

RADIOLOGY AND WORK ROOMS PART PLAN

	COMPONENT DESCRIPTION AND WIRING SCHEDULE							
	A FURNISHED AND INSTALLED BY PHILIPS B FURNISHED BY CUSTOMER/CONTRACTOR AND INSTALLED BY CUSTOMER/CONTRACTOR C INSTALLED BY CUSTOMER/CONTRACTOR D FURNISHED BY PHILIPS AND INSTALLED BY CONTRACTOR							
	No. G.E. COMPONENT		ELECTRICAL CONTRACTOR RESPONSIBLITY	NOTES/COMMENTS				
B	(CB)	CIRCUIT BREAKER	(1) 100A CIRCUIT BREAKER WITH SHUNT TRIP AND LOAD SIDE PRESSUR LUGS FOR #2 AWG EXTRA FLEXIBLE CABLE (T + B TYPE 31009 "LOCKTIGHT" OR SIMILAR)	LOCATION PER LOCAL CODE OR OWNER REQUIREMENTS. COORDINATE WITH LOCAL PHILIPS SERVICE.				
В	(র)	SUNT TRIP (EMERGENCY OFF)	(1) LARGE MUSHROOM—HEAD BUTTON ON REMOTE CONTROL STATION WITH CONTACTS TO OPERATE FEATURE OF CB ITS LOCATION MUST BE WITHIN EASY REACH B SUBJECT TO AN ACCIDENTIAL BUMP. EXACT LO TO BE DETERMINED BY CUSTOMER OR COORDI WITH LOCAL PHILIPS SERVICE.					
D	ME	OPTIMUS 80 CONTROL CABINET	(1) 19 1/4"Wx67"Hx4"D FLANGED-EDGE TERMINAL WALL BOX WITH REMOVABLE SCREW-TYPE COVER PLATE, SURFACE MOUNTED 75" AFF TO TOP OF BOX. CONDUITS TO TERMINATE ON TOP AND SIDES OF THE BOX AS REQUIRED.					
В	PBC	OPTIMUS CONTROL PANEL	(1) 6"Wx6"Lx4"D PULL BOX WITH REMOVABLE SCREW-TYPE COVER PLATE, SURFACE MOUNTED 22"AFF TO BOTTOM OF BOX.					
В	MS	DIGITAL DIAGNOST TH	(1) 8"Wx8"Lx4"D FLOOR BOX, FLUSH MOUNTED WITH REMOVABLE GASKETTED SCREW-TYPE COVER PLATE.					
В	MU	CS 4 TUBE CRANE WITH CABLE CARRIER RALL	(1) 8"Wx8"Lx6"D CEILING BOX FLUSH MOUNTED WITH REMOVABLE SCREW-TYPE COVER PLATE.					
В	(DVM)	DIGITAL DIAGNOST VM (LEFT)	LEFT) (1) 8"Wx8"Lx6"D CEILING BOX FLUSH MOUNTED WITH REMOVABLE SCREW-TYPE COVER PLATE.					
В	(DDW)	IIIII I DIOINE DIAGNOSI WOMOSIATION I .		LOCATION SHOWN IS RECOMMENDED AND MAY BE CHANGED, VERIFY RELOCATION WITH LOCAL PHILIPS SERVICE.				
В	(WL)	WARMING LIGHT	(1) INCANDESCENT SURFACE OR FLUSH MOUNTED LIGHT FIXTURE ABOVE DOOR TO INDICATE WHEN X-RAY IS ON. PROVIDE A 115V, 15A NORMALLY OPEN RELAY IN THIS FIXTURE.					
B DOOR SWITCH (1) 120V, 5A SWITCH LIMITED TO OPEN WHEN DOOR IS OPEN. MOUNT IN UPPER CORNER ON STRIKE SIDE OF MAIN ENTRY DOOR(S). COOPER #1665 OR EQUIVALENT. PER PHYSICIST OF RECORD REQUEST.								

PHILIPS EQUIPMENT NOTES:

