BRANCH CIRCUIT, COAXIAL CABLE (AS INDICATED) IN CONDUIT.
	SATELLITE RECEIVER WITH OUTPUT SET TO CHANNEL 3, MOUNT IN EQUIPMENT RACK.
	SATELLITE RECEIVER WITH OUTPUT SET TO CHANNEL 4, MOUNT IN EQUIPMENT RACK.
	MODULATOR, MOUNTED IN EQUIPMENT RACK.
	PASSIVE COMBINER, 8 INPUT SHOWN, RACK MOUNTED.
	EQUIPMENT RACK, WALL MOUNTED.



DRIVE–UP INTERCOM SYSTEM

	BASE STATION.
	INTERCONNECT MODULE.
	LOOP DETECTOR CONTROL.
	POWER TRANSFORMER.
	LOOP DETECTOR CONDUCTORS.
	BRANCH CIRCUIT IN CONDUIT, NUMBER OF CONDUCTORS AS REQUIRED BY SYSTEM MANUFACTURER.
	PEDESTAL WITH MICROPHONE AND SPEAKER.



DOOR BUZZER SYSTEM

	PUSH BUTTON, WALL MOUNTED. 1A, 125V, LOCKNUT MOUNTED, PUSH BUTTON SWITCH IN STAINLESS STEEL PLATE. MOUNT 1219mm AFF.
	BELL TRANSFORMER, 120 VAC PRIMARY, 12 VAC SECONDARY, 15VA, IN NEMA 1 ENCLOSURE WITH LOW VOLTAGE BARRIER, MOUNT ABOVE CEILING.
	CHIME, SINGLE STROKE, TWO TONE, 12VAC, WALL MOUNTED. TWO ENTRANCE TYPE, SURFACE MOUNT 2032mm AFF.
	CIRCUIT WITHOUT FURTHER DESIGNATION 2#16–16mmC., 3 BARS 3#16–16mmC., 4 BARS 4#16–16mmC., ETC.

MOUNTING TYPES

	GENERIC SHAPE FOR RECESSED MOUNTED ENCLOSURE.
	GENERIC SHAPE FOR SURFACE MOUNTED ENCLOSURE.

GROUNDING

	CONNECT TO BUILDING SERVICE GROUND WITH 1#8GND. – 16mmC., UNLESS OTHERWISE NOTED.
	GROUND CONDUCTOR IN CONDUIT. SHOWN #6 CONDUCTOR. SIZE CONDUIT PER NEC.

IF SHEET IS LESS THAN 28"x42", IT IS A REDUCED PRINT. SCALE REDUCED ACCORDINGLY.

MEDICAL/DENTAL CLINIC			
COMMUNICATIONS LEGEND			
SIZE	CODE IDENT. NO.	DRAWING NO.	8144757
F	XXXXX	CONST. CONTR. NO.	
SCALE: AS SHOWN	SPEC. 11996048	SHEET 252 OF 316	