- ELECTRICAL DUCTS AND BOXES SHALL BE ACCESSIBLE AND HAVE REMOVABLE COVERS. FLOOR DUCTS AND BOXES SHALL HAVE WATERTIGHT COVERS. DUCTS SHALL BE DIVIDED INTO AS MANY AS THREE SEPARATE CHANNELS BY METAL DIVIDERS TO SEPARATE WIRING AND/OR CABLES INTO GROUPS AS FOLLOWS: GROUP "A" - POWER WIRING AND/OR CABLES GROUP "B" - SIGNAL AND/OR DATA AND PROTECTIVE GROUND WIRING AND/OR CABLES GROUP "C" - X-RAY HIGH VOLTAGE CABLES, THE USE OF 90° ELLS IS NOT ACCEPTABLE ON CEILING DUCT AND WALL DUCT UDE 45 DEG. BENDS AT ALL CORNERS. ALL INTERSECTING POINTS IN DUCT TO HAVE CROSS OVER TUNNELS SUPPLIED AND INSTALLED BY CONTRACTOR TO MAINTAIN SEPARATION OF CABLES.
- 2. CONDUIT POINT-TO-POINT RUNS SHALL BE AS DIRECT AS POSSIBLE. EMPTY CONDUIT RUNS USED FOR CABLES MAY REQUIRE PULL BOXES LOCATED ALONG THE RUN. CONSULT WITH PHILIPS. A PULL WIRE OR CORD SHALL BE INSTALLED IN EACH CONDUIT RUN. ALL CONDUITS WHICH ENTER DUCT PRIOR TO THEIR TERMINATION POINT MUST MAINTAIN SEPARATION FROM OTHER CABLES VIA USE OF DIVIDERS, CROSS OVER TUNNELS, OR FLEX CONDUIT SUPPLIED AND INSTALLED BY CONTRACTOR FROM ENTRANCE INTO DUCT TO EXIT FROM DUCT.
- 3. ALL CONDUCTORS SHALL BE 75°C STRANDED COPPER, RUNG OUT AND MARKED. 4. ELECTRICAL RACEWAY SHALL BE INSTALLED WITH REMOVABLE COVERS. THE RACEWAY SHOULD BE ACCESSIBLE FOR THE ENTIRE LENGTH. IN CASE OF NON-ACCESSIBLE FLOORS, WALLS AND CEILINGS, AN ADEQUATE NUMBER OF ACCESS HUTCHES SHOULD BE SUPPLIED TO ENABLE INSTALLATION OF CABLING. APPROVED CONDUITS MAY BE

SUBSTITUTED. ALL RACEWAYS WILL BE DESIGNED IN A MANNER THAT WILL NOT ALLOW CABLES TO FALL OUT OF THE RACEWAY WHEN THE COVERS ARE REMOVED. CONDUIT OR RACEWAY ABOVE CEILING MUST BE KEPT AS NEAR TO FINISHED CEILING AS

- 5. ALL SECTIONS OF RACEWAY AND CONDUIT SHALL BE GROUNDED WITH AN INDEPENDENT #6 AWG GREEN WIRE THAT IS TO BE ATTACHED USING SOLDERLESS LUGS. ALL CEILING MOUNTED STRACTURAL SUPPORT MEMBERS AND CEILING PLATES SHALL ALSO BE GROUNDED. ALL GROUNDING CONNECTIONS, TERMINALS, ETC. SHALL BE INSTALLED IN A MANNER TO PROVIDE ACCESSIBILITY FOR INSPECTION,
- MAINTENANCE, REPAIR, ETC. 6. NEUTRAL AND GROUND CONDUCTORS TO BE SIZED EQUIVALENTLY TO PHASE
- CONDUCTORS, UNLESS OTHERWISE NOTED. 7. METAL CONDUIT SHALL NOT BE USED AS THE EQUIPMENT GROUND CONDUCTOR.

EQUIPMENT NOTES:

- POWER CONNECTION TO FILM VIEWER, COORDINATE FINAL CONNECTION BASED ON MANUFACTURER RECOMENDATION.
- 2 DEDICATED RECEPTACLE FOR CR READER
- TWO GANG OUTLET BOX WITH PATIENT MONITOR OUTLET AND ADJACENT DUPLEX RECEPTACLE. RUN 1" CND. FROM OUTLET BOX TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING. MOUNT 5'-0" A.F.F., POSITIONED TO LEFT SIDE OF MOUNTING BASKET AND WITHIN 12" OF MONITOR WALL CHANNEL.
- DEDICATED NEMA 6-20R RECEPTACLE FOR CONNECTION TO
- 5 DEDICATED RECEPTACLE FOR PANAREX CONTROL UNIT
- POWER CONNECTION FOR PATIENT LIFT CHARGING STATION TO BE LOCATED ON THE WALL NEAR THE CEILING

BRANCH CIRCUIT AND WIRE GAUGE REQUIREMENTS OPTIMUS 80/OPTIMUS C

BRANCH POWER:	150 KVA
CIRCUIT BREAKER:	3 POLE, 100 AMPERES (@ 480V)
MAXIMUM INSTANTANEOUS POWER:	158 KVA (800 MA @ 100 KV) (SHORT-TERM) <8 AMPS (STAND-BY/LONG-TERM)

RECOMMENDED CONDUCTOR SIXES FOR 1% IMPEADANCE OF BRANCH CONDUCTORS. BASED ON 20°C COPPER CONDUCTORS:

	460 VAC	480 VAC
#1 AWG	87 ft.	96 ft.
1/0 AWG	110 ft.	121 ft.
2/0 AWG	139 ft.	152 ft.
3/0 AWG	175 ft.	192 ft.
4/0 AWG	221 ft.	242 ft.
250 MCM	261 ft.	287 ft.
300 MCM	313 ft.	344 ft.
400 MCM	418 ft.	459 ft.
500 MCM	522 ft.	574 ft.
INST. CURRENT	200 A	190 A
MAX. PHASE—PHASE IMPEADANCE	0.2 W	0.2 W
MAX. LOAD VOLTAGE DROP	40.0 V	38.0 V
PERCENT REGULATION AT MAXIMUM LOAD	8.7 %	7.9 %
MINIMI IM COPPER WIRE SIZE	CIRCUIT BREAKER TO FOU	IIPMENT: #2

CONDUIT REQUIRED

GENERAL NOTES

1. ALL CONDUIT RUNSMUST TAKE MOST DIRECT ROUTE POINT TO POINT. 2. ALL CONDUIT RUNS MUST HAVE A PULL STRING.

A CONDUIT SUPPLIED/INSTALLED BY CONTRACTOR — PHILIPS CABLES INSTALLED BY PHILIPS B CONDUIT SUPPLIED/INSTALLED BY CONTRACTOR - PHILIPS CABLES INSTALLED BY CONTRACTOR * V VIDEO CABLES C CONDUIT AND CABLES SUPPLIED AND INSTALLED BY CONTRACTOR

P POWER / GROUND CABLES S SIGNAL CABLES HIGH TENSION POWER CABLES F FIBER OPTIC

	CONDUIT		CONDUIT QUANTITY (* CABLE	MINIMUM CONDUIT	DEFAULT CONDUIT	SPECIAL REQUIREMENTS	
<u> </u>	RUN No.	FROM	ТО	TYPE)	SIZE	LENGTH	NEGONEMENTO
C	1	(CB)	POWER PANEL	1 (P)	per NEC	per NEC	
В	2	(CB)	ME	1 (P)	2*	50'	
C	3	(CB)	(ST)	1 (P)	3/4"	50'	
c	4	ME	(WL)	1 (P)	1/2"	50'	
c	5	ME	DS	1 (P)	1/2"	50'	
A	6	ME	PBC	1 (P)	1 1/2"	65'	
A	7	ME	PBC	1 (S)	2*	65'	
A	8	ME	MS	1 (P)	1 1/2"	19'	LONGER CABLES TO BE ORDERED (10m) FOR RADIOLOGY ROOM #1
A	9	ME	MS	1 (S)	2 1/2"	19'	LONGER CABLES TO BE ORDERED (10m) FOR RADIOLOGY ROOM #1
A	10	ME	MU	1 (P)	2 1/2"	32'	
A	11	ME	MU	1 (S)	2 1/2"	32'	
A	12	ME	(DVM)	1 (P)	1/2"	65'	
A	13	ME	(DVM)	1 (S)	2*	65'	
A	14	ME	(DDW)	1 (S)	1 1/2"	65'	
A	15	MS	ME	1 (P)	1 1/2"	52'	SEE NOTE "A"
A	16	ME	MU	1 (P)	1 1/2"	TOTAL	SEE NOTE A
A	17	MS	ME	1 (S)	1 1/2"	52'	SEE NOTE "A"
A	18	ME	MU	1 (S)	1 1/2"	TOTAL	SEE NOTE A
A	19	MS	ME	1 (P)	1 1/2"	65'	SEE NOTE "B"
A	20	ME	(DVM)	1 (P)	1 1/2"	TOTAL	
A	21	MS	ME	1 (S)	2"	65'	SEE NOTE "B"
A	22	ME	(DVM)	1 (S)	2" _	TOTAL	OLL HOLL D
A	23	MS	(DDW)	1 (S)	1 1/2"	65'	
A	24	MS	(DDW)	1 (F)	1 1/2"	65'	
A	25	(DVM)	(DDW)	1 (S)	1 1/2"	78'	
A	26	(DVM)	(DDW)	1 (F)	1 1/2"	78'	
	1 1	NOTE A					

TOTAL CONDUIT LENGHT "MS" — "ME" — "MU" CANNOT EXCEED 52'—0". CABLES FROM "MS" TO "MU" ARE SHOWN ABOVE AS ROUTED VIA "ME". LONGER CABLES ARE AVAILABLE VIA CABLE QUESTIONNAIRE (65' OR 78")

TOTAL CONDUIT LENGHT "MS" — "ME" — "DVM" CANNOT EXCEED 65'—0". CABLES FROM "MS" TO "DVM" ARE SHOWN

ABOVE AS ROUTED VIA "ME". LONGER CABLES ARE NOT AVAILABLE FOR THIS CONNECTION.

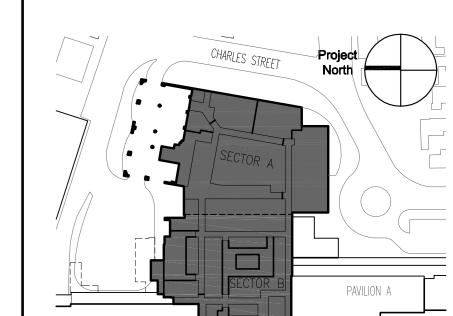
ISSUE DATE DESCRIPTION

General Notes:

THIS PLAN SHALL BE USED IN CONJUNCTION WITH PHILIPS MEDICAL SYSTEMS EQUIPMENT VENDORS DRAWING FOR EXACT LOCATION OF

EQUIPMENT, CABLE TRAY, VERTICAL RACEWAY, ETC.

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